International Institute of Business Study

CURRICULUM & SYLLABUS

FOR

Post Graduate Diploma in Management

(I- VI Trimester)

REGULATIONS – 2024

ABOUT IIBS

Over the years, with dedicated commitment and perseverance **International Institute of Business Study (IIBS)** has established itself as one of the premium business School. It has grown in stature in **Bangalore**. It employs supreme education methodologies raising the standards of management education on par with excellence.

In the year 2008, The Srimati B. Devi Educational & Charitable Trust was founded by a well-acclaimed educationist, **Dr. Jay Prakash**. The foundation of one of the most prestigious B-School in India, the International Institute of Business Study (IIBS), was laid by this trust.

Bangalore is a highly competitive city with a huge plethora of top B-schools in the country**. Dr. Jay Prakash** was highly enthusiastic and committed to excellence, he believed that IIBS will reach its zenith resulting from global work culture practiced in Bangalore.

Bangalore is also known as the 'Silicon Valley' of India. It is one of the very few cities that has fast-paced development in technology and management sectors in the country. The growing number of MNCs has leveraged the city's potential resources and manpower to its fullest advantage which has witnesses a tremendous growth in infrastructural and educational domains in the recent past. IIBS was strategically positioned in Bangalore to boost the career opportunities and promise a better future to its students.

At this juncture, it becomes important to provide competent and dynamic education structure and stay one step ahead of rest of the B-Schools. We at IIBS make sure to inculcate the global work culture and its principles in our courses to better equip our students with adaptive skills, adequately competent to tackle both, intellectual and practical challenges during their career.

IIBS promotes a professional learning environment for the students. We are equipped with modern state of the art infrastructure and have experienced management professionals. Supported by strong intellectual resources and industry experiences, we envision becoming the "nucleus of global management education". We enable our student to pursue their career anywhere across the globe by developing a multicultural aptitude too.

Our Vision:

To inculcate ethical values and provide innovative, holistic learning experiences that nurture individuals into well-rounded human beings, thereby equipping them to become influential global leaders.

Our Mission:

- To encourage the students with modern education to bring economic emancipation and social transformation.
- To provide the resources and opportunities to create global leaders.
- To provide holistic approach to prepare the students to grow personally, professionally, socially and emotionally and to make them a complete human being.
- To redefine the student's talents to make them successful entrepreneurs and responsible citizens.
- To develop great human beings with values and ethics.

ABOUT PGDM

(POST GRADUATE DIPLOMA IN MANAGEMENT)

The Post Graduate Diploma in management (PGDM) is a two-year, fulltime program. In these two years academic input is divided into two different parts: Compulsory package and Elective Package. Both the packages fulfil different purpose. Compulsory package is mainly in the first year while elective package is completed in second year. The input of the compulsory package is essential for all managers. There is almost no overlap between the compulsory package and the elective package.

The main objective of the program is to groom students into proficient professional managers with:

- An ability to learn and acclimatize to national and global corporate environment.
- A direction towards achieving brilliance, maintaining high ethical standards.
- Competence to work effectively and efficiently, both individually and in a team.

Program Educational Objectives (PEO)

PEO 1 **:** Work Effectively in diverse teams, demonstrating strong interpersonal skills and the ability to collaborate to achieve common goals as a member or to lead a team.

PEO 2 **:** Achieve career advancement in the chosen field, taking different role as a professional in multidisciplinary environment and provide sustainable solutions for the upliftment of society.

PEO 3 **:** Engage in lifelong learning and pursue higher study and carryout research to understand the development in management and allied areas.

GRADUATE ATTRIBUTES

1. **Scholarship of Knowledge:** Gain comprehensive understanding of business management and related professional areas, including global perspectives, with the ability to discern, evaluate, analyze, and integrate both existing and new knowledge to enhance managerial expertise.
2. **Critical Thinking:** Evaluate complex business challenges critically and independently, applying sound judgment to synthesize information and drive innovative or creative advances in management practices within theoretical, practical, and policy contexts.
3. **Problem Solving:** Think creatively and strategically to conceptualize and resolve business problems, assess a variety of potential solutions, and implement effective, optimal strategies, considering factors like public welfare, cultural, social, and environmental impacts in core areas of management.
4. **Research Skills:** Gather relevant information for unfamiliar business problems through comprehensive literature reviews, employ suitable research methods and tools, analyze and interpret data effectively, and contribute individually or in teams to the development of business knowledge.
5. **Use of Modern Tools:** Identify, learn, and apply appropriate management techniques, tools, and technologies, including data analysis, prediction, and modeling tools, to enhance decision-making and problem-solving capabilities.
6. **Collaborative and Multidisciplinary Work:** Understand and utilize group dynamics to recognize opportunities for and contribute positively to collaborative and multidisciplinary business initiatives, demonstrating teamwork, self-management, open-mindedness, objectivity, and rational decision-making to achieve shared objectives and promote collective learning.
7. **Project Management and Finance:** Demonstrate knowledge of project management and financial principles, applying them effectively as both team members and leaders to manage projects efficiently in various business disciplines and multidisciplinary settings, with a focus on economic and financial considerations.
8. **Communication:** Effectively communicate with peers, industry professionals, and the broader community, demonstrating the ability to prepare and present clear, concise reports, design proper documentation, deliver impactful presentations, and give and receive clear instructions.
9. **Life-long Learning:** Acknowledge the importance of continuous personal and professional development, showing readiness and capability to engage in lifelong learning independently, with a strong commitment to enhancing knowledge and skills over time.
10. **Ethical Practices and Social Responsibility:** Uphold professional integrity, adhere to ethical standards in business and research, understand the societal impact of managerial decisions, and commit to contributing to the sustainable development of society through responsible business practices.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1	Apply the fundamental understanding of management sciences in order to tackle the challenging business issues.
PSO2	Instil the capacity for acquiring multidimensional knowledge via experiential learning, research, analysis, problem solving abilities through case studies, projects, industrial training and apply necessary tools to solve the problems
PSO3	Demonstrate the practice of professional ethics and standards for societal and environmental well-being.

PROGRAM OUTCOMES

Perhaps Programme Outcomes have been prepared based on the suggestions and ideas of the BOS, keeping in mind the Vision, Mission, and Programme Educational Objectives.

PO 1	Apply knowledge of management theories and practices to solve business problems.
PO 2	Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ability to develop value-based leadership ability.
PO 4	Ability to understand, analyse and communicate global ,economic ,legal and ethical aspects of business.
PO 5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.
PO 6	Exhibit proficiency in applying advanced quantitative and qualitative research methodologies, allowing them to critically evaluate data, make evidence-based decisions, and contribute to the continuous improvement of organizational processes.
PO 7	Demonstrate expertise in resolving business problems that may arise due to the advancement of the management concepts and engage in lifelong learning.
PO 8	Build proficiency in utilizing modern business technologies and tools, understanding their impact on business operations, and leveraging them for strategic advantage

BOARD OF STUDY

BOS Chairman

Dr. Tripuraneni Jaggaiah, Director, IIBS

BOS Members

- Dr. M .Nirmala, External BOS Director, Professor, CBSMS, Bengaluru City University.
- Dr. Krishna Kumari, Assistant Professor, Indus Business Academy
- Mr. K.K. Sashivardhana, Senior Bank Manager, Bank of India.
- Dr. D.N.Murthy, Dean Marketing Research, Welingkar Institute of Management.
- Dr. Jahnavi. M, Associate Professor, R.V. University.
- Dr. Chetan Bajaj, Dean, Firebird Institute of Research in Management.
- Mr. Sourirajan Ranganathan, Director-Strategy, Sharda University.
- Dr. Gunjan Mohan Sharma, Associate Professor and Associate Dean, Chair-AACSB Accreditation committee, O.P.Jindal Global University.
- Dr. Chaitra. V.H, Assistant Professsor, Presidency University.
- B. Ajay Chowdary, Charted Accountant.
- Dr. Mahesh Pavan, Project Manager, Ogilvy, WPP.
- Mr. Jaya Prakash, Senior Implementation Analyst, Deloitte USA.
- Mr. Maheshwara reddy, IIBS Alumini.
- Dr. M. Kethan, Principal & IQAC Coordinator, IIBS.
- Dr. Gurunatha Naidu, Professor, IIBS.
- Dr. Samiya Mubeen, Assistant Professor, IIBS.
- Dr. Arun Kumar, Assistant Professor, IIBS.
- Dr. Balaji Naik, Assistant Professor, IIBS.
- Dr. Rubeena, Assistant professor, IIBS.
- Ms. V. Manikrishna, Assistant Professor, IIBS.
- Ms. Mangala Reddy, Assistant Professor, IIBS.
- Mr. Rajesh. A.V, Assistant Professor, IIBS.
- Ms. Akriti Gupta, Assistant Professor, IIS.
- Mr. Shrinidhi, Assistant Professor, IIBS.

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BENGALURU CAMPUS :
75, Muthugadahalli, Jala Hobli,
Bangalore North Taluk, Bangalore Urban District,
Bangalore - 562157. Karnataka
TRUST OFFICE :
119, KHB Main Road,
Kankanagar, R.T.Nagar, Post,
Bengaluru, Karnataka 560032

Meeting Members

SL.NO	NAME OF THE MEMBER	DESIGNATION	SIGNATURE
1	Dr.Tripuraneni Jaggaiah Director & Principal principal@iibsonline.com	Chairman BOS	
2	Dr. M. Nirmala Associate Professor, CBSMS, BCU nirmala.cbsms@gmail.com	External BOS director	
3	Dr. Krishna Kumari Assistant Professor Indus Business Academy manchikantikumari@gmail.com 7337620265	External member	
4	Mr. Sashivardhana K.K Senior Bank Manager Bank of India icarryinfo@gmail.com 9677132162	External member	
5	Dr.Jahnavi.M Associate Professor janu.munagala@gmail.com	External member	
6	Dr.M. Kethan Associate Professor & IQAC Coordinator Dr.mkethan@iibsonline.com 9502733317	Internal Chief Editor	
7	Dr.Arun Kumar Assistant Professor arunkumar.a@iibsonline.com 9003505259	Internal Subject Matter Expert	

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Bengaluru, Karnataka 560032

8	Dr.Balaji Naik Assistant Professor dr.sbalaji@iibsonline.com	Internal Subject Matter Expert	
9	Ms. Mangala Reddy Assistant Professor mangala@iibsonline.com	Internal Subject Matter Expert	
10	Mr. Rajesh A.V Assistant Professor rajesh.av@iibsonline.com	Internal Subject Matter Expert	
11	Ms.Akrithi Guptha Assistant Professor	Internal Subject Matter Expert	
12	Dr.Rubeena Assistant Professor	Internal Subject Matter Expert	
13	Mr. Shrinidhi Assistant Professor	Internal Subject Matter Expert	
14	Mr.Maheshwara Reddy IIBS Alumni	External member	Absent
15	Mr. Raghukumar H S	Industry Expert	Absent
16	Mr. Srinivas Ganga	Industry Expert	

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MINUTES OF MEETING

Board of Studies Meeting for PGDM Course

Date: 29-05-2024

Time: 10.00AM

Venue: Board Room

Agenda Items:

1. Introduction and Welcome
2. Approval of Previous Meeting Minutes
3. Curriculum Review for PGDM Courses of all 6 Trimesters for batch:2024-26
6. Industry Collaboration and Internship Opportunities
7. Pos & Cos Mapping to curriculum/syllabus.
8. Add on courses as a part of experiential learning in the curriculum asper the Industrial requirement.

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Meeting Proceedings:

1. The board discussed the need for updating the PGDM course curriculum to align with industry trends and standards.
2. Strategies for enhancing industry collaborations and increasing internship opportunities for students were discussed.
3. Implementation of E materials access for research initiatives.
4. Introduction of Add-on Courses as per Industry demand.

Action Items:

1. Update PGDM course curriculum - Director to lead
2. Explore industry partnerships for internships - Placement Officer to take the lead
3. Introduction of Add on courses as a part of experiential learning in the curriculum- Principal to lead.

Course Content for the Batch 2024-26 (Effective from Academic Year 2024-25)

PGDM CURRICULUM

1st Trimester

Paper Code	Subject	Credit	Contact Hours L-P*	DTA	TEE	Total Marks
PGDC101	Managerial Economics (Micro)	3	35	40	60	100
PGDC102	Organizational Behavior	3	35	40	60	100
PGDC103	Accounting for Managers	3	35	40	60	100
PGDC104	Business Statistics & Analytics for Decision Making	3	35	40	60	100
PGDC105	Operations Management	3	35	40	60	100
PGDC106	Employability Skills Development	2	35	40	60	100
PGDC107	Quantitative & Logical Reasoning	1	15	40	60	100
Total		**18**	**225**	**280**	**420**	**700**

2nd Trimester

Paper Code	Subject	Credit	Contact Hours L-P*	DTA	TEE	Total Marks
PGDC201	Human Resources Management	3	35	40	60	100
PGDC202	Marketing Management	3	35	40	60	100
PGDC203	Corporate Finance	3	35	40	60	100
PGDC204	Managerial Economics (Macro)	3	35	40	60	100
PGDC205	Quantitative Techniques	3	35	40	60	100
PGDC206	Computer Applications for Business	2	35	40	60	100

PGDC207	Advanced Quantitative & Logical Reasoning	1	15	40	60	100
Total		**18**	**225**	**280**	**420**	**700**

3rd Trimester

Paper Code	Subject	Credit	Contact Hours L-P*	DTA	TEE	Total Marks
PGDC301	Business Research Methods	3	35	40	60	100
PGDC302	Indian Financial System & Financial Markets	3	35	40	60	100
PGDC303	Organisational Change & Development	3	35	40	60	100
PGDC304	Entrepreneurship	3	35	40	60	100
PGDC305	Corporate Strategy & Social Responsibility	3	35	40	60	100
PGDC306	Core Option (Data Science, LSCM, & Agricultural Marketing)	3	35	40	60	100
Total		**18**	**210**	**240**	**360**	**600**

FOURTH Trimester (Elective Subjects)

PAPER CODE	SUBJECTS	CREDITS
INDUSTRY INTERNSHIP		**3**

FINANCE		
PGDFN401	Managing Banks & Financial Institutions	3
PGDFN402	Investment Analysis & Portfolio Management	3
PGDFN403	Corporate Analysis & Valuation	3

PGDFN404	*Project Appraisal & Finance	3

MARKETING		
PGDMK411	Digital & Social Media Marketing	3
PGDMK412	Consumer Behaviour	3
PGDMK413	Sales & Distribution Management	3
PGDMK414	*Services Marketing	3

HUMAN RESOURCES		
PGDHR421	Performance Management System	3
PGDHR422	Employee Relations	3
PGDHR423	Manpower Planning, Recruitment & Selection	3
PGDHR424	*Compensation Management	3

BUSINESS ANALYTICS		
PGDBA431	Business Analytics And Business Intelligence With Power Bi	3
PGDBA432	Data Analytics using R	3
PGDBA433	Business Data Mining with SQL	3
PGDBA434	*Design Thinking	3

AGRI BUSINESS MANAGEMENT		
PGDABM441	Agri Business Environment & Policy	3
PGDABM442	Agri Supply Chain & Retail Management	3
PGDABM443	Food Technology & Processing Management	3

PGDABM444	Agricultural Finance & Banking Management	3

OPERATIONS MANAGEMENT		
PGDOM451	*Supply Chain & Logistics Management	3
PGDOM452	Quality Management System	3
PGDOM453	Advanced Production Systems	3
PGDOM454	OR Applications	3

HEALTH CARE MANAGEMENT		
PGDHCM461	Healthcare Management	3
PGDHCM462	Marketing Strategy in Healthcare	3
PGDHCM463	*Strategic Management in Healthcare	3
PGDHCM464	Accounting in Healthcare	3

DATA SCIENCE		
PGDDS471	* Analytics toolkit for Decision Sciences	3
PGDDS472	Data Analysis with Python	3
PGDDS473	Big Data with Data Warehousing and Data Mining	3
PGDDS474	Advanced Statistics & Probability for Data Science	3

HOSPITAL MANAGEMENT		
PGDHM481	* Hospital Operations Management& & Quality Assurance	3
PGDHM482	Patient Care Management & nursing service administration	3

PGDHM483	Equipment Management & Quality Assurance	3

LSCM		
PGDLSCM491	International Trade Management	3
PGDLSCM492	Economic Geography	3
PGDLSCM493	Liner Trade	3
PGDLSCM494	***Logistics Management**	

FIFTH Trimester (Elective Subjects)

PAPER CODE	**SUBJECTS**	**CREDITS**
PGDC502	International Business	3

FINANCE		
PGDFN501	International Financial Management	3
PGDFN502	Derivatives Management	3
PGDFN503	*Behavioural Finance	3
PGDFN504	Corporate Taxation for Managers	3

MARKETING		
PGDMK511	B2B Marketing	3
PGDMK512	Retail Marketing	3
PGDMK513	International Marketing	3
PGDMK514	*Product & Brand Management	3

HUMAN RESOURCES		
PGDHR521	Team Dynamics at Work	3
PGDHR522	* HR Metrics & Analytics	3
PGDHR523	International HR Management	3
PGDHR524	Strategic HRM	3
BUSINESS ANALYTICS		
PGDBA531	Big Data Analytics	3
PGDBA532	Data Visualization for Managers with Tableau	3
PGDBA533	*Future Trends in Business Analytics	3
PGDBA534	Machine Learning using Python	3

AGRI BUSINESS MANAGEMENT		
PGDABM541	Organic Food Production and Certification Management	3
PGDABM542	Risk Management in Agricultural Commodity Markets	3
PGDABM543	Rural And Agricultural Marketing	3
PGDABM544	* International Agribusiness Management	3

OPERATIONS MANAGEMENT		
PGDOM551	Operations Research Applications	3
PGDOM552	Behavioral Operations Management	3
PGDOM553	Supply Chain Analytics	3
PGDOM554	* Advanced Quality Metrics	3

HEALTH CARE MANAGEMENT		
PGDHCM561	*Legal & Policy Aspects of Healthcare Industry	3
PGDHCM562	Healthcare Supply chain Management	3
PGDHCM563	Healthcare Analytics	3
PGDHCM564	Innovation in Healthcare Management	3

DATA SCIENCE		
PGDDS571	Emerging Trends in Data Science	3
PGDDS572	*Data Visualization	3
PGDDS573	Machine Learning with Python	3
PGDDS574	Natural Language Processing	3

HOSPITAL MANAGEMENT		
PGDHM581	* Sales & Distribution Management in hospital sector	3
PGDHM582	Hospital Planning & Design	3
PGDHM583	Disaster Management & Bio Medical Waste Management	3

LSCM		
PGDLSCM591	Procurement, Storage and Warehouse Management	3
PGDLSCM592	International Logistics and Management	3
PGDLSCM593	Distribution Management for Global Supply Chain	3

PGDLSCM594	* Containerisation And Multimodal Transport	

SIXTH Trimester (Elective Subjects)

PAPER CODE	SUBJECTS	CREDITS
Final Project		**10**
MOOC/SWAYAM COURSE		**2**

Trimester-wise Summary of Credit Distribution

Trimester	Total
I	18
II	18
III	18
IV	24
V	24
VI	12
Total	**114**

Guidelines for Sixth Trimester Dissertation

Provisions in Academic Regulations

Every student is required to work on a project in the area of his/her specialization and prepare a dissertation report under the supervision of a Faculty Guide Prior to the actual work, the students are required to submit a synopsis of the dissertation incorporating the statement of problem, objectives and methodology to be followed and submit the same to the Directive Head of Institution. The dissertation must preferably be organization specific but not a macro study. The dissertation duly signed by the guide and certified by the Principal/ Director is to be submitted in a bound copy and a soft copy to the IIBS College before commencement of your VIVA (6th trimester Term End Examination). The dissertation shall be evaluated for 200 marks by two examiners (One of them will be the faculty member who has guided the work and other will be the external examiner appointed by BOE).

A minimum of 100 marks is required for a pass in the dissertation work. There shall be a viva-voce examination for 50 marks on the dissertation work. Viva-voce will be conducted by the Board of Examiners / Examiners authorized by BOE. A minimum of 25 marks is a must for pass in the viva-voce examination. Student has to work for not less than 45 days on full time basis on the dissertation. There will be no classes during this period. Specific guidelines for the same are given below:

Guidelines:

It is a practical, in-depth study of a problem, issue, opportunity, technique or procedure – or some combination of these aspects of business. Typically, the student will be required to define an area of investigation, carve out research design, assemble relevant data, analyze the data, draw conclusions and make recommendations. The dissertation should demonstrate organizational, analytical and evaluative skills, and, where appropriate, an ability to design a suitable implementation and review procedure.

The students are required to submit a copy of registration forms, synopsis, and progress reports which is to be sending to your respective guides.

The objective of the dissertation is to help the student develop research ability to apply multi-disciplinary concepts, tools and techniques to solve the organizational problems.

1. Under this program, every student is required to undertake a dissertation for a period of six weeks during VI trimester under the guidance of a recognized Faculty Guide. An executive in

the host organization could guide as co- Guide. It must be individual based but not as group project.

2. The students are required to work full time in the organization under the guidance of an executive who will be the co-guide for the dissertation. The dissertation must include a certificate from the organization duly signed by the co-guide on the organization letterhead mentioning the successful completion of dissertation.

3. On the completion of dissertation, the student is required to submit a report on the work done to the Head of the Institution through the Faculty Guide before commencement of VI Trimesters examinations.

4. Satisfactory completion of dissertation, obtaining 100 out of 200 marks for a report and 25 out of 50 marks in Viva Voce examinations are essential requisites for completing PGDM program.

5. The student's needs to study a problem/ issue purely based on the specialization stream chosen.

6. The students are required to submit synopsis to the Principle/ Director with minimum of 7-10 pages as per the format (Appendix 2) duly signed by the respective guides and forwarded by the director/Principle of colleges for approval.

7. The students need to submit fortnightly progress reports. (Appendix 3). The online submission of progress report is allowed, a copy of which is to be send to respective guides. At the time of presentation, the report should reflect the time and date of submission which is duly signed by guide and student. The online report should not be sent as an attachment but as a mail message.

8. The progress report submitted by the student duly signed by the guide will be reviewed by the POE (Panel of Expert) constituted by BOE. The POE will review progress reports and draft of Dissertation, provide feedback, observation and recommend the dissertation for submission.

9. The registration of topic, submission of synopsis, Progress report presentation, dissertation period and submission of Final Dissertation must be completed as per timelines.

10. Faculty Guide with PhD should have minimum of 3 years' of experience and Faculty guide without PhD should have a minimum of 5 years' experience. Maximum of 10 students are allowed under each faculty guide.

11. Students shall have regular interaction with the Faculty Guide in order to ensure better Quality of dissertation. The Faculty Guide shall necessarily approve the research design, tool for Data Collection etc., He/ She is authorized to reject the dissertation if it does not meet his/her expected standard quality or the guidelines. The Guides should take the responsibility

of maintaining the quality and authenticity of the dissertation and issue of certificate of originality.

12. Any attempt to copy from another (Present or Previous) student or to copy large chunks from academic or other sources without approximately referencing those sources will trigger the full weight of plagiarism procedures. University will initiate stern action.

13. In order to avoid plagiarism, the students are required to produce a certificate of anti-plagiarism from the authority recommended by POE. Similarity index of 25% is allowed.

14. All the material that relates to the dissertation, including completed questionnaires or tapes from interviews, should be shown to the guide and be kept by the students until the University has declared the results. Students are advised not to throw the material away once their dissertation is submitted, as they might be asked to present it as part of the viva voce before their Dissertation results are declared.

15. One hardbound copy of dissertations along with soft copy [CD] has to be submitted to IIBS College. This has to be uploaded on the website of the institution after the completion of Viva -Voce Examination

16. The body of the dissertation report must be organized in the following manner.

- Cover Page with Title and other details
- Certificate of originality from the Student and Faculty
- Certificate by Head of the Institution
- Acknowledgements
- Abstract [Should not exceed 150 words with five key terms]
- Table of Contents
- List of Tables
- List of Figures
- Project report should not be less than 100 pages and not exceed 150 Pages with 12 point Times Roman New Font with 1.5 line spacing.
- References
- Appendices

CONTINUOUS FORMATIVE EVALUATION/ ASSESSMENT – SCHEME

The final grade for each course will be based on the combined results of the Term End Examination (TEE) and During Term Assessment (DTA). According to the NEP's resolution, the DTA and TEE tests must follow the same uniform pattern of 40:60.

TOTAL MARKS FOR EACH COURSE	**100Makrs**
Continuous assessment (C1)	20% marks
Continuous assessment (C2)	20% marks
Trimester End Examination (C3)	60% marks

EVALUATION /ASSEMENT PROCESS

a) The first component of the evaluation (C1) carries a 20% weight. Based on the components like tests/assignments/seminars/case studies/fieldworks/project work, this is to be done. This procedure of evaluation and scoring shall be done once 50% of the course/s' syllabus is completed.

b) The second assessment component (C2) carries a 20% weight. Based on the components like tests/assignments/seminars/case studies/fieldwork/internships/ industrial practice/project work, this is to be done. This evaluation and scoring procedure shall be based on finishing the remaining 50% of the course/s' syllabus is completed.

c) A Term End Examination shall be conducted by the Institute for each course. This forms the third and final component of assessment (C3) and this carries 60% weight.

d) A student is considered to have dropped the test if they fail to appear up for the C1 or C2 on the scheduled date. The Programme Coordinator / Principal may hear an appeal from a student who was unable to take the test on the scheduled day for genuine reasons.

e) In consultation with the concerned teacher, the programme coordinator or principal will determine whether the claim is true and whether to hold a special exam for the candidate in question on the day set by the instructor but prior to the start of the TEE.

f) When writing the components of C1 and C2, students should bring the required supplies, which should be stamped by the appropriate department using their department seal.

g) The results of the internal assessment must be published on the departmental or college notice board.

h) At least 10 days before to the start of the TEE, During Term Assessment shall be communicated to the Controller of Examinations (COE).

i) There shall be no minimum standard for internal evaluation scores. Individual internal assessment scores may be kept. Candidates who are unsuccessful or rejected the outcome can retain their internal evaluation scores.

ELIGIBILITY CRITERIA

1. No candidate shall be deemed to have passed the Term End Examination for any course or paper unless he or she receives at least 40% in the written or practical examination.
2. 40% marks in the aggregate of written / practical examination and internal assessment put together in each of the courses and 40% marks (including DTA) in Project work and viva-voce wherever prescribed.
3. A candidate shall be declared to have passed the program if he/she secures at least 40% of marks or a CGPA of 4.0 (Course Alpha-Sign Grade P) in the aggregate of both During Term Assessment and Term End Examination marks put together in each unit such as theory papers / practical / field work / internship / project work / dissertation / viva-voce, provided the candidate has secured at least 40% of marks in the trimester end examinations in each unit.

FINAL RESULT / GRADES DESCRIPTION

Trimester GPA	**Aplha-Sign**	**Trimester %of marks**	**Result/Class Description**
9.00-10.00	O (Outstanding)	90.0-100	Outstanding
8.00-<9.00	A+ (Excellent)	80.0-<90.0	First Class Exemplary
7.00-<8.00	A (Very Good)	70.0-<80.0	First Class Distinction
6.00-<7.00	B+ (Good	60.0-<70.0	First Class
5.50-<6.00	B (Above Average)	55.0-<60.0	High Second Class
5.00-<5.50	C (Average)	50.0-<55.0	Second Class
4.00-<5.00	P (Pass)	40.0-<50.0	Pass Class
Below 4.00	F (Fail)	Below 40	Fail/Reappear
Ab (Absent)	-	Absent	-

4. The candidates who pass all the Term End Examinations in the first attempts are eligible for ranks provided they secure at least CGPA of 6.00 (Alpha-Sign Grade B+).
5. A candidate who passes the Term End Examination in parts is eligible for only Class, CGPA and Alpha-Sign Grade but not for ranking.
6. The results of the candidates who have passed the 6^{th} trimester Term End Examination but not passed any of the lower trimester Term End Examination shall be declared as NCL (Not Completed the Lower Trimester Term End Examinations). Such candidates shall be eligible for the degree only after completion of all such pending Examinations.
7. If a candidate fails in a subject, either in theory or in practical's, he/she shall appear for that subject only at any subsequent regular examination, as prescribed for completing the programme. He/she must obtain the minimum marks for a pass in that subject (theory and practical's, separately) as stated above.
8. CARRYOVER- Candidates who fail the Term End Examination in any of lower trimesters will be moved to the higher trimesters and will retake the Examination in the lower trimester.
9. If a candidate fails in any of the lower trimester, She/He can take the examination in the higher trimester. But no applicant will be allowed to sit for the sixth trimester Term End Examination unless they have passed every course in the first and second trimester Term End Examinations.

TEACHING METHODOLOGY/PEDAGOGY

- Classroom Lectures/ Presentations
- Case Study Approach
- Seminars and Workshops
- Live Assignments/ Projects
- Group Discussion
- Simulation & Experiential Learning
- Field Visit & Industrial Visit
- Internship Program
- Guest Lectures

Course Code & Title: PGDC101- Managerial Economics (Micro)

Course Description: Managerial Economics applies microeconomic principles to decision-making processes within a business context. This course aims to provide students with the tools and concepts necessary to analyze and solve problems encountered by managers in both the private and public sectors. Topics covered include demand and supply analysis, production and cost functions, market structures, and the role of government in the economy.

Course Objectives:

1. To understand and apply microeconomic concepts and tools in managerial decision-making.
2. To analyze consumer behavior and demand.
3. To evaluate production and cost functions.
4. To examine various market structures and pricing strategies.

Course Outcomes:

CO1: Understand the scope and significance of managerial economics.

CO2: Analyze the principles of production theory and their applications.

CO3: Evaluate the characteristics and implications of various market structures.

CO4: Examine the rationale for and types of government intervention in the market.

Course Pre-requisites: Prior knowledge of basic concepts of Managerial Economics

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 42

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Managerial Economics and** Introduction to Managerial Economics: Definition, scope, and significance of managerial economics - Fundamental concepts and principles of managerial economics – Opportunuty Cost- Production Possibility Curve – Discounting Principal	**8 hours**	**1**		
Unit-2	**Demand Analysis & Consumer Behavior:** Demand Analysis: Law of demand and determinants of demand - Elasticity of demand: price, income, and cross elasticity - Demand forecasting: methods and applications - **C**onsumer	**10 hours**	**2**		

	Behaviour : Utility analysis: cardinal and ordinal approaches - Indifference curve analysis				
Unit-3	**Production and Cost Analysis** Production Theory: Production functions: short-run and long-run - Law of diminishing returns - Isoquants and isocosts: optimal combination of inputs - **Cost Analysis:** Cost concepts: fixed, variable, and total costs - Short-run and long-run cost curves	**10 hours**	**3**		
Unit-4	**Market Structures and Pricing Strategies** Market Structures: Characteristics of different market structures: perfect competition, monopoly, monopolistic competition, and oligopoly - Market power and its implications - Pricing Strategies: Pricing under different market structures – Theory of Factor of Pricing – Wage -Rent- Theory of Intrest and Investment	**12 hours**	**4**		

Reference Books:

1. Ritika Sinha: Managerial Economics, SBPD Publishing House
2. Damdaran Suma: Managerial Economics, Oxford University
3. Petersen Lewis & Jain: Managerial Economics, Pearson
4. Paul A Samuelson and William D Nordhas: Economics, Mc Graw Hill
5. Geethika, Ghosh & Choudary: Managerial Economics, McGraw Hill
6. Dwicedi D N, “Managerial Economics”, Vikas Publication.
7. Pindyck Rubinfeld & Mehta, “Micro Economics”, Pearson

Course Code & Title: PGDC102 - Organizational Behavior

Course Description:

This course deals with individuals in the organizational context. People have diversified personalities, attitudes, perceptions and behaviors. After their entry, they cannot remain as individuals. Organizations have their own culture, leadership and conflicts. It is this subject which blends incompatible ones into a whole. Understanding the individual and organizational behaviors would go a long way in bringing about this perspective.

Course Objectives:

1. To enhance the understanding of the dynamics of interactions between individual and the organization.
2. To facilitate a clear perspective to diagnose and effectively handle human behavior issues in Organizations.
3. To develop greater insight into their own behavior in interpersonal and group, team, situations.
4. To explore the key parameters of sustainable organizational culture and change management.

Course Outcomes:

CO1.Describe the basic concepts of Organizational Behavior in dealing with the management problems using human approach for decision making

CO2. Explain and utilize personality models and various approaches to find feasible solutions for organizational people problems.

CO3 : Apply the knowledge of individual, group and organizational behaviour to build effective teams.

CO4. Analyse and apply the knowledge and skills of HR to create vibrant organization culture and change management.

Course Pre-requisites: Prior knowledge of basic concepts of principles of management.

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 36

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	Foundations of Organizational Behavior: • The nature and determinants of organizational behavior • Roles & Functions of Managers & need for knowledge of OB, • contributing disciplines to the field, • Hawthorne studies. • Individual Differences: Individual characteristics, differences and significance • Theories & Behavior Modification, • Values, Attitude, Cognitive Dissonance Theory	**8 hours**	**1**	**1**	**1**
Unit-2	Personality: • Determinants, Trait Theory, • MBTI, Big Five model, • Emotional Intelligence; • Perception: Perceptual process, • Attribution theory, Individual Decision Making & Perceptual errors. Work Motivation: • Mc. Gregor's Theory X & Y, • Abraham Maslow's Need Hierarchy, • Herzberg's Two Factor Theory, • Contemporary Theories - McC Leland's 3 Needs Theory, • Goal setting theory, • Equity theory, Expectancy theory, • Reinforcement theory, • Application of Motivation Theories.	**10 hours**	**2**	**6**	**2**
Unit-3	Group Behaviour: • Types of Groups, Stages of Group Development, Group Properties. • Understanding Teamwork: Types of Teams, • Creating Effective teams, Turning individuals into team players, • Role of Emotional Intelligence in team work. • Leadership: Basic Approaches –Behavioral Theories & Contingency Theories, • Leadership Styles, Contemporary issues in leadership,	**10 hours**	**3**	**6**	**1**

	• Leadership role in facilitating Work life balance among employees				
Unit-4	Organizational Culture: • Types of organizational culture, creating and sustaining culture, • Changing Organizational Culture; • Change Management: overcoming resistance to change, Lewin's three stage model; • Stress Management: Sources and consequences of stress, stress management, • role of personality in stress management. • Work from home facility and its impact • Conflict Management - types of conflict, conflict process, negotiation	**8 hours**	**4**	**4**	**3**

REFERENCES

1. Gregory Moorhead & Ricky W. Griffin, "Organizational Behaviour, Managing people and organizations", 3rd edition, Jaico

2. Jerald Greenberg, "Behavior in Organizations", Tenth edition,Prentice Hall

3. Robert Krietner&AngeloKinicki, "Organizational Behaviour", Eighth edition, Tata McGraw Hill

4. John M Ivancevich, Robert Konopaske, Michael T Matteson, "Organizational Behaviour and Management", 7th edition, Tata McGraw Hill

5. PG Aquinas, "Organizational Behaviour: concepts, realities, application and challenges", First edition, Excel

6. Jason A. Colquitt, Jeffery A. LePine& Michael J Wesson, "Organizational Behavior", McGraw Hill

7. UdaiPareek, "Organizational Behavior", Oxford University Press

Course Code & Title: PGDC 103- Accounting for Managers

Course Description:

Accounting for Managers" provides essential financial literacy for non-accounting professionals. Topics include financial statement analysis, cost management, budgeting, financial ratios, capital budgeting, and ethical considerations. The course emphasizes practical applications in managerial decision-making, using case studies to interpret and use financial information effectively. It covers international accounting standards (IFRS, GAAP) and risk management basics. Designed for managers without formal accounting backgrounds, it aims to enhance their ability to assess financial health, control costs, make informed strategic decisions, and contribute to organizational success through sound financial management practices.

Course Objectives:

1. Equip managers with essential knowledge to interpret financial statements and understand key financial metrics.
2. Develop the ability to use financial information effectively in strategic and operational decision-making processes.
3. Understand techniques for controlling costs, budgeting, and variance analysis to optimize financial resources.
4. Integrate ethical considerations into financial decision-making practices, ensuring responsible managerial behaviour.

Course Outcomes:

1. Ability to interpret and analyse financial statements (e.g., balance sheet, income statement) to assess the financial health and performance of an organization.
2. .Skills in creating budgets, forecasting financial needs, and performing variance analysis to manage financial performance effectively.
3. Awareness of ethical issues in accounting and finance, such as conflicts of interest, financial reporting fraud, and the importance of integrity in financial management.
4. Understanding of cost behaviour (fixed vs. variable costs) and techniques for cost analysis to optimize resource allocation and improve profitability.

Course Pre-requisites: Prior Knowledge of basic concept of Basic Finance

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 40 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Module 1	Conceptual Basis for Accounting: Meaning and Definition – Basic frame work of accounting – Objectives and Purpose of accounting – User of accounting information –	10 hrs.	1	1,2	1,

	Branches of accounting – GAAP – Accounting Concepts and Conventions – IFRS.				
Module 2	**Preparation of Financial Statements** Ethics in accounting – Accounting Literature – Accounting Equation – Journal Entries – Ledger – Income Statement – Balance Sheet (Vertical) – Current Assets – Inventory Valuation – Fixed Assets – Depreciation Methods – Liabilities and its Classification.	15 hrs.	2	2,4	2,
Module 3	Analysing Financial Statements: Financial Statements Objectives – Sources – Quality of Earnings – Window dressing. Techniques of Analysis: Comparative and Common size Statements (Income Statements & Balance Sheet) – Trend Analysis – Ratio Analysis – Cash Flow Statements.	12 hrs.	3	3,4	1
Module 4	Operation to Cost Accounting: Meaning of Cost – Classification of Cost – Based on Elements – Functions and behavior. Cost Management – Techniques for controlling and reducing cost – Marginal Costing – Cost-Volume-Profit analysis – Budgetary Control	8 hrs.	4	4,5	2

Reference Books:

1. Paresh Shah, "Basic Financial Accounting For Management", Oxford University Press
2. Ramachandran, N. & Kakani, R.K., "Financial Accounting for Management", Tata McGraw Hill.
3. Bhattacharya, S.K "Accounting for Management: Text and Cases", Vikas Publishing House.

Recommended Books:

1. Narayanaswamy. R, "Financial Accounting: A Managerial Perspective", Prentice Hall of India (PHI)
2. M.N. Arora, "Accounting for Managers", Himalaya Publications

Course Code & Title: PGDC104 - Business Statistics and Analytics for Decision Making

Course Description: It will discuss from both conceptual and application perspective, basic statistical and mathematical concepts and tools widely used in business applications. The course gives a basic mathematical /statistical input desired for a clear understanding of core courses like Economics, Foundations of Finance, Managerial Finance, Operations Management and electives in Marketing & Finance Courses. Further it enables to conceptualize business problems in statistical / mathematical terms and solve them to provide solutions.

Course Objectives:

1. Understand the concept of Probability & random variables and applications of important probability models

2. Understand the need and application of sampling methods. Various sampling methods used in practice will be discussed.

3. Understand and apply appropriate inferential statistical tools of estimation and testing of hypothesis. Understand the method of evaluating the association between variables through correlation and regression modelling.

4. Use basic time series analysis for forecasting.

5. Understand the approach for decision making under uncertainty.

6. Appreciate the use of some basic mathematical tools for business applications.

Course Outcomes:

CO1. Utilize important probability models such as binomial, Poisson, and normal distributions in practical contexts.

CO2. Evaluate the necessity of sampling in statistical analysis and apply inferential statistics for estimation and hypothesis testing

CO3: Interpret statistical results accurately and draw meaningful conclusions from them.

CO4. Utilize time series analysis techniques to analyze temporal data and develop forecasting models for future predictions.

CO5: Assess different decision-making strategies under uncertainty and evaluate the risks and uncertainties associated with different decisions.

CO6: Apply basic mathematical tools such as calculus, linear algebra, and optimization techniques to solve business problems.

Course Pre-requisites: prior knowledge of basic concepts of statistics

Pedagogy: ICT and Digital support					
LTP: 2:1:0					
Course type: HC					
Contact Hours: 39					
Units	**Detailed Syllabus**	**Contact hours**	**CO**	**PO**	**PSO**
Unit-1	**Role of statistics:** Applications of statistics in managerial decision-making; Phases of a statistical study, Presentation of data to convey meaning - Tables, Graphs and Frequency Distribution. Measures of central tendency: Mean, Median and Mode and their implications, Measures of Dispersion: Range, Mean deviation, Standard deviation, Coefficient of Variation, Skewness, Kurtosis.	**9 hours**	**1**	**1**	**1**
Unit-2	**Time series analysis:** Concept, Additive and Multiplicative models, Components of time series. Trend analysis: Least Square method, Linear and Non- Linear equations, Exponential smoothing method, Applications in business decision-making. **Correlation and Regression:** Meaning and types of correlation, Karl Pearson and Spearman rank correlation. Regression equations and their application.	**10 hours**	**2**	**6**	**2**
Unit-3	**Probability:** Concept of probability and its uses in business decision-making; Addition and multiplication theorems; Bayes' Theorem and its applications. Probability Theoretical Distributions: Concept and application of Binomial; Poisson and Normal distributions.	**10 hours**	**3**	**6**	**1**
Unit-4	**Estimation Theory and Hypothesis Testing:** Sampling theory; Formulation of Hypotheses; Application of Z-test, t-test, F-test and Chi-Square test Techniques of association of Attributes &	**10 hours**	**4**	**4**	**3**

	Testing ANOVA one and two way, Design of experiments.				

Reference Books:

1. SC Gupta, Fundamentals of Statistics, Himalaya Publications.2013.

2. N.D. Vohra, Business Statistics, Tata McGrawHill, 2013

3. T N Srivastava, Shailaja Rego, Statistics for Management,

4. Tata McGraw-Hill, Latest edition.

5. S P Gupta, Statistical Methods, Sultan Chand & Sons, Latest edn.

6. Glynn Davis and BrankoPecar, Business Statistics using Excel.

7. Oxford University press, 2010

8. J. K. Sharma, Fundamentals of Business Statistics,

9. 2nd Edition, Vikas Publication, 2014.

COURSE CODE & Title: PGDC105 – Operation Management

Course Description:

This course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-delivering organization. Topics include operations strategy, process design, facilities location and layout, forecasting, production scheduling, work measurement, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization.

Course Objective

1.) Understand the fundamental concepts and objectives of Operations Management, including the differences between services and goods and the role of an operations manager.
2.) Analyze various forecasting methods and production systems, and comprehend the importance of supply chain management, including warehousing, logistics, and the 4 M's.
3.) Evaluate different methods for work measurement and productivity, materials management, inventory control techniques, and vendor rating.
4.) Apply project management principles, including network diagrams, scheduling techniques (CPM, PERT, Gantt charts), and agile management, while recognizing recent trends in operations management.

Course Outcome

CO1: Students will be able to describe the key concepts and objectives of Operations Management, including the characteristics of modern operations management and the differences between services and goods.

CO2: Students will be able to compare and contrast different types of forecasting methods, production systems, and facility layouts, and explain the factors affecting facility location.

CO3: Students will be able to analyze and select appropriate inventory control methods and materials management techniques, including EOQ, ABC analysis, and vendor rating.

CO4: Students will be able to develop project management plans using network diagrams, CPM, PERT, and Gantt charts, and implement agile management techniques while assessing recent trends in operations management.

Course Pre-requisites: prior knowledge of basic concepts of operations.

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	**Operations Management concept, objectives and types; Characteristics of Modern Operation** Management; Differences between Services and Goods; Role of Operations Manager; Concept on Productivity; Decision-making Strategies of Operations Management, Roles & Responsibilities of Ptoduction & operations Management.	**9 hours**	**1**	**1**	**1**
Unit-2	Forecasting – Types of Forecasting – Qualitative and Quantitative. Production and Operations Management – Types of Production System. Supply Chain Management – Warehousing and Logistics; Concept on Resources – 4 M's; Types of Supply Chain Management – Participants of Supply Chain. Product Design – Factors – Legal, ethical and environmental issues in product design; Facility Location – Types of Facility Location; Factors affecting selection of facility location; Facility Layout – Concept; Types of Facility Layout.	**9 hours**	**2**	**6**	**2**
Unit-3	Time Study, Method Study and Motion Study – Work Measurement and Productivity. Materials Management – Concept; Inventory Control – Economic Order Quantity; EOQ with Quantity Discounts; ABC analysis, VED analysis, FSN analysis, HML analysis, XYZ analysis; Concept of Material Handling; Purchasing – Concept, Vendor Rating & Value Analysis.	**9 hours**	**3**	**6**	**1**
Unit-4	Project Management – Concept of Network Diagram (AOA – Activity on Arrow and AON – Activity on Node); Scheduling Techniques – CPM, PERT and Gantt Charts; Concept of Agile Management. Maintenance – Definition, Types of Maintenance; Recent Trends in Operations Management.	**9 hours**	**4**	**4**	**3**

Reference Books:

1) Jay Heizer and Barry Render, Operations Management Sustainability and Supply Chain Management, Pearson Publication, Twelfth Edition, 2017.

2) S.N. Chary, Production and Operations Management, TMH Publications, 1995.

Text Books

1) Everett E Adam & Ebert, Production & Operations Management, PHI Publication forth edition, 2012.

2) Joseph G Monks, Operations Management (Theory & Problems), McGraw Hill Int., 2012.

3) Chunawalla and Patil, Production and Operations Management, Himalaya, 2005.

4) Lee J.Krajewski and Larry P. Ritzman, Operations Management: Strategy and Analysis, 10th edition, Adison Walley, 2012.

5) Chase, Aquilano & Jacobs, Production and Operations Management, 12th edition, Tata McGraw Hill, 2010.

6) P.C.Sharma, Production Technology (Manufacturing Process), S. Chand, Chennai, 2010.

7) S.A. Chunawalla, Basics of Production and Operations Management, First Edition, Himalaya Publishing House, 2001.

Journals and Magazines:

1) Journals of Operations Management

2) International Journal of Advanced Operations Management.

3) International Journal of Operations and Production Management.

Course Code& Title: PGDC 106 - Employability Skills Development

Course Description:

This course will teach you all about communication in business. You'll learn why communication is important both inside and outside a company. The Business Communications course will help future entrepreneurs make clear business messages, give good presentations, write easy-to-read business documents, and understand how communication affects a business.

Course Objective:

1. Helps students see things in new ways and get ready for the fast-changing world. With technology and globalization changing business communication a lot in recent years, students will learn to handle these new challenges effectively**.**
2. Enhance proficiency and competencies in verbal and non- verbal communication skills with a holistic long-term perspective
3. Guide the participants to manage cross cultural communication
4. Develop technical communication skills

Course Outcome:

CO1. Demonstrate the use of basic and advanced business writing skills.

CO2. Produce clear and concise written business documents.

CO3. Develop interpersonal communications skills that are required for social and business interaction.

CO4. Plan and conduct effective meetings and deliver Presentation.

Course Pre-requisites: prior knowledge of basic concepts of communication

Pedagogy: ICT and Digital support

LTP:3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Communication in Business** Importance of Communication, Process of Communication Forms of Communication. Verbal and Non-Verbal Communication, Communication in Organization, Barriers and how to overcome Barriers in communication. Hands on exercise on verbal and non-verbal communication.	**9 hours**	**1**	**1**	**1**

	Verbal Communication: Public Speaking, Effective Power Point presentation, Audience research, Creativity in communication, EI, EQ and IQ. Communication through Telephonic, video and Skype, Group Discussion. **Non-verbal aspects**: Facial expressions, voice modulation, eye contact, audience research, responding to queries from the audience.				
Unit-2	**Listening Skills** Listening and Hearing Importance and differences, types of Listening, Anatomy of poor Listener, Features of a good Listener, ways to improve listening, Barriers and how to overcome Barriers in listening. Hands on exercise on listening skills.	**9 hours**	**2**	**6**	**2**
Unit-3	**Interpersonal Communication Skills** Advantages and disadvantages of utilizing the team work; characteristic features of successful teams; stages of the development of a team; team roles; challenges in teamworking, forms of non-team behaviour. Conditions of negotiating; strategies of negotiating (win-win, win-loss); participative negotiations; negotiating tactics; cognition and emotions in negotiating and ethics Types and sources of conflicts; the influence of various cultures on the solving of conflicts.	**9 hours**	**3**	**6**	**1**
Unit-4	**Written communication** **Writing an Effective Report:** Stages of Writing, Style and Tone; Five Ws and one H of Report Writing, Format of report. Divisions, Numbering and use of Visual Aids. **Business Communication:** Business Letters – Full Block, Semi-Block, Simple Commercial Letters. Application : Job Application, Grievance letters, Emails – Formal and Informal mails, Resolution Letters	**9 hours**	**4**	**4**	**3**

	Resume Writing Memo, Minutes of Agenda and Minutes of meeting. Journals/ Maintaining a Diary.				

Reference Books:

1. Damerst, William (1966). *Resourceful Business Communication*. Harcourt, Brace & World.
2. Scot Ober, Comtemporary Business Communication, Biztantra.
3. ParagDiwan Business Communication, Excel Book.
4. Murphy, Effective Business Communication, McGraw-Hill.
5. Monipally MM, Business Communication Strategies, McGraw Hill
6. Bovee, Till and Schatzman, Business Communication today, Pearson.

Course Code& Title: PGDC 107 - Quantitative & Logical Reasoning

Course Description:

Aptitude is essential to assess analytical and problem-solving skills in a student. logical reasoning helps to assess ability to reason using concepts wrapped in words. It verifies levelof understanding and comprehension, as well as your dexterity when it comes to filtering out key information from a bulk of text.

Course Objective:

1. To categorize, apply and use thought process to distinguish between concepts of Quantitative methods.
2. To prepare and explain the fundamentals related to various possibilities and probabilities related to quantitative aptitude and critically evaluate numerous possibilities related to logical reasoning.

Course Outcome:

CO1. Analyze and Distinguish Between Quantitative Methods: Students will be able to analyze different quantitative methods and distinguish between various concepts by applying critical thinking and categorization skills.

CO2. Evaluate and Apply Probability Principles: Students will evaluate fundamental probability concepts and apply them to solve problems related to quantitative aptitude, demonstrating critical thinking and logical reasoning skills.

Course Pre-requisites: prior knowledge of basic concepts of Aptitude

Pedagogy: ICT and Digital support

L:T:P- 0:1:0

Course type: HC

Contact Hours: 15

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Quantitative aptitude:** **Number System:** Classification of Numbers, Divisibility Rules, Multiple and factors, HCF & LCM, concept of exponents, BODMAS. **Percentage & Averages:** Problems Based on Population, Consecutive decrease, Results on Depreciation, Percentage Change, Percentage of Quantity. **Profit and Loss:** Concepts of SP, CP, Profit, Loss, Gain or Loss %, Marked Price & Discount problems, Successive Discount. **Ratio Proportion:**	**8**	**1**	**1**	**1**

	Comprehend and Dividend Problems on ages, Mixtures & Allegation				
Unit-2	**Logical Reasoning:** **Coding & Decoding:** Concept of EJOTY, Opposite Letter, Reversing the alphabets, Jumbling of Letter, Finding Codes of Different Derivatives. **Series completion:** Basics of Next no, Missing no and Wrong no and problems on that. **Image Analysis:** Paper cutting & Folding, Mirror & Water Image, Cubes and Dice, Find the odd one out, Rule Detection. **Seating Arrangement:** Linear and Circular seating Arrangements as well as problems of sitting around square and rectangular table. **Analogies:** Drawing similarity between different but sufficiently similar events, situations, or circumstances using tips and tricks.	**7 hours**	**2**	**6**	**2**

Reference:

Text Books:

1. Quantitative Aptitude for Competitive Examinations by R S Agarwal
2. Wileys Exam Xpert General Aptitude for Campus Placements by Uma Maheshwari
3. Solved Placement Papers Campus Recruitment (Version Lite 2019) by Praxis groups
4. Modern Approach to Verbal and Non-verbal reasoning, by R S Agarwal
5. Quantitative Aptitude for Competitive Examinations by Rakesh Sharma

Website/URLs:

1. http://placement.freshersworld.com/placement-papers
2. Fast track objective arithmetic by Rajesh Verma
3. Career Prime study materials
4. https://examsdaily.in/quantitative-aptitude-study-material
5. https://cracku.in/blog/rrb-ntpc-reasoning-questions-pdf/

Course Code & Title: PGDC201 – Human Resource Management

Course Description: This course covers topics such as role and importance human resource management in the firm, recruitment, selection, job analysis, job description, training and development, job evaluation, performance management system and grievance addressal mechanism.

Course Objectives:

1. To learn the evolution of human resource management and how to forecast manpower need.
2. To learn the recruitment practices and selection procedure.
3. To learn the new perspectives in Training.
4. To learn application of performance evaluation and grievance handling mechanism.

Course Outcomes:

CO1: Explain the evolution of human resource management and Identify the demand forecasting of human resource required and hire right person for right place at right time

CO2: Demonstrate the various recruitment practices and selection procedure

CO3: Illustrate new perspectives in Training and executive development

CO4: Apply the performance evaluation and learn how to handle grievance.

Course Pre-requisites: prior knowledge of basic concepts of HRM

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction To Human Resource Management** Evolution of Human Resource Management – Functions of HRM – Role of Human Resource Manager – Techniques in HRM -Human Resource Planning & Objectives - Factors affecting HRP - Process of HRP; Job Analysis - Process of Job Analysis - Job Description - Job Specifications- Job Evaluation – Objectives – Process of Job Evaluation – Methods.	**10 hours**	**1**		
Unit-2	**Employee Recruitment, Selection & Socialization** Recruitment - Factors affecting recruitment,	**10 hours**	**2**		

	Constraints and Challenges in Recruitment Process, Process of Recruitment, Sources of Recruitment and Recruitment Practices in India; Selection - Steps in Selection Procedure, Socialization process.				
Unit-3	**Training & Executive Development** Concept of Training, Training Methods, New Training Techniques, Evaluation of Training, Emerging Issues in Training, Training Need Analysis – Neuro Linguistic Programme (NLP)- Executive Development – Objectives – Methods- Self learning tools & modalities.	**9 hours**	**3**		
Unit-4	**Performance Appraisal And Grievance Redressal** Performance Appraisal, Methods of Performance Appraisal, Possible Errors in the Appraisal Process; Work from Home, Employee Diversity and Performance Appraisal; Moonlighting - Grievance – Causes – Implications - Redressal Procedure – Green HRM.	**10 hours**	**4**		

TEXT BOOKS

C.B.Gupta, Human Resource Management - Text and Cases, Sultan Chand & Sons, New Delhi.

REFERENCES

1. Gary Dessler and BijuVarkkey, Human Resource Management, Pearson Education, New Delhi.

2. R. Wayne Mondy, Human Resource Management, Prentice Hall, 2011.

3. Venkataraman & Srivastava, Personnel Management & Human Resources

4. Edwin B. Flippo, Personnel Management, McGraw-Hill, 1984

WEB REFERENCE

1. http://www.nitc.ac.in/app/webroot/img/upload/546896605.pdf

2. https://www.assessteam.com/managing-work-from-home-employee-performance

3. https://www.small-improvements.com/blog/performance-management-diversity-and inclusion/

Course Code & Title: PGDC202 – Marketing Management

Course Description: This course covers topics such as role and importance of marketing in the firm and other organizations, marketing plans/strategies, marketing research, market segmentation, targeting, positioning and competitive strategies

Course Objectives:

1. To provide basic knowledge of concepts, principles, tools and techniques of marketing
2. To give detailed knowledge about marketing environment and consumer behavior
3. To create deep understanding about the marketing mix
4. To make students aware about segmentation, positioning and competitive dynamics

Course Outcomes:

CO1: Describe the concepts, principles, tools and techniques of marketing
CO2: Analyze the marketing environment and consumer behavior dimensions
CO3: Apply the knowledge of marketing mix in business applications
CO4: Explain the concepts of segmentation, positioning and competitive dynamics

Course Pre-requisites: prior knowledge of basic concepts of marketing

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Marketing** Meaning & Definition – Nature and Scope of Marketing – Goals – Concepts of Marketing– Functions of Marketing – Core Marketing Concepts, Role of Strategic Planning – Strategic Trends	**9 hours**	**1**	**1**	**1**
Unit-2	**Marketing Environment and Consumer Behaviour** Marketing Research process; Importance of Macro & Micro environment (trends), factors measuring and forecasting Market Demand, Factors Influencing Consumer Behavior, Buying Decision Process, Difference between Business Market and Consumer Market.	**10 hours**	**2**	**6**	**2**
Unit-3	**Marketing Mix** Meaning, Elements, Product, Product Mix, Product Line, New product Development, PLC: Design Marketing Strategies for each Stage of the Product Lifecycle; Branding, Packaging, Labeling, Pricing – Objectives, Factors influencing Pricing Policy and Methods of Pricing. Process of Pricing; Physical Distribution – Meaning – Types of Marketing channel, Factors affecting Channel Selection –	**10 hours**	**3**	**6**	**1**

	Promotion – Meaning and Significance of Promotion Mix: Advertising, Sales Promotion, Personal Selling, Public Relations and Publicity				
Unit-4	**New Trends and Concepts in Marketing** Integrated Marketing Communications – Digital & Social Media Marketing – CRM – Influencer Marketing – Marketing Campaigns – Interactive Marketing – Other latest Trends	**10 hours**	**4**	**4**	**3**

Reference Books:

1. Michael J. Etzel, Bruce J. Walker, and William J Stanton, (2019) Tata Mc Graw Hill, Publishing Co Ltd

2. Philip Kotler, Kevin Lane Keller (2015) 15th edition, Marketing Management, Pearson.

3.Kuranakaran, (2010) Marketing Management, Himalaya Publishers.

4. William J. Stanton, Michael J.Etzel, Bruce J Walker, Fundamentals of Marketing, McGraw Hill Education.

5. Kotable and Helsen, Global Marketing Management, 7th edition, John Wiley

Course Code & Title: PGDC203 – Corporate Finance

Course Description: The course delves into key topics such as value creation, corporate social responsibility, long-term and short-term financing, time value of money, capital budgeting decisions, capital structure theories, cost of capital, and working capital management with a focus on dividend policy and relevant financial theories.

Course Objectives:

1. To understand the significance of corporate finance and its role in achieving organizational objectives.

2. To apply capital budgeting decision rules and evaluate the impact of risk on investment decisions.

3. To analyze different capital structure theories and comprehend the cost of capital components.

4. To assess sources of working capital and understand factors influencing dividend policy.

Course Outcomes:

CO1: Articulate corporate finance goals, analyze finance manager roles and issues, and grasp principles of long-term and short-term finance and working capital management.
CO2: Estimate cash flows, apply decision rules (Payback, ARR, NPV, IRR, PI, MIRR), and utilize discounted cash flow models effectively.

CO3: Comprehend leverage, compute cost of debt, estimate beta, understand WACC and WMCC, and identify diverse sources of finance.
CO4: Identify working capital sources, estimate requirements, manage cash and securities, and understand factors and models influencing dividend policy.

Course Pre-requisites: Prior knowledge of basic concepts of Basic Finance

Pedagogy: Lecture/ PPT Case study Practical / live assignment Interactive class room discussions

LTP: 2:1:0

Course type: HC

Contact Hours: 40

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**MODULE 1: Introduction to Corporate Finance** Significance of Corporate Finance - Objectives – Goals – emerging role of finance manager in India – current issues of finance manager – Agency problem – Value creation - corporate social responsibility – Long-term and Short-term source of Finance – Working Capital Management (Theory) Time Value of Money: Present Value- future value- P.V. Annuities- F.V. Annuities- Growing Annuities-	**12 hours**	**1**	**1**	**1**

	Compounding and Discounting techniques – Amortization. (Problems)				
Unit-2	**CAPITAL BUDGETING DECISIONS** Capital Budgeting: Estimating cash flows – Initial, Intermediate, and terminal – on incremental basis – capital budgeting decision rules – Pay back, ARR – DCF Models – NPV, IRR, PI, MIRR ;Capital rationing – Impact of risk on capital budgeting	**8 hours**	**2**	**6**	**2**
Unit-3	**CAPITAL STRUCTURE THEORIES & COST OF CAPITAL** Capital Structure theories: NI, NOI, Traditional, MM Hypothesis for Optimum Capital Structure – MM Position I & II – Pecking order theory; - Leverages: Types & Measures. Cost of Capital: Cost of Debt – Beta estimation and the cost of equity – Computing WACC & WMCC - CAPM approach – Adjusting WACC for risk; Sources of finance.	**12 hours**	**3**	**6**	**1**
Unit-4	**Working Capital Management & Dividend Policy** Sources of working capital – Estimation of working capital requirements- Management of Cash & Marketable Securities. Factors affecting the dividend policy – Theories of dividend policy – relevance and irrelevance dividend decision – Walter's and Gordon's model - Modigliani and Miller approach.	**8 hours**	**4**	**4**	**3**

Reference Books:

1. Prasanna Chandra; Financial Management Theory and Practice; Tata McGraw Hill; 7th Edition 2. I.M. Pandey – Financial Management (Vikas), 9/e,
2. IM Pandey – Financial Management – Vikas Publishing House
3. Brigham & Houston – Fundamentals of Financial Management, Thomson Cengage Learning, 1/e,
4. M.Y. Khan & P.K. Jain – Financial Management (TMH), 5/e

Course Code & : PGDC204 – Managerial Economics (Macro)

Course Description: This course aims to provide an in-depth understanding of macroeconomics, focusing on the behavior of the economy as a whole. Students will explore key macroeconomic concepts, theories, and policies, enabling them to analyze and interpret economic phenomena at the national and global levels.

Course Objectives:

1. To comprehend fundamental macroeconomic theories and principles.

2. To analyze economic indicators and understand their implications.

3. To evaluate macroeconomic policies and their impact on economic stability and growth.

4. To apply macroeconomic concepts to real-world economic issues.

Course Outcomes:

CO1: Develop critical thinking skills to analyze complex economic situations concerning national income concepts, economic indicators, and their significance in economic analysis.

CO2: Apply economic theories and quantitative techniques within the Open Economy framework to facilitate managerial decision-making related to monetary and fiscal policies.

CO3: Demonstrate ethical and socially responsible decision-making in business contexts influenced by economic policies, government debt, and monetary transmission channels.

CO4: Integrate global perspectives into strategic business planning by understanding theories related to inflation, unemployment, and economic growth models, enabling comprehensive analyses of global economic scenarios.

Course Pre-requisites: Prior knowledge of basic concepts of Managerial Economics

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 42

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to National Incomes** Introduction to National income - National Income Concepts, GDP - Determination of National Income Modules, Economic Indicators; GDP,GNP, NDP,	**10 hours**	**1**		

	NNP, National Debt, Trade Balance, Inflation Rate, Deflection Rate, Interest Rate.				
Unit-2	**Open Economy Framework :** Monetary and Fiscal Policies in Open Economies (with Fixed and Flexible Exchange rates); Interest rates and Exchange rates in open economies (Interest-parity condition)	**10 hours**	**2**		
Unit-3	**Revolution in economic policies Frameworks** Keynesian Theory of the Short-run: Determination of equilibrium output and interest rate (Simple Keynesian and IS-LM models); Monetary and Fiscal Policies ; Government Debt; Channels of Monetary Transmission	**10 hours**	**3**		
Unit-4	**Analysis of Inflation and Unemployment** : The Phillips Curve and theories of unemployment-Theories of Economic Growth : Harrod-Domar Model; Solow Model;	**12 hours**	**4**		

Reference Books:

1. Barro, R. and X. Sala-i-Martin (2005) : "Economic Growth", Prentice Hall : India.
2. Blanchard, O. (2013) : "Macroeconomics", (6th Edition), Pearson Education : New Jersey, USA.
3. De Souza, E. (2008) : "Macroeconomics", Pearson Education : New Delhi.
4. Jones, C. : (2007) : "Introduction to Economic Growth", W.W. Norton : :New York.
5. Ray, D. (1998) : "Development Economics" , selected chapters, Princeton University Press : New Jersey.
6. Romer, D. (1996) : "Advanced Macroeconomics", McGraw-Hill : New Delhi.
7. Sikdar, S. (2006) : "Principles of Macroeconomics", Oxford University Press : New Delhi.

Periodicals and Databases :Economist (Latest issues); Economic Survey, Govt. of India (Various Issues); "Database on Indian Economy" (Reserve Bank of India website); "World Development Indicators" (World Bank); "United Nations National Accounts Statistics" (United Nations)

Course Code & Title: PGDC205 - Quantitative Techniques

Course Description: This course covers topics such as applications of operations research , OR tools in resolving assignment problem , transportation problem, sequencing models & decision theory for optimal decision making.

Course Objectives:

1.To provide knowledge on the basic tools of Operations research in solving the management problems using mathematical approach for decision making & To create awareness about linear programming methods .

2. To create deep understanding about the Transportation model .

3 . To give detailed knowledge about Assignment model.

4. To provide knowledge and skills on decision and queuing theory.

Course Outcomes:

CO1.Describe the basic tools of Operations research in solving the management problems using mathematical approach for decision making and utilize linear programming methods and various types of OR models for decision making.

CO2. Explain and utilize transportation model and various methods for finding initial feasible solution for decision making.

CO3 : Apply the knowledge and skills on decision in assignment problem solving .

CO4. Analyse and apply the knowledge and skills on decision and queuing theory in problem solving and decision making.

Course Pre-requisites: prior knowledge of basic concepts of marketing

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Operations Research & Linear Programming** Definition & Meaning of Operations Research ,Historical evolution of Operations Research , Nature of Operations research , Applications of OR in different Managerial areas . Concept of Linear Programming , components of linear programming , Applications of LPP .Solving LPP	**9 hours**	**1**	**1**	**1**

	through Graphical Method – Maximization , Minimization and Mixed Constraints. Simplex method – Artificial variables technique - Big-M method. Duality in Linear Programming.				
Unit-2	**Transportation Model & Its Applications** Definition & Concept of Transportation Model , Components of Transportation Model , Process of solving Transportation problem , Applications of Transportation Model . Finding initial feasible solutions through North West Corner Method (NWCR) , Least Cost Method or Matrix Minima Method (LCM) , Vogel's Approximation Method (VAM) – Balanced Transportation problems & Unbalanced Transportation problems. Travelling Salesman problems - Mathematical Formulation.	**10 hours**	**2**	**6**	**2**
Unit-3	**Assignment Model & Its Applications** Definition & Concept of Assignment Model, Components of Assignment Model, Process of solving Assignment problem, Applications of Assignment Model. Solving Assignment problems through Hungarian method – Balanced Assignment problem, Unbalanced Assignment problem , Maximization assignment problem & Multiple Optimal Solutions (Travelling Salesman Problems in particular).	**10 hours**	**3**	**6**	**1**
Unit-4	**Sequencing & Decision Theory** Sequencing Concept, Basic elements of sequencing, problems - sequencing with two and three machines. Introduction to decision making, ingredients of decision problems, process of decision making, Decision making - under uncertainty, cost of uncertainty, under risk (EMV criteria), under perfect information. Decision Tree analysis. (Problems).	**10 hours**	**4**	**4**	**3**

Reference Books:

1. Introduction to Operations Research by F S Hiller and G J Lieberman
2. Introduction to Operations Research by J K Sharma
3. Introduction to Operations Research by S Kalavathy
4. Operations Research – An Introduction by H A Taha
5. Quantitative Methods and Operations Research by KS Shridhara Bhatt.

Course Code & Title: PGDC206 – Computer Applications for Business

Course Description: This course typically aims to provide students with the knowledge and skills needed to effectively use computer applications and technology in a business context.

Course Objectives:

1. To provide basic knowledge of basic concepts, principles of computer in business

2.To give in-depth knowledge of information systems

3.To acknowledge about the current information system in business

4.To make students aware about the current advancements of computer applications in business

Course Outcomes:

CO1: Describe the basic concepts, principles of computer in business

CO2: Analyze the importance of information systems

CO3: Analyze the knowledge of information systems existing in business

CO4: Explain the current advancements of computer applications in business

Course Pre-requisites: prior knowledge of basic concepts of computers

Pedagogy: Digital and case analysis

LTP: 2:0:1

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Data and Information** Difference between data and information- data processing-database, features of information-types of DBMs, data mining, conversion of data to information using MS Excel	**9 hours**	**1**	**1**	**1**
Unit-2	**Information System** Components of information system- Information system benefits- Information system and business-Information system resources-Types of information systems.	**10 hours**	**2**	**2**	**2**
Unit-3	**Basics of MIS and Business applications**	**10 hours**	**3**	**3**	**1**

	Need of MIS, functions, characteristics of MIS, Decision-making, ERP, CRM-role-advantages-disadvantages				
Unit-4	Mobile commerce, E-commerce, Business analytics-artificial intelligence-machine learning, Web 4.0, Industry 5.0, blockchain technology, implementation using google analytics, wordpress	**10 hours**	**4**	**6**	**3**

Reference Books:

1. Sanjay Saxena, A First Course in Computers, Vikas Publishing House, New Delhi

2. R. Hunt, J. Shelley, Computers and Common sense, Prentice Hall of India New Delhi

3. Leon, M. Leon, Fundamentals of Information Technology, Leon Vikas

4. Prof. U Dinesh Kumar "Business Analytics: The science of data driven decision making" by Wiley Publication

5. P. Mohan, Computer Applications in Business, Himalaya Publishing House

Course Code& Title: PGDC 207 – Advanced Quantitative & Logical Reasoning

Course Description:

This course provides an in-depth understanding of analytical and problem-solving techniques across various topics, including data interpretation, time and work, speed and distance, interest calculations, blood relations, and logical puzzles. Students will develop skills to analyze, evaluate, and synthesize information, enhancing their critical thinking and decision-making abilities. The course aims to prepare students for real-world scenarios by equipping them with practical and theoretical knowledge.

Course Objective:

1. Analyze and Solve Problems: Students will analyze data and apply problem-solving techniques to accurately solve scenarios in areas like time, work, interest, and logical puzzles.
2. Evaluate and Make Informed Decisions: Students will evaluate information and synthesize it to make informed decisions, enhancing reasoning and critical thinking skills.

Course Outcome:

CO1: Analyze and Apply Problem-Solving Techniques: Students will analyze complex data and scenarios, applying relevant techniques to solve problems in areas like time, work, interest, and logical puzzles.

CO2: Evaluate and Synthesize Information for Decision-Making: Students will evaluate various types of information and synthesize it to make informed decisions, demonstrating critical thinking and reasoning skills.

Course Pre-requisites: prior knowledge of basic concepts of Aptitude

Pedagogy: ICT and Digital support

L:T:P- 0:1:0

Course type:

Contact Hours: 15

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Data Interpretation:** Bar Graph, Tabular Form, Line Chart, case let Form, Pie Chart, Radar/Web, and Missing Data Interpretation. **Time & Work:** work efficiency, Work & Wages Speed Time & Distance Relative Speed, Average Speed Problems on Train, Boat & Stream. **Simple Interest & Compound Interest Simple:** Interest, Basic Difference b/w both the Interests. CI with a	**10**	**1**	**1**	**1**

	Fractional Rate, to find Instalments of both SI and CI.				
Unit-2	**Blood Relations:** Generation Tree, Family Tree Problems, Statement Based Questions, Coded Blood Relation Question, Blood Relation Based Puzzles. **Calendars:** To find day on a given date, Concept of earth rotation, Leap and non-leap Years. Finding day with reference to another date. **Distance and Directions:** between any two points as well as puzzles based on that, Concept of Shadows, Linear and Angular distance-based questions. **Logical Puzzles:** Floor Based Puzzles, Data Arrangement Puzzles, Puzzles having more than three variable and practice of puzzles	**9 hours**	**2**	**6**	**2**

Reference:

Text Books:

1. Quantitative Aptitude for Competitive Examinations by R S Agarwal
2. Wileys Exam Xpert General Aptitude for Campus Placements by Uma Maheshwari
3. Solved Placement Papers Campus Recruitment (Version Lite 2019) by Praxis groups
4. Modern Approach to Verbal and Non-verbal reasoning, by R S Agarwal
5. Quantitative Aptitude for Competitive Examinations by Rakesh Sharma

Website/URLs:

1. http://placement.freshersworld.com/placement-papers
2. Fast track objective arithmetic by Rajesh Verma
3. Career Prime study materials
4. https://examsdaily.in/quantitative-aptitude-study-material
5. https://cracku.in/blog/rrb-ntpc-reasoning-questions-pdf/

SUBJECT CODE: PGDC301 - Business Research Methods

Course Description: Knowledge of research fundamentals (i.e.) research problem, hypothesis, design, data, sampling, analysis and report writing are studied. This course equips students to understand the research process.

COURSE OBJECTIVES

1. To understand the fundamentals of research
2. To identify the methods best suited for investigating different types of problems and questions.
3. To construct research questions that are based on and build upon a critical review of existing research.
4. To develop a research design and analysis the results to provide suggestions based on research findings

COURSE OUTCOME

CO1 Demonstrate ability to understand different research terminologies.

CO2 Identify research problems, questions and Develop methodology for research problems

CO3 Analyse data required for business decision-making.

CO4 Propose suggestions based on the findings from the research

1. **Course Pre-requisites:** Prior Knowledge of Basic Concepts of Business Research Methodology
2. **Pedagogy:** ICT and Digital Support

L T P: 2:1:0

Course Type: HC

Contact Hours: 40

Units	Detailed Syllabus	Contact Hours	CO	PO	PSO
Unit-1	**BUSINESS RESEARCH DESIGN** Introduction, **N**ature and role of business research, types of research based on outcome, process, purpose, nature, Research concepts, constructs, Features of good research study, research process, Research problem identification (Search engine), statement of the problem, problem identification sources, Research Design.	**10 Hours**	**1**		
Unit-2	**DATA GATHERING AND MESAUREMENT**	**10 Hours**	**2**		

	Source of Data Collection, Scales of measurement, classification of scales – comparative & non- comparative, single vs multi-item scales, continuous rating, criteria for good measurement, questionnaire designing procedure, types of questionnaires, questionnaire testing, pilot study				
Unit-3	**SAMPLING AND ANALYSIS** Concept of sample, target population, sample size determination, characteristics of good sample, sampling design process, basic data analysis, null and alternative hypothesis, hypothesis testing procedure, error in hypothesis testing, Types of Error in Sampling, Statistical tools & Software	**13**	**3**		
Unit-4	**INTERPRETATION & REPORT WRITING** Meaning, techniques, Percolation of Research Interpretation , Types of research reports, report structure, guidelines for effective documentation and visual representation, research briefing, Plagiarism	**7 HOURS**	**4**		

TEACHING / LEARNING RESOURCES

i. Kothari, C. R. (2019). Research Methodology Methods & Techniques. New Delhi: Vishwa Prakashan, Fourth Edition
ii. William G. Zikmund, Barry J. Babin, Jon C.Carr, Atanu Adhikari, Mitch Griffin. (2019). Business Research Methods., Delhi: Cengage Learning India Pvt. Ltd, Eight Edition
iii. Gupta, S. L and Gupta, Hitesh (2017), Business Research Methods, McGraw Hill Education(India) Private Limited, New Delhi, 1st Edition
iv. Bryman, Alan and Bell, Emma (2018), Business Research Methods, Oxford UniversityPress. Third Edition
v. Krishnaswami, O., & Ranganatham, M. (2013). Methodology of Research in Social Sciences. Mumbai: Himalaya Publishing House, Second Edition.

Course Code & Title: PGDC 302 - Indian Financial System & Financial Markets

Course Description:

Indian Financial System & Financial Markets of a country play an important role in its economic development. The role of financial system is to efficient allocation of funds thereby creating capital that helps in achieving the ultimate goal of economic development. A vibrant Indian Financial System & Financial Markets is considered fundamental to the growth and development of a country. The working of a Indian financial system is facilitated by the existence of an efficient financials service sector. In addition, financial market, financial institutions and financial instruments together contribute to the functioning of the Indian financial system.

Course Objectives:

1. Gain knowledge of the structure, components, and functions of the Indian financial system, including its regulatory framework and key institutions (e.g., RBI, SEBI, IRDAI).
2. Learn about the functioning and operations of various financial markets in India, such as money market, capital market (equity and debt markets), derivatives market, and forex market.
3. Familiarize with different financial instruments and products traded in Indian markets, including stocks, bonds, mutual funds, derivatives (futures, options), and insurance products.
4. Understand the role and importance of financial intermediaries (banks, NBFCs, mutual funds, insurance companies) in the Indian financial system, and their contribution to capital allocation and economic development.

Course Outcomes:

1. Understanding of the structure, functioning, and regulatory framework of various financial markets in India, including money markets, capital markets (equity and debt), derivatives markets, and forex markets.
2. Familiarized with different financial instruments and products traded in Indian markets, such as stocks, bonds, mutual funds, derivatives (futures, options), and insurance products. They will understand their characteristics, risks, and uses in investment and risk management.
3. Develop an awareness of the regulatory bodies governing the Indian financial system, including the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority of India (IRDAI), and their roles in ensuring market integrity, investor protection, and financial stability.
4. Acquire skills to analyse financial market data, evaluate investment opportunities, and make informed decisions within the Indian financial context. They will be able to apply their knowledge to assess market trends, risks, and opportunities, contributing to effective financial management and strategic decision-making.

Course Pre-requisites: Prior Knowledge of basic concept of Basic Economics and Finance

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 40 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Module 1	**Overview Of Indian Financial System** Introduction, Objectives, Concept of Finance, Saving v/s Investment, Introduction to the Financial System, Functions of Financial System, Structure of Indian Financial System, Regulatory Framework of the Indian Financial System, Introduction to Global Financial Market, Role of Financial Market in Economic Development of a country, Stakeholders in Financial Market (Domestic and Global) Indian Financial Market Scenario.	10 hrs.	1	1,2	1
Module 2	**Financial Markets: Money Market** Major reforms pre and post issues, Basics of Money Market ,Money Market Participants (Institutions)Reserve Bank of India (RBI),Schedule Commercial Banks (SCBs),Co-operative Banks, Financial and Investment Institutions, Corporates, Mutual Funds, Discount and Finance House of India, Money Market Instruments: Call/Notice money, Treasury Bills (TBs),Commercial Bills, Certificate of Deposits (CDs) Commercial Paper	12 hrs.	2	2,4	2
Module 3	**Capital Market: Primary Market, Secondary Market and Debt Market:** Meaning of Capital Market, Structure of Indian Capital Market, Significance of Capital Market Capital Market V/S Money Market, Primary Market, Features of Primary Market, Methods of Floating New Issue, Parties Involved In the New Issue, Secondary Market, Relationship between Primary and Secondary Market, Functions of Secondary Market, Overview of National Stock Exchange (NSE) Ltd. Segments of National Stock Exchange (NSE), Trading system of National Stock Exchange (NSE) Clearing and settlement system of National Stock Exchange (NSE)	12 hrs.	3	3,4	1

	Concept of Debt Market, Overview of Indian Debt Market, Significance of Debt Market, Participants in Indian Debt Market, Debt Market Instruments, Corporate Bond Market Measures taken to develop corporate bond market.				
Module 4	**Financial Services:** Meaning and Definition – Features – Importance. Types of Financial Services – Factoring, Leasing, Hire Purchase, Venture Capital, Consumer Finance.	8 hrs.	4	4	2

Reference Books:

1. Saha, S.S., "Indian Financial System and Markets", TMH Education Private Limited.
2. Vasantha Desai: The Indian Financial System, HPH
3. D.K. Murthy and Venugopal : Indian Financial System I.K. International Publishers
4. P N Varshney & D K Mittal: Indian Financial System, Sulthan Chand & Sons

Recommended Books:

1. Khan. M.Y., *"Indian Financial System"*, TMH publishing company Limited.
2. Pathak, B.V., *"The Indian Financial System – markets, institutions and services",* Pearson Education.
3. E Gardon & K Natarajan: Financial Markets & Services, HPH

Course Title & Code: PGDC303 -Organizational Change and Development

Course Description:

Organizational Change and Development deals with Stimulating Forces and triggers of change, Resistance & dealing with change and Organizational Development Interventions including HR.

Course Objectives:

1. To emphasize and understand the necessity for change
2. To understand the resistance to change and the process of change
3. To familiarize the concepts and techniques of OD
4. To develop organizational interventions

Course Outcomes:

CO1: Students will cope with the elements and perspectives of Organizational Change and Development there by to meet the workplace changes for better people management.

CO2: Students will understand resistance to change and coping with effective strategies in organizations.

CO3: Students can apply organizational development interventions in various sectors.

CO4: Students can analyze process, structural and technical aspects of OD Interventions practically.

Course Pre-requisites: HRM & OB

Pedagogy: Direct Method and ICT

LTP: 3:0:0

Course type: HC

Contact Hours: 40 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Unit - I Organizational Change** • Introduction to Organizational Change and Development • Concepts of Organizational Change • Stimulating Forces of change • Change Agents • Planned Change - Unplanned Change • Models of Organizational Change • Lewin's Three Step Model with application • Case study	12 hrs	1	1,2	1
Unit-2	**Unit - II Resistance to Change & dealing with change**	10 hrs	2	2,5	1

	• Individual Factors - Organizational Factors • Techniques to Overcome Change. • Effectiveness of Change Programs • Change Process • Job Redesign • Socio-Technical Systems • Case study				
Unit -3	**Unit - III Organizational Development** • Basic Values - Phases of OD • Entry – Contracting • Diagnosis – Feedback • Change Plan – Intervention • Evaluation - Termination.	8 hrs	3	3,5	1
Unit-4	**Unit - IV Organizational Development Interventions** • Human Process Interventions • Structure and Technological Interventions • Strategy Interventions - Sensitivity Training • Survey Feedback - Process Consultation • Team Building • Inter-group Development • Learning Organizational	10 hrs	4	5,6	1

Reference Books:

1. Kondalkar, ORGANIZATION EFFECTIVENESS AND CHANGE MANAGEMENT, PHI Learning, New Delhi,2009.

2. French & Bell, ORGANIZATIONAL DEVELOPMENT, McGraw-Hill.

3. Dipak Bhattacharyya, ORGANIZATIONAL CHANGE AND DEVELOPMENT, Oxford University Press, New Delhi, 2011.

Course Title & Code: PGDC304 - Entrepreneurship

Course Description: This course provides an in-depth understanding of the entrepreneurial process and the essential skills required to develop, launch, and sustain successful business ventures. Students will explore the fundamental concepts of entrepreneurship, including idea generation, business planning, resource acquisition, and growth strategies. The course emphasizes the role of innovation, risk-taking, and strategic decision-making in entrepreneurship.

Course Objectives:

1. Creating awareness among the students about the significance of entrepreneurship and its social relevance.
2. This course attempts to enable students to exercise writing a business plan by applying various concepts of entrepreneurship such as lean, Business Model Canvas, Blue Ocean Strategy etc
3. Understand the requirements in domestic and international contexts for a startup

Course Outcomes:

CO1: Analyse critical relationships involving entrepreneurship and economics

CO2: Create a business plan by integrating different management functions.

CO3: Understand various factors that affect entrepreneurship.

CO4: Discover various opportunities and challenges to become an entrepreneur and Assess the knowledge of contemporary issues related to managing their firms

Course Pre-requisites: Prior knowledge of basic concepts of Entrepreneurship

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Entrepreneurship Development – Concept, Types, Theories and Process, Developing Entrepreneurial Competencies; Intrapreneurship – Concept and Process; Women Entrepreneurship and Rural Entrepreneurship ; Enterprise Ecosystem players in India and schemes.	**9 hours**	**1**		

Unit-2	Business Plan and Feasibility Analysis – Concept and Process of Technical, Market and Financial Analysis ; Micro and Small Scale Industries in India; Role of Government in Promoting SSI; Sickness in Small Industries – Reasons and Rehabilitation ; Institutional Finance to Small Industries – Financial Institutions, Commercial Banks, Cooperative Banks, Micro Finance	**9 hours**	**2**		
Unit-3	Innovation in Current Business Environment- Problem-Solving and Idea Generation- Business Models and value proposition, Business Model Failure: Reasons and Remedies, Incubators: Business vs. technology, Managing Investors for Innovation, Future Markets and Innovation needs for India.	**12 hours**	**3**		
Unit-4	Dos & Don'ts in Entrepreneurship -Business Model Canvas- Blue Ocean vs Red Ocean Strategy- Legal aspects of business (IPR, GST, Labor law) – International opportunities for startups- growth strategies-market development strategies, product development strategies, diversification strategies.	**19 hours**	**4**		

TEXT BOOKS

1.Vasant Desai, Dynamics of Entrepreneurship Development, Himalaya Publishers.

2.Mathew, J. Manimala, Entrepreneurship Theory at the Crossroads, Wiley India.

3.Tabarrok, Entrepreneurial Economics, Oxford University Press.

4.C.V. Bakshi, Entrepreneurship Development, Excel Publications.

5.Balaraj Singh, Entrepreneurship Development, Wisdom Publications.

REFERENCES

1. Vasant Desai, Dynamics of Entrepreneurship Development, Himalaya Publishers.
2. Mathew, J. Manimala, Entrepreneurship Theory at the Crossroads, Wiley India.
3. Tabarrok, Entrepreneurial Economics, Oxford University Press.
4. C.V.Bakshi, Entrepreneurship Development, Excel Publications.
5. Balaraj Singh, Entrepreneurship Development, Wisdom Publications.

Course Title & Code: PGDC305 - Corporate Strategy & Social Responsibility

Course Description: Explore the core principles of strategic management, covering strategy concepts, environmental analysis, and formulation strategies. Delve into functional strategies like marketing, production, and finance, while addressing the vital interplay between strategy formulation and implementation. Additionally, examine the ethical dimensions of corporate behavior, including corporate social responsibility (CSR) and governance practices, essential for sustainable business success.

Course Objectives:

• Understand the fundamental concepts of strategy, including its various levels of operation, approaches to decision making, and the significance of mission, objectives, and goals within an organizational framework.

• Analyze environmental factors affecting strategic decision-making, employing techniques such as environmental scanning and appraisal to assess the competitive landscape and identify opportunities and threats.

• Evaluate strategies for formulation and choice, including modernization, diversification, integration, and turnaround, while also exploring the implications of mergers, takeovers, and joint strategies on organizational growth and sustainability.

• Understand the principles of corporate social responsibility (CSR), including its motives, legal frameworks, types, phases, and objectives, alongside an introduction to business ethics and corporate governance within the context of strategic management.

Course Outcomes:

CO1: To understand the core concepts of strategy, its decision-making methods, and the importance of organizational goals.

CO2: To analyze environmental factors using scanning and appraisal techniques to inform strategic decisions.

CO3: To Evaluate various strategies, including modernization and diversification, considering their impact on growth and sustainability.

CO4: To understand CSR principles, including motives, legal aspects, and ethical considerations within strategic management.

Course Pre-requisites: Prior knowledge of basic concepts of Finance

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Concepts of Strategy - Levels at which strategy operates; Approaches to strategic decision making; Mission and purpose, objectives and goals; Strategic business unit (SBD); Functional level strategies. Environmental Analysis and Diagnosis - Environment and its components; Environment scanning and appraisal.	**10 hours**	**1**		
Unit-2	Strategy Formulation and Choice - Modernization, Diversification Integration - Merger, take-over and joint strategies - Turnaround, Divestment and Liquidation strategies - Strategic choice - Industry, competitor and SWOT analysis - Factors affecting strategic choice; Generic competitive strategies - Cost leadership, Differentiation, Focus, Value chain analysis, Bench marking, Service blue printing	**12 hours**	**2**		
Unit-3	**Functional Strategies:** Marketing, production/operations and R&D plans and polices- Personnel and financial plans and policies. Strategy Implementation - Inter - relationship between formulation and implementation - Issues in strategy implementation.	**12 hours**	**3**		
Unit-4	Corporate social responsibility, CSR Motives, Laws of CSR, Types of CSR, Phases of CSR, Objectives of CSR, Introduction to Business ethics and Corporate Governance.	**8 hours**	**4**		

TEXT BOOKS

1. Azhar Kazmi, STRATEGIC MANAGEMENT & BUSINESS POLICY, Tata McGraw-Hill Publishing Company Limited, New Delhi 2008.

REFERENCES

1. Vipin Gupta, Kamala Gollakota & Srinivasan, BUSINESS POLICY & STRATEGIC MANAGEMENT, Prentice Hall of India Private Limited, New Delhi,2008.
2. Amita Mittal, CASES IN STRATEGIC MANAGEMENT, Tata McGraw- Hill Publishing Company Limited, New Delhi 2008.

3. Fred R. David, STRATEGIC MANAGEMENT CONCEPT AND CASES, PHI Learning Private Limited, New Delhi, 2008. Corporate Social Responsibility: An Ethical Approach - Mark S. Schwartz
4. Corporate Social Responsibility in India - Sanjay K Agarwal
5. Corporate Social Responsibility: Indian Concepts & Cases : by C. V. Baxi & Ajit Prasad.

Course Code& Title: PGDMDS306- Data Science

Course Description: Introduction to Data Science is a foundational course designed to equip students with the essential skills and knowledge to embark on a journey in the field of data science. This course covers the fundamental concepts, tools, and techniques used to analyze, visualize, and interpret data, enabling students to derive meaningful insights and make data-driven decisions.

Course Objectives:

1. Explain the data science process and lifecycle, including problem formulation, data collection, data cleaning, data analysis, and communication of results.
2. Apply basic statistical methods to analyze data, including descriptive statistics, hypothesis testing, confidence intervals, correlations, and regression analysis.
3. Explore correlations and regression analysis and understand their coefficients in the context of data science.
4. Understand ethical and legal considerations in data science, with a focus on data privacy matters in the real business sector.

Course Outcomes:

CO1*:* To Explain the data science process and lifecycle, including problem formulation, data collection, data cleaning, data analysis, and communication of results.

CO2*:* To Apply basic statistical methods to analyze data, including descriptive statistics, hypothesis testing, and confidence intervals.

CO3*:* To Explore Correlations and regression Analysis and its coefficient in Data Science.

CO4: To understand ethical and Legal considerations in data science with respective of Data Privacy matters in real Business Sector.

Course Pre-requisites: Prior knowledge of basic concepts of Data Science and Statistics

Pedagogy: ICT and Digital support.

LTP: 3:0:0

Course type: HC

Contact Hours: 40

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Data Science:** Benefits and uses – facets of data – Data Science Process: Overview – Defining research goals – Retrieving data – Data Collection - Data preparation – Exploratory Data analysis – build the model– presenting findings and building	**10 hours**	**CO1**	**PO1**	**PSO1**

	applications – Data Mining – Data Warehousing – Descriptive Statistics.				
Unit-2	Types of Data – Types of Variables – Describing Data with Tables and Graphs –Variability – Normal Distributions and Standard(Z) Scores, Exploratory Data Analysis and EDA – Applications and Tools.	**10 hours**	**CO2**	**PO2**	**PSO1**
Unit-3	Correlation – Scatter plots – Correlation coefficient for Quantitative data – Computational formula for correlation coefficient error estimate – interpretation of r2 – multiple regression equations – regression towards the mean.	**10 hours**	**CO3**	**PO3**	**PSO2**
Unit-4	**Privacy concerns**: Ethical implications of data collection and analysis - GDPR, CCPA, HIPAA, COPPA, Privacy Act 1988, PIPL, APPI, LGPD, POPIA.	**10 hours**	**CO4**	**PO4**	**PSO3**

TEXT BOOKS:

- Introduction to Data Science" by Jeffrey Stanton
- Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking" by Foster Provost and Tom Fawcett
- Doing Data Science: Straight Talk from the Frontline" by Cathy O'Neil and Rachel Schutt.

Course Code& Title: PGDMDS306- Logistics & Supply Chain Management

Course Description: This course provides a comprehensive understanding of logistics and supply chain management, covering key concepts, strategies, and integration techniques. Students will explore distribution network design, the role of logistics in the economy, and recent trends such as supply chain digitization and omni-channel approaches. Emphasis is placed on achieving competitive advantage and operational efficiency through effective logistics and supply chain practices.

Course Objectives:

1. To learn the basics of logistics management
2. To study the concept of integrated logistics and supply chain management
3. To gain knowledge on supply chain network design.
4. To know the role of different channels of distribution.

Course Outcomes:

CO1*:* Explain the concepts and fundamentals of logistics

CO2*:* Examine the process of integrated logistics and supply chain management.

CO3*:* Examine the design and process of supply chain network

CO4: Examine the role of channels of distribution and Identify the recent trends in supply chain management.

Course Pre-requisites: Prior knowledge of operations managemnet

Pedagogy: ICT and Digital support.

LTP: 3:0:0

Course type: HC

Contact Hours: 40

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Introduction, Objectives, Concept of Logistics, Objectives of logistics, Types of logistics, Role of Logistics in an Economy, Logistics and Competitive Advantage, Logistics Mix.	**10 hours**	**CO1**	**PO1**	**PSO1**
Unit-2	Role of Logistics and Supply chain Management: Scope and Importance of Supply Chain -Decision Phases in Supply Chain – Competitive and Supply chain Strategies – Drivers of Supply Chain Performance and Obstacles.	**10 hours**	**CO2**	**PO2**	**PSO1**

Unit-3	Factors influencing Distribution network design – Design options for Distribution Network Distribution Network in Practice-Role of network Design in Supply Chain – Framework for network Decisions. Tailored transportation – Routing and scheduling in transportation.	**10 hours**	**CO3**	**PO3**	**PSO2**
Unit-4	Meaning and Role of Distribution in Supply Chain – different types of distribution channels, Customer Service Strategy: Identification of Service needs, cost of services – revenue management. Supply Chain Digitization, Omni channel Supply Chains, Circular Supply Chains, Block chain, Dark Stores and cloud kitchen.	**10 hours**	**CO4**	**PO4**	**PSO3**

TEXT BOOKS :

1. Text book of Logistics and Supply Chain Management, D.K. Agrawal, Macmillan India Limited
2. Logistics and Supply Chain Management: Cases and Concepts, Raghuram, G, Macmillan Publisher.
3. Sunil Chopra and Peter Meindl, Supply Chain Management – Strategy, Planning and Operation, Pearson/PHI, 3rd Edition, 2007.
4. Supply Chain Management by Janat Shah Pearson Publication 2008.

REFFERENCES :

1. A Logistic approach to Supply Chain Management – Coyle, Bardi, Longley, Cengage Learning, 1/e.
2. Donald J Bowersox, Dand J Closs, M Bixby Coluper, Supply Chain Logistics Management, TMH, Second Edition, 2008.
3. Supply Chain Logistics Management, Donald Bowersox, David Closs, M. Bixby Cooper, Tata Mcgraw Hill Education.

Course Code& Title: PGDC306- Agricultural Marketing in India

Course Description: Explore the core principles and subject matter of agricultural marketing with respect to theory of markets and market structure, development of markets, grading and standardization. The role of marketing agencies, institutions and channels.

Procurement and distribution of operations of foodgrains, quality control, price support, price controls and rationing of foodgrains.

Course Objectives:

1. Understand the core concepts of agricultural marketing with its scope and importance the various policies, strategies and decisions relating to marketing that can be developed by agribusiness firms.
2. To analyze the market and market structure
3. Critically evaluate the grading and standardization of agricultural produce.
4. Understand the role of marketing agencies, institutions and channels.

Course Outcomes:

CO1: Understand the core concepts of agricultural marketing with its scope and importance

CO2: Analyze the market and market structure.

CO3: Evaluate the grading and standardization of agricultural produce.

CO4: Understand the role of marketing agencies, institutions and channels

Course Pre-requisites: Prior knowledge of agri business

Pedagogy: ICT and Digital support.

LTP: 3:0:0

Course type: HC

Contact Hours: 40

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Concept and Definition – Importance & Scope – History and Growth of Agricultural Marketing – Problems in Agricultural marketing in India – Need for Market Regulation – Market Intermediaries – Different types of Market Intermediaries	**10 hours**	**CO1**	**PO1**	**PSO1**
Unit-2	Market – Components of Market – Dimensions of a Market – Classification and Growth of Markets. Market Structure – Meaning and Components – Dynamics of Market Structure – Market Forces –	**10 hours**	**CO2**	**PO2**	**PSO1**

	Producers Surplus and Marketable Surplus of Agricultural Commodities.				
Unit-3	Concept and Definition – Types of Grading – Criteria for Grade Standards _ Advantages of Grading – Grade Specifications for Agricultural Commodities – Procedure for formulation of Indian Standards for Processed Products – Other provisions for Standardization	**10 hours**	**CO3**	**PO3**	**PSO2**
Unit-4	Marketing Agencies ¬– Marketing Institutions – Marketing Channels – Factors affecting the length of marketing channels – Marketing channels for Cereals, Oilseeds, Fruits & vegetables, Eggs, Poultry, Pulses – Lates Innovative Marketing Channels.	**10 hours**	**CO4**	**PO4**	**PSO3**

TEXT BOOKS :

1. Acharya & Agarwal, "Agricultural Marketing in India", Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi

REFERENCES

1. Kohls RL & Uhj JN. 2005. Marketing of Agricultural Products. 9th Ed. Prentice Hall.
2. Kotler P. 2002. Marketing Management – Analysis, Planning, Implementation and Control. Pearson Edu.
3. Krishnamacharyulu C & Ramakrishan L. 2002. Rural Marketing. Pearson Edu.
4. Ramaswamy VS & Nanakumari S. 2002. Marketing Management. 2nd Ed. Mac Millan India

Course Title & Code: PGDFN401 & Managing Banks & Fintech Services

Course Description: This course focuses on the basics of banking. It aims to provide an overview of the theory and practice of banking from a manager's perspective. And also provides a comprehensive understanding to the various activities performed by banks.

Course Objectives:

1. Comprehend the features and significance of various types of financial services.
2. Familiarize with the mechanisms and operational processes of financial services.
3. Demonstrate and apply various concepts and regulations governing financial services.
4. Appreciate and analyze the functioning of financial services organizations in India & Relate and evaluate the implications of financial services on the broader Indian financial system.

Course Outcomes:

CO1: Understand the features and significance of various types of Financial Services.

CO2: Become familiar with the mechanism of financial services.

CO3: Demonstrate of apply the various concepts and regulations of financial services.

CO4: Appreciate the functioning of the financial services organization in India & Relate the implications of Financial Services on the Indian Financial System.

Course Pre-requisites: Prior knowledge of basic concepts of Finance

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTRODUCTION** Overview of Indian financial system, Role of various players in Indian Financial System-Financial markets –types-Financial institutions-financial services-Fund based and fee based financial services-Role of fin tech in Financial services.	**06 Hours**	**1**		

Unit-2	**Mutual funds & PORTFOLIO ANALYSIS** Mutual funds - Operations – Types – Performance measures of a mutual funds – NAV, Regulations – SEBI guidelines for mutual funds Modern Portfolio Theory: Conceptual framework, Diversification and Portfolio Risk; Markowitz Risk Return optimization: The Mathematical Model, Quantification of Portfolio Risk and Return: Effect of combining securities in Portfolio, Efficient Frontier, Computing Utility and Selection of Optimal Portfolio.	**10 hours**	**2**		
Unit-3	**FinTech and BLOCK CHAIN IN FINANCE:** Fintech – Meaning – Types – Services – Growth of Fintech industry in India - Digital lending – Regulations for Fintech and Digital lending. Block Chain applications in Currency – Bitcoins – Distributed Ledger Technology – Digital Currency	**10 Hours**	**3**		
Unit-4	**VENTURE CAPITAL IN FINANCE** Venture capital: meaning – origin and growth of venture capital – stages of venture capital financing - Seed Financing and Angel Funding – venture capital industry in India- Private Equity Funding. Peer to Peer lending (P2P)-Crowd funding - Payment and settlement system in India – National payment corporation of India –services	**12 Hours**	**4**		

BOOKS FOR REFERENCE

- Fischer, E Donald and Jordan, J Ronald (2005); ―Security Analysis and Portfolio Management‖, Prentice Hall of India Private Ltd., 6th Edition.
- Shalini Talwar ―Security Analysis and Portfolio Management‖, CENGAGE
- Punithavathy Pandian, ―Security Analysis and Portfolio Management‖, Vikas Publishing House Private Limited, Fifth Reprint Edition.
- Jeff Madura, "Financial Markets and Institutions", 12e,Cengage Learning,2016.
- Sasidharan K, Alex. K Mathews, "Financial Services and System", McGraw Hill Education,2008.
- Bhole L.M, "Financial Institution and Markets", 6e, McGraw Hill Education,2017.
- Mittal,Varshney,"Indian Financial System",Sultan chand,2017.

Course Code: PGDFN402 & Investment Analysis & Portfolio Management

Course Description: This course provides a thorough exploration of investment analysis and portfolio management principles. Students will learn to assess investment opportunities, construct diversified portfolios, and manage risk in the context of various financial markets.

Course Objectives:

1. Define financial markets and understand their role in the economy. Identify different types of financial instruments and their characteristics.

2. Analyze various investment opportunities, including stocks, bonds, and alternative investments.
3. Develop skills in portfolio construction and optimization. Understand the principles of asset allocation and diversification.

4. Evaluate and manage different types of risks associated with investments. Understand the concept of beta and its role in measuring systematic risk.

Course Outcomes:

CO1. Explain the role of financial markets in the economy. Summarize the principles of fundamental and technical analysis..

CO2. Apply fundamental and technical analysis techniques to assess investment opportunities.

Implement portfolio construction and optimization strategies.

CO3. Evaluate the performance of investment portfolios using relevant metrics. Critically assess the efficiency of a portfolio in relation to the efficient frontier.

CO4. Create diversified portfolios based on principles of asset allocation and diversification. Design strategies to mitigate the impact of behavioral biases on portfolio management.

Course Pre-requisites: prior knowledge of basic concepts of Investment Analysis & Portfolio Management

Pedagogy: ICT, Digital support & Case Analysis

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTRODUCTION TO INVESTMENT AND SECURITIES** Concepts of investment, objectives, process and planning- Investment, speculation, arbitrage/gambling - Investment alternatives, factors effecting investment	**9 hours**	**1**	**1**	**1**

	need for investment policy statement - Approaches to investment decisions, code of ethics and standards for investment professionals - Financial markets – new issue market, secondary market - Debt market, money market instruments, recent developments in Indian Capital markets - Risk and Return – Types of Risk - Risk Return Trade off – Risk Exposure – Expected Return - Risk and Return analysis of individual securities – Standard Deviation- Valuation - probability distribution to measure risk & return – risk & return in portfolio				
Unit-2	**SECURITY ANALYSIS** **Fundamental analysis** :Economic analysis, Industry analysis, Company analysis, forecasting company earnings, valuation of companies - **Technical analysis**: Market indicators, forecasting individual stock performance, techniques, types of charts, Dow theory, Relative strength, Moving average, Conference index, Trading volume, concept of depth and breadth of the market **Efficient market theory**: Random Walk and efficient market hypothesis Forms of Market Efficiency, Empirical test for different forms of market efficiency.	**10 hours**	**2**	**2**	**2**
Unit-3	**PORTFOLIO ANALYSIS & CONSTRUCTION** **Risk & Return Analysis**- probability distribution to measure risk & return – risk & return in portfolio context – Characteristic regression line and beta estimation (use excel calculation) - Bond pricing-bond theorems – duration – Immunization - Modified duration – convexity - **Portfolio construction:** Capital allocation between the risky asset and the risk free asset, optimal risky portfolio	**10 hours**	**3**	**3**	**1**

	– Markowitz model: Portfolio selection – opportunity set, efficient frontier – Sharpe Index model: Beta measurement and single index model – CAPM: Basic assumptions, SML,CML, pricing model – APT: Treynor-Black model, Assumptions, equilibrium				
Unit-4	**PORTFOLIO MANAGEMENT, EVALUATION AND REVISION** Diversification- Investment objectives, Risk Assessment, Selection of asset mix, Risk, Return and benefits from diversification. Mutual Funds:, Mutual Fund types, Performance of Mutual Funds-NAV. Performance evaluation of Managed Portfolios-Treynor, Sharpe and Jensen, Information Ratio, Sortino's Ratio, Challenges in Performance management . Passive Management – Active Management – The Formula plans for the purchase & sale of securities – Rupee cost averaging – Constant rupee plan – Constant ratio plan – Portfolio revision & cost	**10 hours**	**4**	**6**	**3**

Reference Books:

1. Prasanna Chandra, Investment Analysis and Portfolio Management, Mc Graw Hills
2. Portfolio Management Handbook, Robert A. Strong, Jaico Publishing House, Mumbai.
3. Security Analysis and Portfolio Management, VA Avadhani Pearson Publications.
4. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publication.

Course Code & Title: PGDFN 403 - Corporate Analysis and Valuation

Course Description: This course offers a comprehensive exploration of corporate analysis and valuation techniques, providing students with the necessary skills to assess the financial performance and value of companies. Through a combination of theoretical frameworks, practical case studies, and financial modelling exercises, students will gain insights into the key factors influencing corporate value and develop the ability to make informed investment and strategic decisions.

Course Objectives:

1. Develop a comprehensive understanding of the basic concepts and principles of corporate valuation and the various approaches used to determine a company's value.
2. Build analytical skills to apply and interpret valuation methods such as the Discounted Cash Flow (DCF) approach, Free Cash Flow to Equity (FCFE) model, and the valuation of bonds and equity shares.
3. Acquire a deep conceptual knowledge of relative valuation methods and effectively apply them in various corporate finance scenarios.
4. Understand the methods of evaluating the cost and benefits of mergers and acquisitions, determine exchange ratios, and demonstrate value-based management approaches in restructuring processes.

Course Outcomes:

CO1: Acquire the basic concept of Corporate Valuation and approaches.

CO2: Build the analytical ability to solve and interpret Discounted Cash flow Approach, Free Cash Flow to Equity (FCFE) model, valuation of Bond, Valuation of Equity shares

CO3: Determine conceptual knowledge on the relative valuation.

CO4: Exposed the knowledge on methods of Cost and Benefit of a merger, exchange ratio in mergers in M&A and Restructuring. Demonstrate the concept of Value Based Management and Approaches.

Course Pre-requisites: prior knowledge of basic concepts of Corporate Analysis and Valuation

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Corporate Valuation:** Introduction to Corporate Valuation, conceptual framework of valuation, approaches of valuation :asset based approach to valuation, earning based approach to valuation ,earning measure based on	**9 hours**	**1**	**1**	**1**

	accounting – capitalization method, P/E ratio, earning measure on cash flow basis (DCF approach), and other approaches to value measure. Adjusted Book Value Approach, Stock & Debt Approach and Direct Comparison Approach.				
Unit-2	**Enterprise DCF Approach** Discounted Cash flow Approach and Analysing historical performance, estimating the Cost of Capital. , Free Cash Flow to Equity (FCFE) model, Adjusted Present Value (APV model, Economic Value Added method and Valuation of Bond, Valuation of Equity shares. DCF Approach of Two and Three stage model, Equity DCF Model: Dividend discount model	**10 hours**	**2**	**6**	**2**
Unit-3	**Relative Valuation:** Steps involved in relative valuation, equity valuation multiples, enterprise valuation multiples, choice of multiple, best practice using multiples, assessing of relative valuation, advance issues in valuation.	**10 hours**	**3**	**6**	**1**
Unit-4	**M&A and Restructuring:** Mergers, reasons for merger, mechanism of a merger, Cost and Benefit of a merger, exchange ratio in mergers, leveraged buy outs (LBO). **Value Based Management** Methods and keys premises of VBM, Strern stewart approach(EVA approach),EVA and Capital Budgeting, BCG approach.	**10 hours**	**4**	**4**	**3**

Reference

1. Prasanna Chandra “Corporate Valuation aned Value Creation” 2011, Tata McGraw Hill
2. Aswath Damodaran “Damodaran on Valuation” 2/e, 2006 John Wiley and Sons
3. Prasanna Chandra “Financial Management Theory and Practice” 9/e 2016, Tata McGraw Hill
4. A N Sridhar “ Strategic Financial Management” 4/e Shroff Publishers
5. Rabi Narayan Kar and Minakshi “Mergers Acquisitions & Corporate Restructuring - Strategies & Practices” 3/e, 2017 Taxmann’s publication
6. Sheeba Kapil and Kanwal N. Kapil “Mergers and Acquisitions” 2/e, 2017, Wiley publication
7. H R Machiraju “Mergers, Acquisitions and Takeovers” 1/e, 2010, New Age International Publishers

8. Ramanujam S. “Mergers et.al.-Issues, Implications, and Case Law in Corporate Restructuring” 2000 Tata McGraw Hill Publishing House
9. Weston Mitchell and Mulherin “Takeovers, Restructuring and Corporate Governance” 4/e , 2003 Pearson Education
10. Philip R Daves, Michael C. Ehrhardt, and Ron E. Shrieves “Corporate Valuation: A Guide for Managers and Investors” 2003 Cengage Learning
11. David Frykman, Jakob Tolleryd “Corporate Valuation” 2003, Prentice Hall

Course Code & Title: PGDFN 404 - Project Appraisal and Finance

Course Description: This course provides an in-depth study of project appraisal methodologies and financing strategies. Students will gain a comprehensive understanding of the processes involved in evaluating project feasibility, financial viability, and securing appropriate funding.

Course Objectives:

1. Focuses on capital budgeting and project financing.
2. To provide knowledge about different sources of financing and financial appraisal technique.
3. To acquaint students about social cost benefit analysis.
4. To give an understanding of different types of project risk and also post assessment of the project.

Course Outcomes:

CO1. Define project appraisal and its importance in project management. Identify the key components of project feasibility studies.

CO2. Explain the importance of project feasibility in project management. Summarize the technical, economic, and financial aspects of project feasibility.

CO3 : Apply financial modelling techniques to develop project evaluation models. Implement cash flow analysis to assess project financial viability.

CO4. Analyze various risks associated with project financing. Evaluate the impact of risk on project feasibility. Critically assess the implications of different financing structures.

Course Pre-requisites: prior knowledge of basic concepts of Project Appraisal & Finance

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**PLANNING & ANALYSIS OVERVIEW** Capital budgeting concepts, objectives and Phases, levels of decision making, Resource Allocation Framework: Key criteria for allocation of resource – elementary investment strategies. Generation and screening of project ideas: Generation of ideas –	**9 hours**	**1**	**1**	**1**

	monitoring the environment – regulatory framework for projects – corporate appraisal – preliminary screening – project rating index (Theory)				
Unit-2	**CASH FLOW ESTIMATION** **Cash flow measurement**: dependence and independence of cash flows in evaluating projects – measures of risk and return – Total risk for multiple investment – Measuring cash flows for acquisition (Excel for estimating cash flows and decision making) – Bias in cash flow estimates. **Project Financing** –long term sources – lease financing- Venture Capital – Hybrid Financing	**10 hours**	**2**	**6**	**2**
Unit-3	**CAPITAL BUDGETING EXTENSION** **Capital Budgeting extension –** Choice between mutually exclusive projects of unequal life – optimal timing decision – determination of economic life – interrelationships between investment and financing aspects – inflation and capital budgeting – Real Vs. Nominal discount rates- multiple IRR, MIRR - **Ranking projects** – NPV-IRR conflict – Fisher's rate of intersection – optimal decisions under capital rationing Constraints	**10 hours**	**3**	**6**	**1**
Unit-4	**PROJECT RISK ANALYSIS** Types and measures of risk and return – Total risk for multiple investment techniques for measuring stand-alone risk– sensitivity analysis – scenario analysis – Monte Carlo simulation – Decision tree analysis – selection of projects under risk – risk analysis in practice. Rationale for SCBA – UNIDO approach to SCBA – Little and Mirle approach to SCBA. Linear programming model- Quantitative Analysis:	**10 hours**	**4**	**4**	**3**

	Qualitative factors and Capital budgeting - Environmental appraisals of projects				

REFERENCE BOOKS

- Project Planning: Analysis, Selection, Implementation and Review – Prasanna Chandra, 7/e, TMH, 2011.
- Project Management and Control – Narendra Singh, HPH.
- Project Management – Bhavesh M. Patel, 2/e, Vikas Publication.
- Project Management for Business and Technology: Principles and Practice – Nicholas, John M., 2/e, Pearson.
- Project Management: The Managerial Process – Gray& Larson, 4/e, TMH, 2011.
- Project Management – Choudhury, 1/e, TMH. 7.
- Project Management, The Managerial Process, Clifford F Gray, Erik W Larson, Gautam V Desai, Mc Graw Hill Education.
- Project Management, Vasant Desai, Himalaya Publishing House.

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Course Title & Code: PGDMK411 – Digital and Social Media Marketing Syllabus

Course Description: In simple terms, digital marketing is the promotion of products or brands via one or more forms of electronic media. Digital marketing is often referred to as online marketing, internet marketing or web marketing.

Course Objectives:

1. Provide students with a comprehensive understanding of digital marketing fundamentals, including its evolution, importance, and scope, and insights into the digital consumer and online communities.
2. Equip students with the skills to master social media marketing techniques, including ad words, search engine marketing, PPC, online advertising, and customer engagement strategies.
3. Explore affiliate marketing strategies, covering strategic partnerships, affiliate networks, product promotion, social affiliate marketing, email marketing, and content strategies.
4. Develop students' ability to utilize data and analytics in digital marketing, focusing on CRM, CX, digital marketing data, social listening, web analytics, and AI-based marketing.

Course Outcomes:

CO1: Students will understand and describe the evolution, importance, and scope of digital marketing, and identify the characteristics of the digital consumer and online communities.

CO2: Students will be able to explain ad words, search engine marketing, PPC, and online advertising, and implement and evaluate effective social media strategies to engage customers.

CO3: Students will understand and apply affiliate marketing principles, utilize affiliate marketing networks for product promotion, and design comprehensive affiliate marketing campaigns.

CO4: Students will be able to explain CRM and CX roles in digital marketing, use data and analytics to inform strategies, conduct social listening and web analytics, and assess the potential of AI-based marketing tools.

Course Pre-requisites: prior knowledge of basic concepts of marketing.

Pedagogy: ICT and Digital support.

LTP: 2:1:0

Course type: HC

Contact Hours: 36

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction:** Evolution of Digital Marketing, Importance, Scope, the Digital Consumer & Communities Online, Digital Marketing Landscape	**7 hours**	**1**	**1**	**1**
Unit-2	**Social Media Marketing:** Ad words, ORM, Search Engine Marketing, PPC and Online Advertising,	**9 hours**	**2**	**3**	**2**

	Social Media Marketing, Social Media Strategy & Customer Engagement				
Unit-3	**Affiliate Marketing:** Affiliate Marketing & Strategic Partnerships, Affiliate Marketing Networks, Promoting the Affiliate Products, Social Affiliate, Email Marketing, Content Strategies	**12 hours**	**3**	**3**	**2**
Unit-4	**Analytics:** CRM & CX in Digital Marketing-Digital Marketing, Data and Analytics-Social Listening- Web Analytics. Introduction to AI based marketing.	**8 hours**	**4**	**4**	**2**

Text Books

1 Michael Solomon and Tracy Tuten, Social Media Marketing, Pearson, 2013
2 Social Media Marketing for Beginners: Create Successful Campains,
3 Gain more Fans and boost sales from any social network by F.R.Media, 2/e, June 2014

Reference books

1 Jan Zimmerman and Deborah Ng. Social Media Marketing All in one for Dummies, 2012
2 Douglas A.Norman, The Design of Everyday Things, Apr, 2011
3 Jack Z.Scissors and Roger B.Baron Advertising Media Planning, 2010
Bhatia Punit, Fundamentals of Digital Marketing, Pearson, 2017
4 Ian Doodson, The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaign, Wiley, 2016
5The Essential Guide to Online Marketing, Rob Strokes, Quirk, ISBN: 9781936126323
6 E-Commerce: An Indian Perspective, P. T. Joseph, Prentice Hall, 4th Edition, 2013
7 Electronic Commerce: A Simplified Approach, Munesh Chandra Trivedi, Jaico Publishing House, 2011.
8 Digital Marketing: Strategy, Implementation and Practice, Chaffey D., Ellis-Chadwick, 5th Edition, F., Pearson, 2012.
9 https://www.redandyellow.co.za/content/uploads/woocommerce_uploads/2017/10/emarketing_textbook_download.pdf.
10 E-Marketing, Judy Strauss and Raymond Frost, Prentice Hall, 6th Edition, 2013
11. Internet Marketing: Integrating Online and Offline Strategies. M. L. Roberts and Debra Zahay, 3rd edition, Cengage Publishing, 2013

Course Code & Title: PGDMK412 - Consumer Behavior

Course Description: This course delves into the intricate dynamics of consumer behavior, providing an in-depth exploration of the factors influencing individuals' decision-making processes in the marketplace. Participants will examine psychological, social, and cultural aspects that shape consumer choices. Emphasis will be placed on understanding the implications of consumer behavior for marketing strategies and developing insights into the ever-changing landscape of consumer preferences.

Course Objectives:

1. Analyze the impact of psychological factors on consumer decision-making.
2. Understand how perception, motivation, and learning influence consumer choices.
3. .Evaluate the formation of consumer attitudes and perceptions.
4. Analyze the role of advertising and branding in shaping consumer perceptions.

Course Outcomes:

CO1.Explain the impact of psychological factors on consumer decision-making. Summarize the role of social and cultural factors in shaping consumer behaviour.

CO2. Apply knowledge of the consumer decision-making process to analyze real-world scenarios.

Utilize insights into psychological factors to predict and understand consumer choices.

CO3 Analyze the factors influencing each stage of the consumer decision-making process.Evaluate the formation of consumer attitudes and perceptions.

CO4. Evaluate the effectiveness of marketing strategies in influencing consumer behaviour.

Course Pre-requisites: prior knowledge of basic concepts of Consumer Behaviour

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Meaning & Definition of CB, Difference between consumer & Customer, Nature & characteristics of Indian Consumers Introduction to Consumer Behavior, The Changing Patterns of Consumer Behavior, Use of Market , Segmentation in Consumer Behavior, Dimensions of Consumerism, Process of Motivation.	**9 hours**	**1**	**1**	**1**

Unit-2	**Attitude**: Basics of attitude, the nature of attitude, Models of Attitude and Marketing Implication, (Tri-component Model of attitude, Multi attribute attitude models. C) Persuasive Communication: Communications strategy, Target Audience, Media Strategy, Message strategies, Message structure and presentation.	**10 hours**	**2**	**6**	**2**
Unit-3	Applications of Personality concepts in Marketing, Personality and understanding consumer diversity (Consumer Innovativeness and related personality traits, Cognitive personality factors, Consumer Materialism, Consumer Ethnocentrisms), Brand Personality (Brand Personification, Gender, Geography, Colour), Self and Self-Image (One or Multiple selves, The extended self, Altering the self).	**10 hours**	**3**	**6**	**1**
Unit-4	AIO classification of Lifestyle, VALSTM Typology, Application of Lifestyle in Marketing, Culture and subculture, Group as a determinant of buyer behavior. Celebrities as Reference group, Concept of family and family life-cycle, Family Buying Decisions, Case Study on Family Buying Decisions, Diffusion of Innovation. Quick commerce – Buying behavior & trends – AI influence on quick commerce – sustainability in quick commerce.	**10 hours**	**4**	**4**	**3**

REFERENCE:

- Consumer Behavior - Leon Schiff man, LesslieKanuk, 10/e, Pearson, 2010.
- Consumer Behavior: Building Marketing Strategy – Del I. Hawkins, & Others, 11/e TMH.
- Consumer behavior - Jay D. Lindquist, Joseph Sirgy, 1/e, Cengage Learning.
  Consumer behavior – David L. Louden, Della Bitta, 4/e, McGraw Hil.

Course Code & Title: PGDMK413 – Sales & Distribution Management

Course Description: This course provides an in-depth study of sales and distribution strategies within the realm of marketing and business. Participants will explore the key principles, techniques, and challenges involved in managing the sales process and establishing effective distribution channels. Emphasis will be placed on understanding consumer behavior, relationship management, and optimizing distribution logistics for organizational success.

Course Objectives:

- Define the fundamentals of sales and distribution management.
- Identify the critical role of sales and distribution in the marketing mix.
- Analyze how consumer behavior influences sales and distribution strategies.
- Understand the factors affecting purchasing decisions and post-purchase behavior.

Course Outcomes:

CO1.Explain how consumer behavior influences sales and distribution strategies. Summarize the factors affecting purchasing decisions and post-purchase behavior.

CO2. Apply knowledge to develop effective sales strategies for diverse products and markets. Utilize segmentation and targeting principles in designing sales approaches.

CO3 Analyze and optimize distribution channels for enhanced product availability.

CO4 Evaluate the advantages and disadvantages of various distribution strategies.

Course Pre-requisites: prior knowledge of basic concepts of Sales & Distribution Management

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**SALES MANAGEMENT** Definition, Nature and Scope of Sales Department Roles and Functions of a Sales Manager Salesmanship, Personal Selling & Sales Management	**9 hours**	**1**	**1**	**1**
Unit-2	**SALES ORGANISATION** Recruiting and Selecting Sales Personnel. Developing and Conducting Sales Training	**10 hours**	**2**	**6**	**2**

	Programmes; Designing and Administering Compensation Plans; Motivating Sales Personnel.				
Unit-3	**SALES TERRITORIES** Sales Forecasting Methods; Management of Sales Territories; Analysis of Sales And Marketing Costs, Evaluation of Salespeople's Performance.	**10 hours**	**3**	**6**	**1**
Unit-4	**DISTRIBUTION MANAGEMENT & CHANNEL MANAGEMENT** Marketing Channels & their Structure, Functions & Relationships of Channel Intermediaries Wholesaling & Retailing; Logistics of Distribution & Channel Planning. Information System & Channel Management; Assessing the Performance of Marketing Channels; International Marketing Channels.	**10 hours**	**4**	**4**	**3**

Reference Books :

1. Sales & Distribution Management by Panda Tapan K., Sahadev Sunil, Oxford Press
2. Sales & Distribution Management - Text & Cases (2nd Edition) - Krishna K. Havaldar, Vasant M. Cavale, Tata McGraw-Hill
3. Sales Management: Decisions, Strategies & Cases, Richard R. Still, Edward W. Cundiff, Norman A.P. Govoni, Pearson Education, Latest Edition.
4. Sales Management: Concepts Practice, and Cases, Johnson F.M., Kurtz D.L., Scheuing E.E., Tata McGraw- Hill, Latest Edition.

Course Title & Code: PGDMK414 – Services Marketing

Course Description: Knowledge of Services marketing environment (i.e.) various dimensions, decisions, format, behavior are studied. This course equips students to understand the shopper behavior and design an effective services management strategy.

Course Objectives:

1.To familiarize with the special characteristics of services relevant for marketing.

2. To analyze the customer satisfaction and compliant management in services.

3. To evaluate the financial implications of improvement in services and

4. To acquaint with CRM application in service marketing.

Course Outcomes:

CO1: To Understand the students relating to Services Marketing and its concepts.

CO2: To gain knowledge on marketing mix and seven Ps of marketing in services.

CO3: To enable students to understand the segmentation in services.

CO4: To enable students to service quality and gaps in services.

Course Pre-requisites: prior knowledge of basic concepts of retail marketing.

Pedagogy: ICT and Digital support.

LTP: 2:1:0

Course type: HC

Contact Hours: 36

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**MARKETING OF SERVICES** Introduction-growth of the service sector- The concept of Service – Characteristics of services – Classification of services – Designing the service Blueprint, Using Technology – Developing Human Resources – Building Service Aspirations.	**7 hours**	**1**	**1**	**1**
Unit-2	**MARKETING MIX IN SERVICES** The seven Ps – Product decisions – Pricing strategies and tactics – Promotion of services and placing or Distribution methods for services – Additional dimensions in services marketing – People, Physical Evidence and process-internet as a service channel.	**9 hours**	**2**	**3**	**2**

Unit-3	**STRATEGIC MARKETING MANAGEMENT FOR SERVICES –** Matching demand and supply through capacity planning and Segmentation – Internal marketing of a service – external versus Internal orientation of service strategy. Marketing of services with special reference to Financial services – Health services – Hospitality services including Travel, Hotels and Tourism – Professional services –Public utility services – Communication services – Educational services.	**12 hours**	**3**	**3**	**2**
Unit-4	**DELIVERING QUALITY SERVICES** Causes of service – Quality Gaps – The customer expectations versus perceived service Gap – Factors and Techniques to resolve this Gaps in services – Quality standards, factors and solutions – The service performance Gap, key factors and strategies for closing the Gap – Developing appropriate and effective communication about service quality.	**8 hours**	**4**	**4**	**2**

Reference Books:

1. Ravi Shanker, **SERVICES MARKETING: THE INDIAN PERSPECTIVE,** Excel Books, New Delhi, 2008.
2. Rajendra Nargundkar, **SERVICES MARKETING: TEXT & CASES,** Tata McGraw-Hill Publishing Company, new Delhi, 2008.
3. Chistopher H. Lovelock, **SERVICES MARKETING: PEOPLE, TECHNOLOGY, STRATEGY,** Pearson Education Asia.
4. R. Srinivasan, **SERVICES MARKETING,** Prentice Hall of India, New Delhi.
   Zcithaml, Parasuraman & Berry, **DELIVERING QUALITY SERVICE,** the Free Press, Macmillan.

Course Code & Title: PGDHR421 - Performance Management System

Course Description: In this course, discusses a number of approaches to measure and methods of reviewing and analyzing performance to facilitate improved among managers. An effective performance management system brings helps in clarifying our roles and performance expectations by focusing on performance development. Also this course blends both theory and practice, with the help of frameworks, real-life examples, case studies and assignments, to make the students 'industry ready', when it comes to Performance Management in an organization

Course Objectives:

1. Understanding Performance Management: This course will provide a comprehensive understanding of performance management and its vital role in shaping organizational culture and driving growth. Participants will learn the significance of implementing a strong and robust performance management system.
2. Rewarding Good Performance: The course will explore various methods to reward good performance, both financially and non-financially, and demonstrate how these rewards can enhance employee motivation and satisfaction.
3. Developing Performance Management Processes: Participants will gain practical skills in creating and implementing effective performance management processes, ensuring a systematic approach to evaluating and improving employee performance.
4. Enhancing Communication for Team Satisfaction: Emphasis will be placed on the importance of transparent and open communication within teams, with strategies to foster such communication for increased team satisfaction and retention.

Course Outcomes:

CO1: Understand the importance, purpose, and impact of a strong and robust Performance Management on the culture and growth of the organisation

CO2: Understand how to reward for good performance – both financially and non-financially

CO3: Creating and implementing a robust process of performance management

CO4: Understand the importance of transparent and open communication for satisfaction and retention in the team

Course Pre-requisites: prior knowledge of basic concepts of HRM

Pedagogy: ICT, Digital support & Case Analysis

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Fundamentals of Performance Management**	**9 hours**	**1**	**1**	**1**

	Concept and Philosophy underlying Performance Management, Significance, Objectives, Pre-Requisites, and Characteristics of Effective Performance Management; Performance Management versus Performance Appraisal; Performance Management and Strategic Planning, Performance Management Process-Conceptual Model, Overview of Strategies for Performance Management.				
Unit-2	**Planning and Implementation of Performance** Management: Overview of Performance Planning, Defining Performance and Selecting a Measurement Approach, Developing Job Descriptions, Defining Performance Standards, Key Result Areas, Competencies and Skills, Characteristics of Effective Performance Metrics.	**10 hours**	**2**	**2**	**2**
Unit-3	**Performance Appraisal and Monitoring** Characteristics of effective Appraisals; Methods of Performance Appraisal; Designing Appraisal Forms; Implementing Performance Appraisal Process, Performance Review Discussions; Improving Quality of Performance Ratings; 360 Degree Appraisal; reappraisal; Performance Monitoring; Performance Management Documentation; Annual Stock Taking, Performance Management Audit.	**10 hours**	**3**	**3**	**1**
Unit-4	**Other Performance Management and Development Issues** Coaching, Counseling and Mentoring - Potential Appraisal, Competency Mapping; Performance Related Pay; Implementing Performance Management System- Strategies and Challenges; Role of HR Professionals in Performance Management; Ethical and Legal Issues, Appraisal and Management Practices in Indian Organizations.	**10 hours**	**4**	**6**	**3**

ReferenceBooks:

1.Michael Armstrong “Performance Management” 2010, Kogan Page.
2.A.S.Kohli&T.Deb, “Performance Management”, 2009, Oxford.
3.T.V.Rao, Performance Management & Appraisal System, Sage , 2008.
4.A.M. Sharma, Perfomance Management System”, 2010, HPH.

5.M Armstrong, “Performance Management & Development”, 2010,Jaico.
6.PremChadha,Performance Management, 2009, Macmillan.
7.Joe Willmore, “Performance Basics”, 2004, ASTD Press.
8.S.K.Bhatia “Performance Management”, 2007, Deep and Deep Publication.
9.Peter G. Northouse, “Leadreship”, 2010, Sage. Lussir, “Efective Leadership”, 2009, Cengage.
10. Herman Aguinis (2104). Performance Management. 3rd Edition. Pearson India.
11. Rao, T.V (2004). Performance Management and Appraisal System. Sage india.
12. Steve Walker (2011).Practical and effective Performance management. Universe of Learning Ltd, Lancashire, UK.
13. Smither J.W. and M London (2009). Performance Management: Putting research into action. JOSSEY- BASS.

Suggested Readings:

1. Rao, T.V., Performance Management and appraisal Systems. Sage publication.
2. Sanghi, S., The Handbook of Competency Mapping. Sage Publication.
3. Kandula, S.R., Performance Management: Strategies Interventions. PHI Learning Pvt. Ltd.
4. Bacal, R., Performance Management. McGraw-Hill.
5. Sahu, R.K., Competency Mapping. Excell books.
6. Sharma R. Radha, 360 Degree Feedback, C. Mapping, Assessment Centre. Tata McGraw Hill.
7. Bagchi, S.N. Performance management. Cengage Learning India.
8. Armstrong, M., Performance Management: Key Strategies and Practical Guidelines. 3rd ed.,Viva Books.

Course Code & Title: PGDHR422 - Employee Relations

Course Description: The Employee Relations course provides a comprehensive overview of managing workplace relationships and fostering a positive organizational culture. Key topics include conflict resolution, communication strategies, employee engagement, performance management, and legal compliance. Students will learn best practices for handling grievances, conducting investigations, and implementing fair disciplinary procedures. The course emphasizes the importance of creating an inclusive and respectful work environment to enhance productivity and employee satisfaction. Through case studies, role-playing, and interactive discussions, participants will develop practical skills to navigate complex employee relations issues effectively and ethically. This course is ideal for HR professionals, managers, and business leaders aiming to improve workplace harmony.

Course Objectives:

1. Understanding Employee Relations: To explore the concept, evolution, and scope of employee relations, including the roles of government, management, and trade unions, with a focus on India.
2. Comprehending Statutory Employee Relations: To study key labor laws such as the Trade Unions Act, 1926, and Industrial Disputes Act, 1947, focusing on dispute resolution, grievance handling, and disciplinary procedures.
3. Applying Employee Relations Management (ERM): To examine tools and strategies for managing employee relations in various sectors, emphasizing multi-union environments, strategic ERM, and performance management.
4. Developing Positive Employee Relations: To understand management practices for fostering positive employee relations, handling conflicts, and building a constructive work culture, supported by recent legal rulings and labor law aspects.

Course Outcomes:

CO1: Analyze Employee Relations: Students will analyze the evolution, scope, and contemporary practices of employee relations, including the roles of government, management, and trade unions in India.
CO2: Apply Labor Law Knowledge: Students will apply the provisions of key labor laws like the Trade Unions Act, 1926, and Industrial Disputes Act, 1947, to effectively handle disputes and grievances.
CO3: Evaluate ERM Strategies: Students will evaluate the effectiveness of various Employee Relations Management (ERM) strategies in multi-union, service, and IT sectors to enhance employee involvement and commitment.
CO4: Develop Conflict Management Skills: Students will develop skills to manage conflicts, mentor employees, and build a positive work culture by understanding the power dynamics and organizational politics.

Course Pre-requisites:
Basic Understanding of Human Resources Principles: Familiarity with fundamental HR concepts and practices, such as recruitment, training, and performance management.
Experience in a Professional Work Environment: Prior work experience in any professional setting to relate course concepts to real-world scenarios.
Communication Skills: Proficiency in verbal and written communication to effectively participate in discussions and role-playing activities.

Analytical Skills: Ability to analyze and interpret workplace situations and data for making informed decisions. **Basic Knowledge of Employment Law**: Awareness of basic employment laws and regulations to understand the legal context of employee relations. **Completion of Introductory HR Course**: Recommended but not required, to ensure a solid foundation in human resources.
Pedagogy: Lectures and Presentations
LTP: 3:0:0
Course type: HC
Contact Hours: 36 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	Employee Relations: Concept, Factors and Scope; Employee Relations: Evolution and contemporary scenario; Employee involvement: concept, types and practices; Trade Union Movement with special focus on India Labour Policy in Five Year Plans, Bipartism, Tripartism; Role of government and State; Role of management; Role of Trade Unions.	10 hrs	1	1,2	1
Unit-2	Statutory Employee Relations Trade Unions Act, 1926; Industrial Disputes Act, 1947; Causes of disputes, Authorities under the Act, Procedure and Power of Authorities, Award and Settlement of industrial dispute. Industrial Employment (Standing Orders) Act, 1948; Misconduct, Disciplinary Action, Types of Punishments, Code of Discipline, Domestic Enquiry, Grievance Handling in IR: Grievance Settlement Procedure, MRTU PULP Act, 1971	10 hrs	2	2,5	1
Unit -3	Employee Relations Management (ERM): Overview, Tools, Core Issues, ERM in multi union situations in Core Sector, ERM in Service & IT Sector, Strategic ERM, Strategy and Employment Policies, Future Challenges, Performance Management Services, Involvement and commitment as Competitive Advantages, The Psychological Contract: Interest and Expectations, HR Infrastructure, Employee Surveys	10 hrs	3,4	3,5	1

Unit-4	Management of Employee Relations: Practices in Industry, Power & Authority Structure, Organizational Politics, Conflict Handling, Consultation, Counselling, Mentoring, Building Positive Employee Relations and Work Culture. Latest Court Rulings on Disciplinary actions in work place. Relevant aspects of Labour laws	4 hrs	4	5,6	

Reference Books:

1. Davar, R.S. (1991). Personnel Management and Industrial Relations. New Delhi, India: Vikas Publishing House Pvt. Ltd.
2. Aswathappa K, (2010), Human Resource Management, McGraw Hill Education; 6th edition.
3. P. N. Singh and Neeraj Kumar, (2010), Employee Relations Manager, Pearson India.

Course Code & Title: PGDHR423 – Manpower Planning Recruitment & Selection

Course Description:

This course delves into the dynamic and critical realm of Strategic Human Resource Management (SHRM), exploring the conceptual foundations, evolutionary trends, and the pivotal linkage between business and HR strategies. Help to gain an in-depth understanding of the HR environment, encompassing technological influences, organizational structures, management of diversity, HR outsourcing, and the challenges posed by global competition and labor sourcing on a global scale.

Course Objectives:

1. To apply the conceptual knowledge of Human Resource Planning in managing the work force
2. To analyse the various models involved in manpower planning, barriers and competency models.
3. To analyse the recruitment process, recruitment outsourcing, E-recruitment, techniques of selection and training
4. To implement, evaluate and control the process of talent engagement and gain an overall knowledge in the field of HR to plan, recruit and selectthe human resource.

Course Outcomes:

- Demonstrate an understanding of the concept of manpower planning, including its importance, objectives, and methods used in forecasting future manpower needs within organizations.
- Analyzing Recruitment Strategies
- Evaluating Selection techniques and tests, and understand their effectiveness,
- Applying Legal and Ethical Considerations manpower planning with relevant laws and ethical standards.
- Utilizing Technology in in modern recruitment practices, social media, and online platforms
- Developing Effective Job Descriptions and Specifications that accurately reflect the requirements of the job role and assist in attracting suitable candidates.
- Measuring Recruitment Effectiveness, using key performance indicators (KPIs) and metrics, and use data-driven insights to improve future recruitment strategies.
- Developing Recruitment Plans considering factors such as budget constraints, timelines, and desired candidate profiles

Course Pre-requisites: Basic HRM

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Introduction to Man Power Planning:**	10 hrs	1	1	1

	-Concept, objective, Significance, Factors affecting & barriers, requisites -Macro & Micro level planning, -Manpower planning Process -Demand & Supply Forecasting of manpower & Method of forecasting. -Dealing With shortage & Surplus of Manpower.				
Unit-2	**Manpower Planning Techniques :** -Job Analysis, Job Description, Job Specification; job Evaluation, Skills Analysis, -Performance Appraisal & Management Strategies-Recruitment, Redeployment, Downsizing Plan, Retention Plan, Training Plan, Career Plan, Succession Plan, Compensation Plan.	08 hrs	2	2	1
Unit -3	**Recruitment and Selection:** - Recruitment Function Concepts, Factors influencing recruitment & Selection, reservation rules, resettlement and rehabilitation rules, - Policy and programs in Public Sector, Private Sector, MNCs, Government Establishments, Educational Institutions, Health Care & Hospitals, Process of Recruitment, Sources of Recruitment, alternatives to recruitment, -The New Techniques: Web, social media, Mobile, Recruitment Issues in Core sector, Service sector and IT sector. -Selection Function: Meaning, use of selection for competitive advantage, Selection Process Tests, types of tests, Group Discussions, -Interviews, types of interviews, Common Interview Problems, Assessment Centres, Gamification, Physical fitness tests, Hiring Decisions, Barriers to effective selection, Evaluation of selection process, making selection effective, Outsourcing, problems, issues.	11 hrs	3	5	1
Unit-4	**Strategic Manpower Planning & Management:** -Concept, objective & Process - Use and Applicability Qualitative & Quantitative Analysis of Manpower Planning - Balance Score card, HR Dash Board, Markov Analysis, Cohort Analysis, -Manpower Planning Information System; -Emerging Trends in Human Resource Planning	10 hrs	4	4	1

Reference Books:

Text Books:

1. Agarwala, T., Strategic Human Resource Management, Oxford University Press, New Delhi, 1st edition.
2. "Strategic Human Resource Management" by Jeffrey A. Mello

Suggested Readings:

1. Jeffrey A., M., Strategic Human Resource Management, Thomson Learning Inc.
2. Prasad, K., Strategic Human Resource Management:, Macmillan Publication,1st edition.
3. Belcourt, M. and McBay, K., Strategic Human Resource Planning, Thomson Learning Inc., 2nd edition.

Course Code & Title: PGDHR424 - Compensation Management

Course Description: This course offers an in-depth exploration of compensation management, covering fundamental concepts, issues, and job evaluation methods. Students will learn to analyze compensation structures, administer payroll, design effective incentive systems, and ensure compliance with relevant laws and regulations.

Course Objectives:

1. Provide a comprehensive understanding of compensation management, including concepts, issues, components, and job evaluation methods.
2. Analyze and administer compensation structures, including payroll and executive compensation.
3. Design and implement effective incentive systems aligned with organizational goals.
4. Understand and ensure compliance with compensation-related laws and regulations.

Course Outcomes:

CO1: Explain the concept of Compensation Management, its issues, components and Framework basic compensation concepts and job evaluation methods.

CO2: Analyze the structure of compensation and undertake payroll administration and understand the components of executive compensation.

CO3: Apply the incentive systems in the organizations.

CO4: Understand the various compensation related laws.

Course Pre-requisites: prior knowledge of basic concepts of HRM

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Components of Compensation - Framework of Compensation - Factors affecting Compensation. Job evaluation – methods of job evaluation - Compensation: Wage and Salary policies in Organisation: Role of HR Department in Wage and Salary Administration - Payroll Administration	**9 hours**	**1**		
Unit-2	Compensation Structure- Components of Wage, CTC, D.A and FDA, Calculation of Variable	**10 hours**	**2**		

	Dearness Allowance (DA), Bonus, Provident Fund, Gratuity. Executive Remuneration Components: Base Salary, Annual Bonus, Long Term Incentives, Perquisites. Recent Trends in Executive Remuneration in Indian Organisations and MNCs.				
Unit-3	Reward based Compensation Management: significance of reward system - Performance linked Reward System - Incentive system - Essentials of Sound Incentive Plan - Allowances and Benefits.	**10 hours**	**3**		
Unit-4	Compensation related laws - Equal Remuneration Act, 1976 - Minimum Wages Act, 1948 - Payment of Wages Act, 1936 - Payment of Bonus Act, 1965 - Payment of Gratuity Act, 1972 - EPF and Miscellaneous Provisions Act, 1952	**10 hours**	**4**		

TEXT BOOKS

RICHARD.I. HENDERSON, Compensation Management in a Knowledge based World - PEARSON EDUCATION PVT. LTD., DELHI.

REFERENCES

1. Bhatia: New Compensation Management in Changing Environment.
2. Henderson: Compensation Management in a Knowledge-based World
3. Milkovich &Newman: Compensation Management
4. Belchar: Wage & Salary Administration
5. Gupta: Managerial and Executive Remuneration in India
6. Sarma: Understanding Wage System
7. Alka Gupta: Wage and Salary Administration in India

Course Code & Title: PGDBA431 - Business Analytics and Business Intelligence With Power Bi

Course Description: This course provides an in-depth understanding of Business Intelligence (BI) and its application in modern businesses. It covers the historical evolution, components, and concepts of BI, emphasizing its role and benefits in business operations. The course also includes practical training on Power BI, focusing on data querying, transformation, visualization, and reporting.

Course Objectives:

1. To introduce the history, major components, and concepts of Business Intelligence.
2. To explain the role, benefits, and applications of Business Intelligence in business.
3. To provide practical skills in using Power BI for data modeling, querying, transformation, and visualization.
4. To teach students how to create comprehensive reports using Power BI.

Course Outcomes:

CO1: Students will be able to describe the history, components, and concepts of Business Intelligence and its significance in business.

CO2: Students will develop the ability to utilize Power BI for data modeling, querying, and transformation.

CO3: Students will gain proficiency in creating data visualizations and applying various functions and filters in Power BI.

CO4: Students will learn to generate detailed and insightful reports using Power BI's advanced features.

Course Pre-requisites: Basic understanding of business concepts, Computers Programing and information systems would be beneficial.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:0:1

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Business Intelligence and Power BI**	10 hours	1	1	1

	History of Business Intelligence: An overview of the evolution of BI, Major Components of Business Intelligence, Information vs. Intelligence, Concepts of Business Intelligence, Role of Business Intelligence in Business, Benefits of Business Intelligence, Applications of BI, Value of Business Intelligence. Power BI Desktop: Introduction to the Power BI Desktop application, Labels: Using and managing labels in Power BI, How to Upload Data: Methods to upload data into Power BI, Data Modeling: Techniques for modeling data within Power BI.				
Unit-2	**Data Query and Transformation in Power BI** Data Querying: Learning to query data using Power BI tools. Data Transformation: Techniques for transforming data to fit analysis needs.	08 Hours	2	4	1
Unit-3	**Data Visualization, Functions, and Filters** Power BI Mapping with Latitude and Longitude: Creating maps using geographical coordinates, Power BI Filled Map, Shape Map vs. Filled Map: Comparing shape maps with filled maps and their use cases, 3D Maps in Power BI: Exploring the capabilities and applications of 3D maps, ArcGIS Map in Power BI: Integrating ArcGIS maps for enhanced geographical analysis, Chart Types: Clustered Chart: Creating and interpreting clustered charts, Stacked Chart: Creating and interpreting stacked charts, 100% Stacked Chart: Creating and interpreting 100% stacked charts, DAX Functions: Utilizing Data Analysis Expressions (DAX) for advanced calculations and data manipulation.	14 hours	3	4	1
Unit - 4	**Reporting** Creating Reports in Power BI: Steps and best practices for creating comprehensive reports, Formatting and Customizing Reports: Techniques for enhancing report aesthetics and readability, Advanced Reporting Features: Leveraging advanced features such as drill-through, bookmarks, and report navigation, Publishing and Sharing Reports: Methods for publishing reports to Power BI Service and sharing them with stakeholders, Interactive Reports: Creating interactive reports to enable dynamic data	07 hours	4	5	1

	exploration, Report Automation: Setting up scheduled refreshes and automating report updates.				

TEACHING /LEARNING RESOURCES

1. "Microsoft Power BI Complete Reference" by Devin Knight, Adam Jorgensen, and Brian Knight:
2. A comprehensive guide covering all aspects of Power BI, including data modeling, visualization, and reporting.
3. "Collect, Combine, and Transform Data Using Power Query in Excel and Power BI" by Gil Raviv: This book dives into Power Query, which is essential for data transformation in Power BI.
4. "DAX Patterns" by Marco Russo and Alberto Ferrari: A deep dive into Data Analysis Expressions (DAX), crucial for advanced calculations in Power BI.
5. "Pro Power BI Desktop" by Adam Aspin: Focuses on advanced techniques and practical applications of Power BI Desktop.

Course Code & Title: PGDBA432 - Data Analytics Using R (Practical)

Course Description: This course introduces students to the principles and applications of predictive analytics using the R programming language. Participants will gain hands-on experience in data preparation, modeling, and interpretation of results, with a focus on real-world applications in various industries.

Course Objectives:

1. Define predictive analytics and its role in decision-making. Identify the key components and processes involved in predictive modelling.

2. Acquire proficiency in using R for data manipulation, exploration, and analysis. Implement statistical techniques for data preprocessing and cleansing.

3 . Introduce regression analysis, classification, and clustering algorithms. Understand the principles of feature selection and model evaluation.

4. Interpret the results of predictive models in the context of business objectives. Formulate actionable recommendations based on predictive analytics insights.

Course Outcomes:

CO1. Explain the role of predictive analytics in decision-making. Summarize the steps involved in predictive modelling..

CO2. Utilize R for data pre-processing and cleansing. Apply regression, classification, and clustering algorithms in R.

CO3 : Assess the performance of predictive models. Analyse the impact of feature selection on model outcomes..

CO4. Evaluate and compare the performance of different predictive models. Critically assess the trade-offs in model optimization.

CO5: Develop predictive models using R. Create visualizations to communicate model results effectively.

Course Pre-requisites: prior knowledge of basic concepts of Data Analytics Using R

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	**INTRODUCTION TO PREDICTIVE ANALYTICS** Introduction to predictive analytics, definition, Evolution of Data Analytics, Applications of predictive analytics, Predictive models: Propensity model, Clustering Model & Collaborative filtering; used cases on predictive analytics.	**6 hours**	**1**	**1**	**1**
Unit-2	**EXPLORATORY DATA ANALYSIS** Time Series Data Analysis: Organizing and processing of data with R, Data Cleaning – Missing values, Outlier treatment, Pre-processing and cleaning and Univariate Analysis, ARIMA model for forecasting.	**10 hours**	**2**	**6**	**2**
Unit-3	**PREDICTION- LINEAR REGRESSION** Understanding simple regression in R, Scenarios for using OLS regression, Computing the intercept and slope coefficient, Obtaining the residuals, Computing the significance of the coefficient. Correlation & R2, Multiple Linear Regression in R, Model building.	**10 hours**	**3**	**6**	**1**
Unit-4	**DECISION TREES & LOGISTIC REGRESSION** Introduction to Decision trees, Data pre-processing, Model building in R, Model comparison. Introduction to Logistic Regression: Interpreting the model parameters and assessing the impact of predictors on the probability of outcome. **NEURAL NETWORKS** Introduction, Structure of neural networks, Information flow, Types of layers, Training a neural network, Back Propagation, Neural networks in R. Naïve Bayes, SVM and KNN	**13 hours**	**4**	**4**	**3**

TEACHING /LEARNING RESOURCES

1. Evans, J. R. (2013). Business Analytics: Methods, Models, and Decisions
2. Robert Stine, Dean Foster, "Statistics for Business: Decision Making and Analysis", Pearson Education, 2nd edition, 2013.
3. Turban, E., Aronson, J. E., Liang, T. P., & Sharda, R. (2010).Decision support and business intelligence systems (9th ed., p. 720).Prentice-Hall.
4. Berson, A., Smith, S. J., & F. (1997).Data Warehousing, Data Mining and OLAP (1st ed., p 640).Computing Mcgraw-Hill.
5. Han, J., &Kamber, M. (2000). Data Mining : Concepts and Techniques (1st ed., p. 550). Morgan Kaufmann
6. Robert Kabacoff, Second Edition (2015), Manning publications: R in Action Data analysis and graphics with R
7. U Dinesh Kumar, “Business Analytics” Wiley India Pvt. Ltd publication, 2017.

8. Dr. Umesh R. Hodeghatta and Umesha Nayak, Apresspublication : Business Analytics Using R - A Practical Approach
9. Jeffrey S. Strickland, Simulation Educators (2014) Predictive Analytics using R
10. Subhashini Sharma Tripathi, Apress publication, Learn Business Analytics in Six Steps Using SAS and R

R – Programming

1. Wickham H., Grolemund G. (2016). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media.
2. Cotton, R. (2013). Learning R: A Step-by-Step Function Guide to Data Analysis 1st Edition [Kindle Version]. Retrieved from http://www.amazon.in.
3. Knell, R. (2013) Introductory R: A Beginner's Guide to Data Visualisation, Statistical Analysis and Programming in R. [Kindle Version]. Retrieved from http://www.amazon.in.
4. Murray, S. (2013) Learn R in a Day. [Kindle Version]. Retrieved from http://www.amazon.in.

Course Code & Title: PGDBA 433 - Business Data Mining with SQL (Practical)

Course Description: This course provides an in-depth exploration of data warehousing and data mining concepts. Participants will gain hands-on experience in designing and implementing data warehouses, as well as extracting valuable insights through data mining techniques. The course emphasizes the integration of these technologies to support decision-making in various business environments.

Course Objectives:

1. Define data warehousing and its significance in data management.
2. Explain the architecture and components of a data warehouse.
3. Introduce various data mining techniques, including classification, clustering, and association rule mining.
4. Understand the role of data mining in extracting patterns and knowledge from large datasets.
5. Explore the integration of data warehousing and data mining for comprehensive business intelligence.

Course Outcomes:

CO1. Explain the significance of data warehousing in data management. Summarize the steps involved in designing a data warehouse.

CO2. Design a data warehouse architecture based on given business requirements. Implement ETL processes for data warehouse population.

CO3 : Analyze the role of data mining in extracting patterns and knowledge. Evaluate and select appropriate data mining algorithms.

CO4. Evaluate the integration of data warehousing and data mining for business intelligence.

CO5: Evaluate the impact of data warehousing and data mining on decision-making.

Course Pre-requisites: prior knowledge of basic concepts of marketing

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Database:** Create Database, Select Database, Show Databases and Drop Database. **Table & Views:**	**10 hours**	**1**	**1**	**1**

	CREATE Table, ALTER Table, Show Tables, Rename Table, TRUNCATE Table ,Describe Table, DROP Table, Temporary Table, Copy Table , Add/Delete Column, Show Columns ,Rename Column. **Key:** Unique Key, Primary Key ,Foreign Key and Composite Key				
Unit-2	**Queries** Queries Constraints, INSERT Record, UPDATE Record, DELETE Record, SELECT Record, Replace, Insert On Duplicate Key ,Update INSERT, IGNORE Insert Into Select.	**6 hours**	**2**	**6**	**2**
Unit-3	**Clauses:** WHERE ,DISTINCT ,FROM, ORDER BY, GROUP BY ,HAVING **Control Flow Function:** IF(), IFNULL() ,NULLIF() ,CASE IF Statement	**8 hours**	**3**	**6**	**1**
Unit-4	**Conditions:** AND, OR, AND OR, Boolean, LIKE, IN, ANY Exists, NOT, Not Equal , IS NULL, IS NOT NULL, BETWEEN. **Aggregate Functions** count() , sum() , avg(), min(), max() , GROUP_CONCAT(), first() last() **Join:** JOIN, Inner Join , Left Join, Right Join, CROSS JOIN, SELF JOIN, DELETE JOIN, Update Join, Equi Join, Natural Join, Left Join vs Right Join Union vs Join	**15 hours**	**4**	**4**	**3**

Course Code & Title: PGDBA 434 - Design Thinking

Course Description: This course introduces students to the principles and processes of Design Thinking, a human-centered approach to innovation that integrates the needs of people, the possibilities of technology, and the requirements for business success. The course emphasizes practical application through observation, ideation, prototyping, and testing, preparing students to implement Design Thinking in dynamic business environments. By the end of the course, students will be equipped with the tools and methodologies to drive innovation and create value in any industry.

Course Objectives:

CO1: Develop a foundational understanding of Design Thinking principles, processes, and its relevance in driving business innovation.

CO2: Acquire the skills to effectively identify, analyze, and reformulate complex business problems through a human-centered approach.

CO3: Demonstrate the ability to observe user behavior, generate creative ideas, and develop prototypes using various techniques and methodologies.

CO4: Apply testing and implementation strategies to validate and refine business ideas, ensuring they meet user needs and business goals.

Course Outcomes:

CO1: Describe the core principles and processes of Design Thinking, and explain its significance in fostering innovation within a business environment.

CO2: Analyse complex business problems by identifying their root causes and reformulate them to enable innovative solution development.

CO3: Apply observational techniques to gather insights, generate creative ideas, and construct prototypes that address user needs.

CO4: Design and execute testing strategies to validate prototypes, interpret user feedback, and refine solutions for effective implementation.

Course Pre-requisites:

Pedagogy: Direct Method and ICT

LTP: 3:0:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO

Unit-1	Introduction to Design Thinking What is Design Thinking? Principles of Design Thinking, The Process of Design Thinking, Planning a Design Thinking Project.	8 hrs	1	1,2	1
Unit-2	Understanding and Analyzing Problems How to Understand the Problem: Search Field Determination, Problem Clarification, Understanding and Analyzing the Problem, Reformulation of the Problem	9 hrs	2	2,5	1
Unit -3	Observation, Ideation, and Prototyping How to Observe, Observation Phase: Empathetic Design, Tips and Methods for Observation and Empathetic Design, How to Find and Select Ideas Ideate Phase: The Creative Process and Principles, Creativity Techniques, Evaluation of Ideas How to Prototype: Prototype Phase, Lean Startup Method for Prototype Development, Visualization and Presentation Techniques	10 hrs	3	3,5	1
Unit-4	Testing, Implementation, and Execution How to Test Business Ideas: Test Phase, Tips for Interviews and Surveys, Kano Model and Desirability Testing, How to Implement Design Thinking: Conducting Workshops, Requirements for the Space and Materials, Agility for Design Thinking	12 hrs	4	5,6	1

Reference Books:

- "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation" by Tim Brown
- "The Design of Business: Why Design Thinking is the Next Competitive Advantage" by Roger L. Martin
- "Design Thinking: Integrating Innovation, Customer Experience, and Brand Value" by Thomas Lockwood.
- "The Design Thinking Playbook: Mindful Digital Transformation of Teams, Products, Services, Businesses and Ecosystems" by Michael Lewrick, Patrick Link, and Larry Leifer

Course Code & Title: PGDABM441 - Agribusiness Environment and Policy

Course Description: This course is designed to sensitise students with respect to scope and emergence of Agribusiness, sub-systems / linkages among sub- sectors of Agribusiness and Agro-based industries. Agribusiness policies, tools, entrepreneurship and also Business organization in Agribusiness sector.

1. To provide in-depth knowledge and skills needed for the Agribusiness Management sector
2. To build knowledge on the key aspects to understand sub-systems and sub sectors of Agribusiness
3. To understand and usage of various Agribusiness policies in the Agribusiness sector
4. To expose and apply business tools and techniques used in solving Agribusiness problems.

Course Outcomes:

CO1: To provide in-depth knowledge and skills needed for the Agribusiness Management sector

CO2: To build knowledge on the key aspects to understand sub-systems and sub sectors of Agribusiness

CO3: To understand and usage of various Agribusiness policies in the Agribusiness sector

CO3: To expose and apply business tools and techniques used in solving Agribusiness problems.

Course Pre-requisites: prior knowledge of basic concepts of Agriculture business

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Unit-I:** Agribusiness - Meaning, Scope of Agribusiness, emerging areas of Agribusiness, need and importance of Agribusiness, Agribusiness in India – SWOC analysis of Agribusiness, Distinguishing features of Agribusiness, dimensions of Agribusiness, career opportunities, stages of processing, policy shifts in Agriculture, challenges of Agribusiness.	**10 hours**	**1**	**1**	**1**
Unit-2	Agribusiness sub-systems / linkages among sub-sectors of the Agribusiness sector, economic reforms and Indian agriculture, Agro-based industries, Agribusiness Environment, categorization of Indian	**8 hours**	**2**	**6**	**2**

	Food Processing sector, Management and its functions.				
Unit-3	Impact of liberalization, privatization and globalization on Agribusiness sector, Emerging trends in production, processing, marketing and exports, six sigma- essentials, roles required for implementation and advantages of six sigma, Integrated Agribusiness Development Policy 2011 and Karnataka Agribusiness & Food Processing Policy 2015, Agricultural price and marketing policies.	**10 hours**	**3**	**6**	**1**
Unit-4	Entrepreneurship in Agribusiness, Business organizations in Agribusiness- Forms, advantages and disadvantages, Agribusiness tools - Break even analysis- Problems, Linear programming – applications, components, assumptions, SWOC analysis – Aim and components, Cost of making wrong decisions in using inputs, Factor share in Agribusiness, E- commerce - types, E-agribusiness – advantages.	**10 hours**	**4**	**4**	**3**

Reference books:

1. Adhikary M. 1986. Economic Environment of Business. S. Chand & Sons.

2. Aswathappa, K., 2014, Essentials of Business Environment – Text, Cases and Exercises. Himalaya Publication.

3. Broadway, A. C. and Arif A. Broadway, 2002, A Text book of Agribusiness Management. Kalyani Publishers, Ludhiana.

4. David D. Van Fleet and Ella Van Fleet, 2014, Agribusiness: Principles of Management, Publisher – Delmar/ Cengage Learning

5. Francis Cherunilam 2003. Business Environment. Himalaya Publisher.

6. Gangadhar Bhatia, 2007 Agribusiness Management. A Mittal publication, New Delhi.

7. Ram Singh and S. M. Feroze, 2016, Agribusiness Management- A training manual. Biotech Books, New Delhi.

8. Smith Diwase, 2017, Agribusiness Management. 3 rd Edition, Everest Publishing House, Pune.

Course Code & Title: PGDABM442 - Agri Supply Chain and Retail Management

Course Description: This course is an introduction to the concepts of Supply Chain, Retail Management and Challenges of Marketing of Agricultural Commodities. Emphasis is on Management of Agri supply chain by understanding logistics management, procurement management, Inventory Management and retailing of agricultural and food in India. Topics include Supply chain management, Demand management in supply chains and its forecasting techniques, Logistics and procurement management, retaining of agricultural commodities, Value chain Vs. Supply Chain.

1. Grasp the fundamentals of supply chain management in agricultural and allied sectors, recognizing its unique challenges and opportunities.
2. Comprehend the importance of demand forecasting, procurement of agricultural commodities, and efficient logistics management to ensure smooth operations within the agricultural supply chain.
3. Analyze and differentiate between the agri-supply chain and the value chain, understanding their distinct roles and impacts on the agricultural sector.
4. Investigate the role of technology and innovation in enhancing agricultural production and marketing. Understand the evolution of agricultural retailing and the emergence of e-tailing, exploring how these advancements transform the agricultural market landscape.

Course Outcomes:

CO1 : Understand the concept of supply chain in agricultural and allied sectors.

CO2 : Understand the importance of Demand Forecasting, procurement of agricultural commodities, logistics management.

CO3 : Analyse the difference between Agri-supply chain and Value chain.

CO4 : Analyse the role of technology and innovation in Agricultural production and marketing and Understand the evolution of Agri retailing and E-tailing.

Course Pre-requisites: prior knowledge of basic concepts of Agriculture business

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Agri Supply Chain - Introduction; Challenges of marketing of agricultural commodities; Role of supply chain - Stakeholders/players and activities of Supply chain; 5 Flows in Supply chain; 4 utilities - Form, Place, Time and Possession; SCM- Changing business environment- Present need; Evolution of	**10 hours**	**1**	**1**	**1**

	SCM - Traditional Vs. Modern SCM; Components and elements of SCM.				
Unit-2	Demand Management in Supply Chain Management-Determinants of demand - Types of Demand - Demand Planning and Forecasting techniques; Operations Management in Supply Chain; Supply chains of agricultural and allied sectors.	**8 hours**	**2**	**6**	**2**
Unit-3	Procurement Management in Agri Supply chain; Purchasing Cycle - Types of Purchases; Contract/Corporate Farming; Inventory Management - Types of inventories. Just in Time (JIT); Vendor Managed Inventory (VMI).	**10 hours**	**3**	**6**	**1**
Unit-4	Logistics Management-History and Evolution of Logistics-Elements of Logistics; Distribution Management- Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management; Service Innovation; Warehousing; Packaging for Logistics; Third-Party Logistics (TPL/3PL); Technological Innovations in agriculture. Retail management and Food Retailing - Changes in Retailing; Organized Retailing in India; E-tailing; types of modern retailing formats; Competition and pricing in food retailing; value chain and value additions across the food retail chain - Supply Chain Vs. Value Chain.	**10 hours**	**4**	**4**	**3**

Reference Books :

1.Samarendra Mahapatra, 2021, Supply Chain Management in Agribusiness, Notion Press

2.Sunil Chopra, Peter Meindl, D.V. Kalra, 2016, Supply Chain Management – Strategy, Planning and Operation, Pearson Education India

3.N Chandrasekaran, G Raghuram, 2014, Agribusiness Supply Chain Management, CRC Press

4.Ganeshkumar, C., M. Pachayappan, G. Madanmohan, 2017, Agri-food Supply Chain Management: Literature Review, Scientific Research Publishing Inc.

5.Manish Shukla and Sanjay Jharkharia, 2013, Agri-fresh produce supply chain management, Emerald Group Publishing Limited.

6.Chandni Khandelwal, Gaurav Gaurav, G.S.Dangayach, and M.L.Meena, 2022, Agriculture Supply Chain Management: A Review (2010–2020), Elsevier B.V. Science Direct

7.Sivaramane, N. and G. P. Reddy, 2014, Supply Chain Management in Agriculture, NAARM, Hyderabad.

8.Satish, 2018, Supply Chain Management, Serial Publishing House.

9.Altekar RV. 2006. Supply Chain Management: Concepts and Cases. Prentice Hall of India

Course Code &Title: PGDABM 443 - Food Technology and Processing Management

Course Description: This course covers with the information deluge in the agriculture sector aiming at the post-harvest technology; to understand the value addition and their concepts which considers principles, preservation, packaging, labelling and acquaint with the quality control measures procedure setting up Food Processing industry.

Course Objectives:

1. To acquaint the students with different food processing techniques and their management
2. To know the scope for self-employment as small, medium or large-scale entrepreneurs
3. To provide knowledge and skills for better preservation techniques, processing and value addition for agricultural products
4. To conduct placement drives for top food and allied industries, institutions or Government Organizations through campus selection

Course Outcomes:

CO1: Define and analyze the operations of food industry
CO2: Analyze the concepts of preservation techniques.
CO3: Assess and understand Food Safety Measures.
CO4: Analyze the project formulation of food industries.

Course Pre-requisites: basics of agricultural marketing and post-harvest technology

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: SC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Food Industry & FPO** Present status of food industry in India; Organization in food industry; operations of food industry; Deteriorative factors- and hazards during processing, storage, handling and distribution. Objectives of Farmer Producer Organisations (FPOs), Farmer Producer Organisations (FPO) in the Food Processing Industry, Financing Food Processing Via the FPO Model	**9 hours**	**1**	**1**	**1**
Unit-2	**Principles of Food Processing** Basic principles of food processing and preservation, factors & application of energy, radiations, chemicals & biotechnological agents; Principles of Post-harvest treatments, Post harvest	**10 hours**	**2**	**6**	**2**

	technology for cereals, legumes, oilseeds, vegetable and spices; Packaging of foods				
Unit-3	**Food Safety & Quality Management** Food Safety & Quality Management; Laws and regulations related to food industry and food production and marketing; Quality management – quality standards, PFA, AGMARK, ISO, etc. Trends in Primary and Processed Agriculture Exports and Imports, APEDA and MPEDA	**10 hours**	**3**	**6**	**1**
Unit-4	**Case Study on Project Formulation** Case studies on project formulation in various types of food industries - milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing. Fruits and vegetable storage and handling, processing of fruits and vegetables, Egg, poultry, fish and meat handling and processing, etc.	**10 hours**	**4**	**4**	**3**

Suggested Readings:

1. Mukund Joshi and Prabhakarasetty, T.K. 2006. Sustainability through organic farming. Kalyani publishers, New Delhi. 349p.
2. Balasubramanian, R., Balakishnan, K and Siva Subramanian, K. 2013. Principles and practices of organic farming. Satish Serial Publishing House. 453p 39
3. Tarafdar, J.C., Tripathi, K.P and Mahesh Kumar, 2009. Organic agriculture. Scientific Publishers, India. 369p.
4. Tiwari, V.N., Gupta, D.K., Maloo, S.R and Somani, L.L. 2010. Natural, organic, biological, ecological and biodynamic farming. Agrotech Publishing Academy, Udaipur. 420p.
5. Dushyent Gehlot. 2005. Organic farming- standards, accreditation, certification and inspection. Agrobios, India. 357p

Reference Book

1. P. L. Maliwal., 2021, Principles of Organic farming: Textbook. Scientific Publishers
2. S S Acharya and N L Agarwal, 2019, Agricultural Marketing in India. Oxford and IBH publishing

Course Code & Title: PGDABM444 - Agricultural Finance and Banking Management

Course Description: This course is concerned with Agricultural finance, in general, refers to the study, examination, and analysis of the financial aspects of the farm business, which is the economy's key sector. It also deals with functioning of various financial and co-operative institutions. Money concerns connected to agricultural production and disposal are included in the financial elements.

1. To provide in-depth knowledge and skills needed to expertise in the field of Agricultural finance and credit.
2. To build knowledge on the key aspects to understand the Banking system, deposits, types cheques and cards.
3. To understand the functioning of various financial and co-operative institutions such as PACSs, RRBs, NABARD, RBI and IMF.
4. To expose and develop weather and climate factors determining the success or failure of agriculture.

Course Outcomes:

CO1 : Understand the core concepts of Agricultural Finance and Credit with its scope and importance.

CO2 : Analyse the technical assistance to reform the public financial institutions and appraisal of credit proposal

CO3 : Evaluate the use of digital financial instruments in agriculture.

CO4 : Understand and explore work in new areas such as access to finance for farmers in agriculture.

Course Pre-requisites: prior knowledge of basic concepts of Agriculture business

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Agricultural Finance, credit analysis & Financial statements** Agricultural Finance, Agricultural Credit, Credit analysis, sources of Agricultural Finance, Classification of loans, Loan repayment plans, Preparation and analysis of financial statements, Service area approach, DRI scheme, Priority sector	**10 hours**	**1**	**1**	**1**

	lending and Kisan Credit card and Appraisal of Credit Proposal.				
Unit-2	**Banker, Customer, DICGI and Deposits** Origin of Banking – Banker- Banking and other business – Customer-relationship between a banker and a customer, Deposits-General precautions for opening accounts, types of account, KYC norms, Current deposit account, FD account, RD account, SB account and other deposits, Deposit insurance and Credit guarantee corporation, Electronic Banking - ATM, Mobile banking, Virtual currency, advantages and disadvantages of E- Banking and Management of Non- Performing Assets.	**10 hours**	**2**	**6**	**2**
Unit-3	**Passbook maintenance, Cheques and RRBs and Exim bank** Pass book-introduction, maintenance of a pass book, Negotiable instruments Act- Features and types, Cheques- meaning, features and types, Draft and Banker's cheque, Loans and advances, Banking system in India- Scheduled and non – Scheduled, small finance banks, microfinance commercial banks, co-operative banks, RRBs, Foreign banks, Private sector banks, Industrial development banks, Exim bank and National housing bank.	**08 hours**	**3**	**6**	**1**
Unit-4	**NABARD, Lead Bank scheme & Co-operation** NABARD – Functions – Schemes – Role - Lead Bank Scheme- District Credit Plan – Process and Implementation, Reserve Bank of India, The Banking Ombudsman Scheme, 2006, World bank, International Monetary Fund, Asian development Bank, Fundamentals of a Bankable project – guidelines, Co-operation – objectives, Principles, Co-operative credit structure, Co-operative Marketing, MPCS, PACS and FSS, Crop insurance – importance, CCIS, NAIS, AIC and weather insurance.	**10 hours**	**4**	**4**	**3**

Reference Books:

1. Yerram Raju, 2013, *Agricultural Banking*. Konark Publishers Pvt. Ltd.
2. Shekhar, K. C. and Lekshmy Shekhar, C. A., *Banking – Theory and Practice*, Vikas Publishing house, Pvt. Ltd.
3. S. Subba Reddy, P Raghu Ram, 2018, *Agricultural Finance and Management*, Oxford & IBH Publishing Co Pvt. Ltd.
4. Gordon, E and K. Natarajan, 2022, Banking – Theory, Law and Practice, Himalaya Publishing house, Mumbai.
5. Mahesh Mahadeo Kadam, 2019, Agricultural Finance and Co-operation, Kalyani Publishers, Ludhiana.
6. Rout, R. K., 2021, A text book of Agricultural Finance and Co-operation, Kalyani Publishers, Ludhiana.

Course Code & Title: PGDOM 451 – Supply Chain and Logistics Management

Course Description: This course provides a comprehensive study of supply chain and logistics management, examining the end-to-end processes involved in the movement and delivery of goods and services. Participants will explore key concepts, strategies, and technologies used in optimizing supply chain operations. Emphasis will be placed on developing analytical and managerial skills to enhance efficiency, reduce costs, and improve overall supply chain performance.

Course Objectives:

1. To introduce the basic concepts of Operations Management & Supply Chain Management.
2. To introduce the process and functions of the physical distribution system, logistics & and transportation & and warehousing.
3. To introduce major building blocks, functions, business processes, performance metrics, and decision-making in the supply chain network.

Course Outcomes:

CO1. Summarize the importance of aligning supply chain strategies with organizational goals.

CO2. Apply logistics planning and optimization techniques.

CO3 : Evaluate the impact of logistics planning on overall supply chain performance..

CO4. Evaluate inventory management strategies using demand forecasting.

CO5: Design strategies for reducing environmental impact and improving overall sustainability.

Course Pre-requisites: prior knowledge of basic concepts of Supply Chain and Logistics Management

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Introduction to Operations Management concepts; Differences between Services & Goods; Role of Operations Manager; Introduction to SCM.	**5 hours**	**1**	**1**	**1**
Unit-2	Demand Forecasting : Types of Forecasting - Qualitative and Quantitative. Types of Supply Chain	**10 hours**	**2**	**6**	**2**

	Management – Participants of Supply Chain & Sourcing Decisions.				
Unit-3	Introduction to Materials Management - Purchasing Concept; Vendor Rating & Value Analysis; Role of Purchase Manager; P2P Cycle; Make or Buy Decisions.	**10 hours**	**3**	**6**	**1**
Unit-4	Inventory Control - Economic Order Quantity; EOQ with Quantity Discounts; Inventory Management Techniques; Risk Management & Concept of Material Handling.	**7 hours**	**4**	**4**	**3**
Unit 05	Packaging; Warehousing & Distribution. Transportation : Fundamentals & Planning; Green Logistics; Reverse Logistics & Supply Chain Sustainability.	**7 hours**	**4**	**4**	**3**

REFERENCES

1. **Operations Management Sustainability & Supply Chain Management :** Jay Heizer and Barry Render - Pearson Publication.

2. **Exploring the SUPPLY CHAIN (Theory & Practice) -** Upendra Kachru

3. **D.K. Agarwal**, LOGISTICS & SUPPLY CHAIN MANAGEMENT, *Macmillan India Pvt. Ltd. New Delhi, 2008*

4. **N. Chandrasekaran,** SUPPLY CHAIN MANAGEMENT, *Oxford University*

5. **Satish K. Kapoor & Purva Kansal,** BASICS OF DISTRIBUTION MANAGEMENT - A LOGISTICAL APPROACH, *Prentice – Hall India.*

6. **Sunil Chopra, Meindl & Kalra,** SUPPLY CHAIN MANAGEMENT, *Pearson Education,*

7. **LOGISTICS MANAGEMENT,** *Tata McGraw Hill, New Delhi, 2008*

Course Code & Title: PGDOM 452 – Quality Management System

Course Description: This course provides a comprehensive study of quality management systems (QMS) and their role in ensuring product and service excellence. Participants will explore key principles, methodologies, and tools used in implementing and maintaining QMS. Emphasis will be placed on fostering a culture of continuous improvement, customer satisfaction, and adherence to international quality standards

Course Objectives:

1. Identify the importance of quality in product and service delivery
2. Understand the principles of ISO 9001 and other relevant quality standards.
3. Develop skills in process mapping, risk management, and performance metrics.
4. Develop approaches for gathering customer feedback and implementing improvements.

Course Outcomes:

CO1. Explain various quality management systems and frameworks. Summarize the importance of quality in product and service delivery.

CO2. Apply QMS methodologies to enhance product and service quality. Utilize process mapping, risk management, and performance metrics.

CO3: Analyze compliance with international quality standards. Evaluate the significance of the certification process for organizations.

CO4. Evaluate the effectiveness of continuous improvement strategies.

Course Pre-requisites: prior knowledge of basic concepts of Quality Management System

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTRODUCTION TO QUALITY Management** Definitions – TOM framework, benefits, awareness and obstacles. Quality – vision, mission and policy statements. Customer Focus – customer perception of quality, Translating needs into requirements, customer retention. Evolution of QMS and TQM culture	**6 hours**	**1**	**1**	**1**
Unit-2	**PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT** Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa,	**10 hours**	**2**	**6**	**2**

	Taguchi techniques , Japanese 5S principles .Garvin 8 principles. Definition of Value: Quality Council and Core Values, Seven Quality control tools for problem solving & Process improvement.				
Unit-3	**STATISTICAL PROCESS CONTROL AND PROCESS CAPABILITY** Meaning and significance of statistical process control (SPC) – construction of control charts for variables and attributed. Process capability – meaning, significance and measurement – Six sigma concepts of process capability. Continuous Process Improvement, PDSA Cycle .	**10 hours**	**3**	**6**	**1**
Unit-4	**TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT** Quality functions development (QFD) –House of quality (HOQ). Failure mode effect analysis (FMEA) – FMEA stages, design, process and documentation. Introduction to IS/ISO 9001:2001 & 9001:2015 – quality management systems, Registration of ISO -9000.	**7 hours**	**4**	**4**	**3**

Reference books:

1. Dale H.Besterfield et al, Total Quality Management, Third edition, Pearson Education (First Indian Reprints 2004).
2. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 2002.

Course Code & Title: PGDOM 453 – Advanced Production Systems

Course Description: This course offers an advanced study of production systems, exploring cutting-edge methodologies, technologies, and strategies for optimizing manufacturing processes. Participants will delve into the principles of advanced production planning, control, and automation. Emphasis will be placed on integrating Industry 4.0 concepts, fostering agility, and achieving operational excellence in modern production environments.

Course Objectives:

1. Define the fundamental concepts of advanced production systems.
2. Identify the key components and principles of modern manufacturing.
3. Analyze advanced production planning and control methodologies.
4. Understand the integration of lean manufacturing, Just-In-Time (JIT), and demand-driven strategies.

Course Outcomes:

CO1 Explain advanced production planning and control methodologies.

CO2. Apply automation and robotics in advanced production systems. 9

CO3 : Utilize skills in selecting, programming, and optimizing automated systems.

CO4. Evaluate the strategies for fostering agility in advanced production systems.

Course Pre-requisites: prior knowledge of basic concepts of Advanced Production System

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**PRODUCTION SYSTEMS** Need and Importance of Production Systems, Stag Production System Life Cycle, Decisions in the life of a production systems, Modeling and Architectur Production and Manufacturing Systems, Automatic Production Systems	**5 hours**	**1**	**1**	**1**
Unit-2	**PRODUCTION PLANNING AND CONTROL** Introduction to Production Planning, Production Planning Models, Forecasting: Subjective and Objective forecasting methods, Characteristics of Forecasting Problems. Strategies for Aggregate	**10 hours**	**2**	**6**	**2**

	Production Planning: Resource Planning, Material Requirement Planning, MRP System, Capacity Requirement Planning.				
Unit-3	**PRODUCT PLANNING AND DEVELOPMENT** Product Design, Capacity Planning, Process Selection and Facility layout Selection, Product Life Cycle and its Stages, Product Development Process in the changing global environment: Stages of Product Development.	**10 hours**	**3**	**6**	**1**
Unit-4	**PRODUCTION SCHEDULING** Introduction to Production Scheduling, Scheduling Objectives, Scheduling Models, Gantt Charts, Scheduling Environment and Constraints. PMS: Role of MIS in Production, Schematic representation of Production Management System.	**8 hours**	**4**	**4**	**3**

Reference Books:

1. Martand T. Telsang, "Production Management", S Chand & Company Pvt Ltd
2. MartandTelsang, "Industrial Engineering Production Management", S Chand & Company Pvt Ltd
3. K. Hans Raj, S. N. Dwivedi, D. S. Mishra, Alok K. Verma, C. Patvardhan. (2012). Agile Manufacturing Systems: Approach for Enhancing Agility of Organisations and Processes. Narosa Publishing House.
4. Ohno, T. (1988). Toyota production system: beyond large-scale production. crc Press.
5. Kumar, S. A., & Suresh, N. (2006). Production and operations management. New Age International.
6. Groover, M. P. (2016). Automation, production systems, and computer-integrated manufacturing. Pearson Education India.
7. Panneerselvam, R. (2012). Production and operations management. PHI Learning Pvt. Ltd..
8. Martinich, J. S. (2008). Production and operations management: An applied modern approach. John Wiley & Sons.
9. Chowdiah, M. P. (2011). Agile Manufacturing: Globalised Customerised Green Products. I. K International Publishing House.

Course Code & Title: PGDOM454 – OR Applications

Course Description: This course provides an in-depth exploration of Operations Research (OR) and its practical applications across various domains. Students will learn fundamental OR techniques such as linear programming, network optimization, and decision analysis. Emphasis will be placed on mathematical modeling, problem-solving methodologies, and the application of OR tools in real-world scenarios. Through lectures, problem-solving sessions, and hands-on exercises, students will develop the skills and knowledge necessary to analyze complex problems, optimize decision-making processes, and enhance organizational efficiency.

Course Objectives:

1. Understand and Apply Operations Research Principles: Grasp the principles and methodologies of Operations Research (OR) and their relevance in diverse fields. Develop proficiency in formulating optimization problems, constructing mathematical models, and addressing real-world challenges.
2. Optimization Techniques and Practical Application: Acquire practical skills in applying linear programming (LP) and integer programming (IP) techniques to optimize resource allocation and production planning. Master network optimization methods, including shortest path algorithms, transportation problems, and project scheduling using critical path analysis.
3. Decision Analysis and Uncertainty: Learn decision analysis techniques to evaluate alternatives under uncertainty and make informed decisions using probabilistic and Bayesian approaches.
4. Multi-Criteria Decision-Making (MCDM): Explore multi-criteria decision-making (MCDM) methods for evaluating and prioritizing alternatives based on multiple criteria, such as cost, risk, and performance.

Course Outcomes:

- Students will be able to comprehend the principles and methodologies of Operations Research (OR) and apply these concepts to formulate and solve optimization problems, demonstrating their relevance in diverse fields.

- Students will be able to analyze real-world challenges, synthesize mathematical models, and utilize linear programming (LP) and integer programming (IP) techniques to optimize resource allocation and production planning.

- Students will be able to evaluate alternatives under uncertainty and make informed decisions using decision analysis techniques, including probabilistic and Bayesian approaches, effectively addressing complex scenarios.

- Students will be able to evaluate and prioritize alternatives based on multiple criteria, such as cost, risk, and performance, by employing multi-criteria decision-making (MCDM) methods, ensuring comprehensive and balanced decision-making.

Course Pre-requisites:

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39					
Units	**Detailed Syllabus**	**Contact hours**	**CO**	**PO**	**PSO**
Unit-1	Overview of Operations Research (OR) and its applications in various fields. Historical development and evolution of OR techniques, Formulation of optimization problems and decision-making processes.	**5 hours**	**1**	**1**	**1**
Unit-2	Basics of linear programming: formulation, graphical solution, and simplex method. Sensitivity analysis and duality in linear programming, Applications of LP and IP in resource allocation, production planning, and project management.	**10 hours**	**2**	**6**	**2**
Unit-3	Network optimization models: shortest path, minimum spanning tree, and maximum flow problems. Transportation and assignment problems: formulation, solution methods, and applications in logistics and supply chain management, Critical path analysis and project scheduling using network models (PERT/CPM), and facility location problems	**10 hours**	**3**	**6**	**1**
Unit-4	Decision-making under uncertainty: decision trees, probability assessment, and expected value analysis, Bayesian decision theory and Bayesian updating in decision analysis, Multi-criteria decision-making (MCDM) methods: weighted scoring, analytical hierarchy process (AHP), Applications of decision analysis and MCDM in strategic planning, risk management, and environmental decision-making	**8 hours**	**4**	**4**	**3**

Reference Books:

1. Operations Research: An Introduction" by Hamdy A. Taha
2. Introduction to Operations Research by Frederick S. Hillier and Gerald J. Lieberman
3. Operations Research: Applications and Algorithms by Wayne L. Winston
4. Operations Research: Principles and Practice by Ravindran, Phillips, and Solberg
5. Operations Research: An Introduction by Hamdy A. Taha

6. Network Flows: Theory, Algorithms, and Applications by Ravindra K. Ahuja, Thomas L. Magnanti, and James B. Orlin
7. Decision Analysis for the Professional by Peter McNamee and John Celona
8. Multiobjective Decision Making: Theory and Methodology by Yannis Siskos and Evangelos Grigoroudis

Course Code & Name: PGDDS471 - Analytics Toolkit for Decision Sciences

Course Description: This course, "Decision Sciences and Analytics," is designed to provide students with a comprehensive understanding of the role of analytics in decision-making processes. It covers a broad spectrum of topics, from the foundational concepts of decision sciences to advanced analytical techniques.

Course Objectives:

1. To understand the fundamental concepts of decision sciences and their application in analytics.
2. To develop skills in using various analytical tools and techniques to solve real-world problems.
3. To enhance the ability to interpret and analyze data for informed decision-making.
4. To apply critical thinking and problem-solving skills using analytical methods.

Course Outcomes:

CO1: Remembering: Identify and describe key concepts and tools in decision sciences and analytics.

CO2: Understanding: Explain the role of data analytics in decision-making processes.

CO3: Aplying: Utilize analytical tools and techniques to analyze data and solve problems.

CO4: Analyzing: Examine and interpret data to derive meaningful insights.

Course Pre-requisites: Basic knowledge of statistics and programming languages.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Decision Sciences and Analytics** Introduction to Decision Sciences, Role of Analytics in Decision Making, Types of Data: Structured vs. Unstructured, Data Sources and	**10 hours**	**1**	**1**	**1**

	Data Collection Methods, Overview of Analytical Tools				
Unit-2	**Exploratory Data Analysis and Data Preprocessing** Introduction to Exploratory Data Analysis (EDA), Data Cleaning: Handling Missing Values, Outliers, and Data Imputation, Data Transformation: Normalization, Standardization, and Encoding, Feature Engineering: Creating and Selecting Predictive Features, Tools for EDA and Data Preprocessing (Excel, R, Python)	**08 Hours**	**2**	**4**	**1**
Unit-3	**Predictive Analytics and Statistical Inference** Introduction to Predictive Analytics, Statistical Inference: Hypothesis Testing and Confidence Intervals, Regression Analysis: Linear and Logistic, Time Series Analysis and Forecasting, Tools for Predictive Analytics (R, Python)	**14 hours**	**3**	**4**	**1**
Unit-4	**Prescriptive Analytics and Decision Optimization** Introduction to Prescriptive Analytics, Optimization Techniques: Linear Programming and Integer Programming, Decision Analysis: Decision Trees and Sensitivity Analysis, Simulation Models for Decision Making, Tools for Prescriptive Analytics (Excel Solver)	**07 hours**	**4**	**4**	**1**

TEACHING /LEARNING RESOURCES

- "Data Science for Business" by Foster Provost and Tom Fawcett
- "Business Analytics: Data Analysis & Decision Making" by S. Christian Albright and Wayne L. Winston
- Online resources and tutorials (Coursera, edX, Khan Academy)

Software tools: Excel, Tableau, R, Python

Course Code & Name: PGDDS473- Big Data With Data Warehousing And Data Mining

Course Description: This course provides an in-depth exploration of Big Data, data warehousing, and data mining concepts, techniques, and technologies. Students will gain a thorough understanding of how to manage and analyze vast amounts of data to extract valuable insights, make data-driven decisions, and solve complex problems.

Course Objectives:

1. Understand the key concepts and applications of Big Data Analytics, including Hadoop, MapReduce, and cloud-based implementations.
2. Master the HDFS architecture, operations, and commands for efficient data processing in Hadoop.
3. Learn Data Warehousing architecture, design, and ETL processes for effective Business Intelligence solutions.
4. Develop skills in Data Mining techniques, including classification, clustering, and anomaly detection for data analysis.

Course Outcomes:

CO1: Explain the concepts and real-world applications of Big Data Analytics, including the use of Hadoop, MapReduce, and cloud platforms.

CO2: Demonstrate proficiency in operating within the HDFS architecture, executing read/write operations, and using HDFS UNIX commands effectively.

CO3: Design and construct a Data Warehouse, applying appropriate ETL processes and tools for Business Intelligence.

CO4: Apply and analyze Data Mining techniques such as classification, clustering, and anomaly detection to solve practical data challenges.

Course Pre-requisites: Basic knowledge of statistics and programming languages.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	**Introduction to Big Data Analytics** Introduction to Big Data Analytics, Components of Big data Analytics, what is Big Data, what are the challenges, Introduction to Apache Hadoop and MapReduce, Apache Spark, Application of Big Data Analytics in real – world Business, Big Data Processing pipeline on Google Cloud (or Amazon AWS).	**10 hours**	**1**	**1**	**1**
Unit-2	**HDFS Hadoop's Lower Levels** Introduction, Evolution, Goals, Needs, read operations, write operations, HDFS Architecture, File Processing, Input File formats in HADOOP, HDFS UNIX Commands.	**10 Hours**	**2**	**4**	**1**
Unit-3	**Introduction to Data Warehousing** Overview of Data Warehousing, Components of a Data Warehouse, Data Warehousing Architecture, Types of Data Warehouses, Data Warehouse Design and Modeling, ETL Processes, Data Warehousing Tools and Technologies, Data Warehousing for Business Intelligence.	**10 hours**	**3**	**4**	**1**
Unit-4	**Module4: Data Mining** Overview of Data Mining, Challenges of Data Mining, Data Preprocessing, Data Transformation, Classification Techniques, Clustering Techniques, Association Rule Mining, Anomaly Detection.	**10 hours**	**4**	**4**	**1**

TEACHING /LEARNING RESOURCES

- Hadoop: The Definitive Guide" by Tom White.
- "Big Data: A Revolution That Will Transform How We Live, Work, and Think" by Viktor Mayer-Schönberger and Kenneth Cukier.
- Data Warehousing in the Age of Big Data" by Krish Krishnan.
- Data Mining: Concepts and Techniques" by Jiawei Han, Micheline Kamber, and Jian Pei.
- "Big Data: Principles and Best Practices of Scalable Real-time Data Systems" by Nathan Marz and James Warren.

Course Code & Name: PGDDS474- Advanced Statistics & Probability For Data Science

Course Description: This course provides a comprehensive introduction to inferential statistics and probability, tailored specifically for data science applications. The course covers essential concepts and techniques used to draw conclusions from data, make predictions, and inform decision-making processes. Emphasis is placed on practical applications, using real-world datasets and modern statistical software.

Course Objectives:

1. Understand hypothesis testing concepts, including error types, significance levels, and key statistical tests.
2. Learn logistic regression techniques and time series analysis, including binary outcomes and basic forecasting methods.
3. Comprehend foundational probability theory, including probability rules, random variables, and Bayes' theorem.
4. Master key probability distributions and their properties, including expectation, variance, and standard deviation.

Course Outcomes:

CO1: Apply hypothesis testing methods to evaluate statistical hypotheses, including performing t-tests, chi-square tests, and ANOVA.

CO2: Interpret logistic regression outputs and utilize time series analysis techniques for forecasting and decision-making.

CO3: Analyze probability scenarios using foundational principles, including probability rules, random variables, and Bayes' theorem.

CO4: Calculate and interpret key probability distributions and their statistical properties, such as expectation, variance, and standard deviation.

Course Pre-requisites: Basic knowledge of statistics and programming languages.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	**Module1: Hypothesis Testing** Concepts of null and alternative hypotheses, Types of errors (Type I and Type II), Significance level (alpha), One-sample and two-sample tests for means and proportions, Tests for variances, Performing t-tests, chi-square tests, and ANOVA.	**10 hours**	**1**	**1**	**1**
Unit-2	**Logistic Regression and Classification & Time Series Analysis** Introduction to logistic regression, Binary outcomes and logistic function, Estimation and interpretation of logistic regression coefficients, Introduction to time series analysis, Components of time series data, Simple forecasting methods: moving averages, exponential smoothing.	**10 Hours**	**2**	**4**	**1**
Unit-3	**Module3: Probability Theory** Basic concepts: experiments, sample spaces, events, Probability axioms and rules, Discrete random variables and probability mass functions, Conditional probability and independence, Bayes' theorem and applications, Random Variables	**10 hours**	**3**	**4**	**1**
Unit-4	**Module4: Probability Distributions** Binomial distribution, Poisson distribution, Normal distribution, Exponential distribution Expectation, variance, and standard deviation.	**10 hours**	**4**	**4**	**1**

TEACHING /LEARNING RESOURCES

- "The Elements of Statistical Learning: Data Mining, Inference, and Prediction" by Trevor Hastie, Robert Tibshirani, and Jerome Friedman
- "Applied Multivariate Statistical Analysis" by Richard A. Johnson and Dean W. Wichern
- "Statistical Inference" by George Casella and Roger L. Berger
- "Probability and Statistics" by Morris H. DeGroot and Mark J. Schervish
- "A First Course in Probability" by Sheldon Ross
- "Introduction to Probability" by Dimitri P. Bertsekas and John N. Tsitsiklis
- "Time Series Analysis: Forecasting and Control" by George E. P. Box, Gwilym M. Jenkins, Gregory C. Reinsel, and Greta M. Ljung.

Course Code & Name: PGDLSCM491 – International Trade Management

Course Description: This course provides a comprehensive understanding of international trade, exploring the theories, practices, and policies that drive global commerce. Students will learn about the impact of trade on economies, the role of international organizations, and the significance of trade agreements and policies. The course also examines contemporary issues in international trade, including globalization, e-commerce, and sustainable trade practices. Through lectures, discussions, and case studies, students will develop critical thinking and analytical skills necessary to understand and navigate the complexities of international trade.

Course Objectives:

1. Understand the Fundamental Theories of International Trade
2. Analyze Trade Policies and Their Impact
3. Explore the Role of International Trade Organizations and Agreements
4. Examine Current Trends and Issues in International Trade

Course Outcomes:

CO1: Demonstrate an Understanding of International Trade Theories

CO2: Evaluate Trade Policies and Their Economic Impacts

CO3: Analyze the Role of International Trade Organizations and Agreements

CO4: Address Contemporary Issues in International Trade

Course Pre-requisites: prior knowledge of basic concepts of marketing

LTP: 2:1:0

Course type:

Contact Hours: 38

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to International Trade** Overview of International Trade (Definition and Importance - Historical Evolution of Trade), Theories of International Trade - Absolute Advantage (Adam Smith)- Comparative Advantage (David Ricardo) - Heckscher-Ohlin Theory, Determinants of Trade: Factor Endowments - Technological Advancements, Trade Patterns and Dynamics: Global Trade Trends- Regional Trade Patterns	**12 hours**	**1**		
Unit-2	**Trade Policies and Regulations**	**10 hours**	**2**		

	Trade Policy Instruments: Tariffs and Quotas-Subsidies and Import Restrictions - Export Promotion Strategies, Trade Liberalization: Advantages and Challenges - Impact on Emerging Economies, Role of Government in Trade: Trade Negotiations and Policy Formulation - National Trade Policies and Economic Development				
Unit-3	**International Trade Organizations and Agreements:** Global Trade Institutions: World Trade Organization (WTO) - International Monetary Fund (IMF) - World Bank, Regional Trade Agreements: NAFTA/USMCA - European Union (EU)- ASEAN – MERCOSUR, Trade Agreements and Economic Integration -Bilateral and Multilateral Agreements - Economic Integration Levels	**10 hours**	**3**		
Unit-4	Current Issues and Trends in International Trade Globalization and Trade: Impact of Globalization on Trade - Cultural and Social Impacts, E-commerce and Digital Trade: Rise of Digital Platforms - Cross-border E-commerce, Trade and Environment: Sustainable Trade Practices - Environmental Regulations and Trade, Trade and Development: Trade's Role in Economic Development, Future of International Trade	**12 hours**	**4**		

Reference Books:

1. "International Trade and Export Management" by Francis Cherunilam
2. "International Business: Text and Cases" by P. Subba Rao
3. "International Economics" by M.L. Jhingan
4. "International Trade: Theory and Practice" by P.N. Chopra
5. "International Business" by Rakesh Mohan Joshi
6. "International Economics: Theory and Policy" by Paul R. Krugman and Maurice Obstfeld
7. "World Trade and Payments: An Introduction" by Richard E. Caves, Jeffrey A. Frankel, and Ronald W. Jones
8. "International Trade: Theory and Policy" by Paul Krugman and Maurice Obstfeld
9. "Theories of International Trade" by Adam Smith, David Ricardo, and others (edited by Eric A. Schutz).
10. "Global Trade Policy: Questions and Answers" by Pamela J. Smith

Course Code & Title: PGDLSCM492 – Economic Geography

Course Description: This course provides a detailed exploration of the physical and geographical factors influencing global shipping and transportation. Students will examine the impact of climate, winds, tides, and currents on shipping routes, and analyze the significance of various modes of transportation, including their advantages and limitations. The course also covers the global distribution of raw materials, minerals, agricultural commodities, and the role of ports in international trade. Emphasis will be placed on the geographical and seasonal patterns affecting trade, with practical exercises on maps to enhance understanding.

Course Objectives:

1. Understand and describe the influence of climate, geographical features, and weather patterns on global shipping.
2. Analyze the significance and geographical impact of different modes of transportation in global trade.
3. Evaluate the global distribution and seasonal movement of raw materials, minerals, and agricultural commodities.
4. Apply knowledge of port functions and trade routes to real-world shipping scenarios, including understanding time zones and load line zones.

Course Outcomes:

CO1: Identify and explain the physical and geographical features that influence shipping, including the location of major ports and ocean routes.

CO2: Assess the advantages and disadvantages of different modes of transportation, considering their geographical influences.

C03: Map and Analyze the sources, destinations, and seasonal movements of key commodities like crude oil, minerals, and agricultural products.

C04: Evaluate the roles of major global ports and their hinterlands in international trade, and understand the significance of time zones and international trade agreements.

Course Pre-requisites: Logistics and geography

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units		CH	CO	PO	PSO
Unit-1	UNIT 1: PHYSICAL & GEOGRAPHICAL FEATURES Climate, winds, tides, currents, and seasons of bad weather and their influence on shipping. Continents, Countries, Seas, Oceans, location of different Ports and Navigable Canals, etc. Major Ocean routes - features and patterns of trade. (Exercise on maps)	9hrs	1	4	1

Unit-2	**UNIT 2 : MODES OF TRANSPORTATION** Significance, their advantages and disadvantages of modes of transportation. Geographical influence on the various modes of transportation. Commodities transported by various modes of transportation. (Exercise on maps)	9 hrs	2	4,5	1
Unit -3	**UNIT 3 : RAW MATERIALS AND MINERALS, AGRICULTURAL COMMODITIES** Crude oil and oil products, marine products, finished goods and other cargoes. Sources and destinations of such cargoes and seasonal cargo movements. (Exercise on maps)	9 hrs	3	3,5	1,2
Unit-4	**UNIT 4 : PORTS AND THEIR HINTERLAND** Functions of ports, types of ports. Major ports of the world and their principal trades, `Time zones, International Date Line, concept of day light saving time, load line zones and their importance in shipping. EC/EU, EFTA, OAU, NAFTA, OECD, ASEAN, LAFTA, SAARC, CIS, WTO, etc.	9 hrs	4	5,6	2

Reference Books:

1. Geography, Surender Singh, Publisher: Tata McGraw Hill
2. Economic Geography, K. Siddhartha, Publisher: KitabMahal
3. Economic and Social Geography - R Knowles, Publisher: Rupa
4. Economic Geography - Girish Chopra, Publisher: Commonwealth Publishers
5. Maritime Logistics: A Complete Guide to Effective Shipping and Port Management" by Dong-Wook Song and Photis Panayides

Course Code & Name: PGDLSCM493 – Liner Trade

Course Description: This course offers a comprehensive overview of the role of shipping in international trade, focusing on liner shipping services, key trade routes, and the types of liner trades. Students will explore the principles of cargo stowage, ship layout, and the critical documents used in international shipping, such as the Bill of Lading. The course also delves into the financial aspects of export-import business, including Letters of Credit and INCOTERMS, and examines the principles of liner service pricing, tariff structures, and the role of liner agencies.

Course Objectives:

1. Understand the role and characteristics of liner shipping in international trade, including key routes, service options, and the major ports around the world.
2. Learn the principles of cargo stowage and the layout of a general cargo liner ship, including the handling equipment and the function of essential shipping documents like the Bill of Lading.
3. Comprehend the financial aspects of international trade, focusing on export-import transactions, Letters of Credit, and INCOTERMS 2010.
4. Analyze the principles of liner service pricing and tariff structures, including the roles of liner conferences, alliances, and the responsibilities of liner agents in international shipping.

Course Outcomes:

CO1: Explain the role and significance of liner shipping in international trade, including key trade routes and types of liner services.

CO2: Demonstrate the principles of cargo stowage, ship layout, and the use of critical shipping documents such as the Bill of Lading.

CO3: Apply knowledge of financial aspects in international trade, including the use of Letters of Credit and INCOTERMS 2010 in export-import transactions.

CO4: Evaluate the structure of liner service pricing, including the role of liner conferences, alliances, and the responsibilities of liner agents in managing international shipments.

Course Pre-requisites: prior knowledge of basic concepts of marketing

LTP: 2:1:0

Course type:

Contact Hours: 38

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**UNIT 1 : INTRODUCTION** Role of shipping in International Trade – a historical perspective, Characteristics of Liner shipping, Liner	**10 hours**	**1**		

	Service Routes - North-South East-West Trade routes, service options, basic geography, important ports of the world and their location. Type of Liner Trades – Break-bulk, containerized, Ro-Ro, Refrigerated, Cruise etc.				
Unit-2	**PRINCIPLES OF STOWAGE OF LINER CARGO** Concept of unitization of cargo, safety of cargo, Layout of a ship and stowage plan of a general cargo liner ship, salient features of a general cargo port, the layout and handling equipment's and the role of a transit shed. The Bill of Lading, its role and function in international trade, anatomy of a general cargo liner bill of lading, Mates' Receipt.	**10 hours**	**2**		
Unit-3	**INTERNATIONAL TRADE** Financial aspects of export-import business, Letter of Credits, Uniform Customs & Practices 500 - 600, INCOTERMS 2010. Concept of a liner voyage	**10 hours**	**3**		
Unit-4	**PRINCIPLES OF LINER SERVICE PRICING** Structure of general cargo liner tariff, Concept of liner conference and its role in pricing, consortium/alliance, liner agency system - the role of a general cargo liner agent - organization structure and the responsibilities of an agent.	**09 hours**	**4**		

Text Book :

Elements of Shipping, 8th Edition by Alan E. Branch.

Course Code & Name: PGDLSCM494 – Logistics Management

Course Description: This course provides a comprehensive understanding of logistics management, covering key concepts such as warehousing, automation, and outsourcing. Students will explore inventory control methods, distribution management, and the dimensions of logistics, while analyzing the role of Logistics Service Providers (LSP) in global and domestic markets. Emphasis is placed on the integration of logistics with other business areas and the factors affecting logistics costs.

Course Objectives:

5. Understand the fundamental concepts and types of logistics management, including warehousing, automation, outsourcing, and their impact on customer service.
6. Gain knowledge of various inventory control methods and distribution management techniques, including demand forecasting, transportation management, and Distribution Resource Planning (DRP).
7. Analyze the dimensions of logistics, including the macro and micro perspectives, and understand the interfaces and cost factors associated with logistics systems.
8. Understand the role and importance of Logistics Service Providers (LSP) in both domestic and international contexts, including their roles in transportation, warehousing, and packaging.

Course Outcomes:

CO1: Explain the key concepts and types of logistics management, including warehousing, automation, and their impact on customer service.

CO2: Apply inventory control methods and distribution management techniques, such as demand forecasting and Distribution Resource Planning (DRP).

CO3: Analyze logistics systems from both macro and micro perspectives, understanding the cost factors and interfaces with other business areas.

CO4: Evaluate the roles and importance of Logistics Service Providers (LSP) in domestic and international logistics, focusing on transportation, warehousing, and packaging.

Course Pre-requisites: prior knowledge of basic concepts of marketing

LTP: 2:1:0

Course type:

Contact Hours: 38

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**LOGISTICS MANAGEMENT** Origin and Definition – Types of Logistics – Logistics Management – Ware House Management – Automation and Outsourcing - Customer Service	**10 hours**	**1**		

	and Logistics Management – A Perspective - Concepts in Logistics and Physical Distribution - Distribution and Inventory.				
Unit-2	**UNIT 2 : TYPES OF INVENTORY CONTROL** Demand Forecasting - Warehousing and Stores Management – Routing - Transportation Management - Some Commercial Aspects in Distribution Management – Codification - Distribution Channel Management - Distribution Resource Planning (DRP).	**10 hours**	**2**		
Unit-3	**DIMENSIONS OF LOGISTICS** A macro and micro dimension – logistics interfaces with other areas – approach to analyzing logistics systems – logistics and systems analysis – techniques of logistics system analysis – factors affecting the cost and importance of logistics.	**10 hours**	**3**		
Unit-4	**ROLE OF LOGISTICS SERVICE PROVIDERS (LSP)** International LSP types for air and sea - role identification – Trends of LSCM, who is LSP, 3PL, role definition in domestic and international trading-transportation, warehousing and packaging	**09 hours**	**4**		

Reference Books:

11. Text book of Logistics and Supply Chain Management, D.K. Agrawal, Macmillan India Limited
12. Logistics and Supply Chain Management: Cases and Concepts, Raghuram, G, Macmillan Publisher

References

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M. Bixby Cooper, Tata Mcgraw Hill Education

2. International Logistics – Pierre David, Biztantra, 2005.

Course Code & Title: PGDC502 - International Business

Course Description: International Business concerns those firms that do not restrict their processes to a single state or populace. International business dissects the reasons for the existence of firms engaged in International business, how they flourish in the intricate and unpredictable international environment, and what their undertakings mean for the countries in which they do business. Culture, language, political systems, geography, and socio-economic factors all influence a company's business practices. Therefore, expanses of study comprise of the challenges of managing international companies, whether enormous or diminutive; the rudiments of strategic management; cross-cultural management; globalization; and the regulation and politics of international business.

Students who aspire to intensify their understanding of global markets need to study international business, since it delivers insights into the global economic and business climates. International business studies encompass topics across a spectrum of business fields, from finance and marketing to management and accounting.

Course Objectives:

1. Understand fundamental macroeconomic theories, drivers, and challenges of International Business (IB).
2. Analyze economic indicators and their implications on global business environments.
3. Evaluate the impact of macroeconomic policies on economic stability, growth, and international business operations.
4. Apply macroeconomic concepts to address real-world economic challenges faced in the international business landscape.

Course Outcomes:

(CO1): Develop critical thinking skills to analyze complex business situations inherent in the global marketplace, considering the evolution, drivers, and challenges of International Business.
(CO2): Apply economic theories and quantitative techniques to facilitate managerial decision-making in an international business context, considering factors such as globalization, modes of entry, and conflict management.
(CO3): Demonstrate ethical and socially responsible decision-making in diverse business contexts, including the ethical considerations inherent in international business operations, trade agreements, and strategic alliances.
(CO4): Integrate global perspectives into strategic business planning, considering the implications of regional economic integration, trade blocs, and the influence of international institutions like the WTO on business strategies and decisions.

Course Pre-requisites: prior knowledge of basic concepts of International Business

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 42

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTERNATIONAL BUSINESS ENVIRONMENT** Evolution, Drivers and Challenges of IB - Modes of entry - Active players in multinational business. The International environment of IB – Terms of Trade – Factor Effecting Terms of Trade – Free Trade-Heckscher-Ohlin Model – Product Life cycle Theory – BOPs – CSR.	**10 hours**	**1**		
Unit-2	**GLOBALIZATION** Routes of globalization, Modes of International Business-Organizing international business – international designs, factors influencing choice of a design, issues in organization design. Conflict management, reconciliation, adjudication and arbitration issues, supporting Institutions, Negotiations	**10 hours**	**2**		
Unit-3	**WTO AND TRADING BLOCKS** WTO and LPG policies, Its Implications on India— Regional Trade Blocks, Integration between countries, levels of integration and impact of integration. International strategic alliances.	**10 hours**	**3**		
Unit-4	**REGIONAL ECONOMIC INTEGRATION** Reasons for growth of economic blocs, Types of economical integration, Benefits of common currency like Euro.-Major regional trade groups – NAFTA, MERCOSUR, EU, GCC, ASEAN, G-20, BRICS.-Impediments of integration, Review of India's trade agreements.	**12 hours**	**4**		

REFERENCES

1. Francis Cherunilam; International Business, Prentice Hall of India.
2. Charles Hill, International Business, McGraw-Hill-Irwin.
3. John D.Daniels, Lee Radebaugh and Daniel P. Sullivan,"International Business", Prentice Hall
4. Richard M Hodgetts And Fred Luthans, "International Management", McGraw-Hill,
5. Hill, C.W.L. and Jain, A.K., International Business: Competing in the Global
6. Marketplace, 6th Edition, Tata McGraw-Hill Education,
7. Paul, J., International Business, 5th Edition, PHI Learning,
8. Ball, D.,Geringer, M., Minor, M. and McNett, J., International Business: The
9. Challenge of Global Competition, Tata-McGraw-Hill Education,

10. Deresky, H, International Management: Managing Across Borders and Cultures, 6thEdition, Pearson.
11. Griffin, R., International Business, 7th Edition, Pearson Education.
12. Anant K Sundaram &J Stewart Black, The International Business Environment, Prentice Hall Of India.
13. Tayeb, Monis H: The Global Business Environment – An Introduction, Sage Publication, New Delhi.
14. Francis Cherunilam, International Business Environment, Himalaya Publishing House.

Course Code & Title: PGDFN 501 - International Financial Management

Course Description: All Countries, companies and people on the globe are increasingly integrated in their economic activities. Globalization offers several opportunities but also pose risks. The course emphasizes on the practical implications of finance theory and its application in international financial management. This subject will help students to understand various analytical tools and techniques for financial decision making in a international setting and prepare them for careers in international finance.

Course Objectives:

1. To provide an understanding of the nature and scope of international financial management and the evolution of the international monetary system.
2. To examine current exchange rate agreements and the differences between fixed and flexible exchange rate regimes.
3. To explore the principles and accounting practices of the Balance of Payments (BOP) and its components.
4. To introduce the fundamentals of foreign exchange markets, exchange rate determination, and risk management tools.

Course Outcomes:

CO1: Understanding: Explain the principles and functions of the Balance of Payments and the mechanisms of foreign exchange markets.

CO2: Applying: Apply theories such as Purchasing Power Parity, Interest Rate Parity, and the International Fisher Effect to real-world scenarios for exchange rate determination and forecasting.

CO3: Analyzing: Analyze different types of foreign exchange exposures and evaluate the effectiveness of various risk management techniques and hedging tools.

CO4: Evaluating: Critically assess the impact of various exchange rate regimes and financial management strategies on international financial stability and business operations.

Course Pre-requisites: prior knowledge of basic concepts of finance

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 42

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**International Financial Management An Overview:** Introduction and Scope of International financial Management, Evolution of International Monetary System. IFM- Nature and Scope, IFM and financial management. The current Exchange Rate Agreements, Fixed vs. Flexible Exchange Rate Regime. Balance Of Payments (BOP)Introduction,	**10 hours**	**1**		

	Functions and Principles of BOP, BOP accounting, Components of the BOP				
Unit-2	**Foreign Exchange Markets:** Introduction, Various types of Foreign Exchange Market, direct and indirect quotations, Cross Rates, Exchange Rate Quotations and Arbitrage, Exchange Rate Determination and Forecasting. Introduction to Currency Futures, Currency Options, Forwards and Swaps.	**10 hours**	**2**		
Unit-3	**Foreign Exchange Rate Determination** Introduction, Purchasing Power Parity Theory, Interest Rate Parity Theory, International Fischer's Effect, Pure Expectations Theory	**10 hours**	**3**		
Unit-4	**Managing Foreign Exchange Exposure** Exchange Risk, Types of Exposure, Tools and Techniques of Foreign exchange risk management, Management of Translation Exposure, translation methods, functional verses reporting currency, comparison of four translation methods, Management of Transaction Exposure, transaction exposure based on currency variability , hedging tools, Management of Transaction economic Risk, Management of Economic Risk (including simple problems),Risk	**12 hours**	**4**		

Text Book:

1. Madura, Jeff, "International Corporate Finance", Thomson South-Western.
2. Apte, Prakash, "International Finance – A Business Perspective", Tata McGraw Hill.
3. V. A. Avadhani: International Finance- Theory and Practice, Himalaya Publishing House.
4. Madhu Vij, International Financial Management, Excel Books

Reference Books:

1. Vyuptakesh Sharan,, "International Financial Management", Prentice Hall of India.
2. Jain, Peyrard, and Yadav' "International Financial Management", MacMillan
3. J. Fred Weston, Bart: Guide to International Financial Management.
4. Robery O. Edmister: Financial Institutions - markets and Management.
5. A.V. Rajwade: Foreign Exchange International Finance and Risk Management,Prentice Hall.

Course Code & Title: PGDMFN 502 – Derivative Management

Course Description:

This course provides a comprehensive overview of international financial management, focusing on the principles of risk management and the use of financial derivatives. Students will explore the mechanics of futures contracts, options contracts, and swaps, learning how to calculate their prices and values. The course aims to equip students with the skills to develop trading plans involving option contracts and to evaluate the concepts and valuation methods associated with swaps. Through a combination of theoretical frameworks and practical applications, students will gain a deep understanding of managing financial risks in an international context.

Course Objectives:

1. To understand the principles of risk management and the role of financial derivatives in mitigating financial risks.
2. To explain the concept of futures contracts and accurately calculate their prices and values.
3. To identify and analyze the mechanisms behind option contracts, develop effective trading plans, and evaluate the costs associated with option contracts.
4. To evaluate the concept of swaps and apply methods to determine their value and cost in financial transactions.

Course Outcomes:

CO1: Understand the principles of risk management and financial derivatives.

CO2: Explain the idea of future contracts and how their price and value are calculated.

CO3: Identify the idea behind option contracts and develop trading plans that include them. Also analyse the cost of option contracts.

CO4: Evaluate the swap concept and the methods used to determine the value and cost of swap.

Course Pre-requisites: Basic Economics

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 36 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Introduction to Financial Derivatives:** Introduction to risk management-Meaning and Need-importance-Types of market risk-risk management issues in business-Financial derivatives-meaning-need-growth of financial derivatives market in India-Derivative markets-Exchange traded financial derivatives for risk management in India- Participants- Functions-Types	7 hrs	1	1,2	1

	of risk management instruments-The regulatory frame work of derivative trading in India				
Unit-2	**Forward and Futures Contract:** Forward contract-Future's growth and development-difference between forwards and futures-financial future-future trading-currency futures-Interest rate futures-pricing and valuation of future contracts-value at risk-hedging risk- hedging with stock index future-types of members and margin system in India-future trading in stock exchange for risk management.	7 hrs	2	2,5	1
Unit -3	**Option contracts and Pricing options:** Options-meaning-needs and importance-options and futures-fundamentals-option strategies-types of option-put-call-valuation of options-trading strategies of risk instruments-positions in options-stock indices-options in Indian stock market. Risk pricing of options-intrinsic value and time value-pricing at the expiry of contract-factors affecting option pricing-put-call-parity pricing-models of pricing-binomial option-pricing models-black Scholes pricing methods	14 hrs	3,4	3,5	1
Unit-4	**Swap:** Swaps-meaning and definition-development structure of swap dealing for risk management-interest rate swaps-cancellable and extend extendable swaps-types of swaps-currency swaps-recent trends in derivatives	8 hrs	4	5,6	1

Reference Books:

1. Kumar S.S (2007). Financial Derivatives, Prentice Hall of India, Latest Edition
2. Kevin Dowd. (2002). Measuring Market Risk, second edition, Wiley

Recommended Books:

1. John C.Hull and Sankarshan Basu (2018). Options futures and other derivatives, tenth edition, Pearson Education
2. Mishra B.and Debasish S.S., (2011). Financial Derivatives, Excel publishers, Latest edition

Gupta S.L.,(2005). Financial Derivatives: Theory, concepts and problems, Prentice Hall of India

Course Code & Title: PGDFN503 – Behavioral finance

Course Description: This course explores the distinctions between Traditional and Behavioural Finance, focusing on investor biases and their impact on financial markets. Students will examine the efficient market hypothesis, behavioural factors in corporate capital structure, and the psychological characteristics of investors.

Course Objectives:

1. To learn the behavioral finance theories and difference between Traditional Finance Vs. Behavioural Finance.
2. To learn the investor biases
3. To learn challenges to the efficient market hypothesis
4. To learn behavioural and psychological characteristics of investors

Course Outcomes:

CO1: Understand the Traditional Finance Vs. Behavioural Finance

CO2: Identify and Comprehend prominent investor biases

CO3: Examine the theoretical foundations and challenges to the efficient market hypothesis, behavioural factors and Corporate Decisions on Capital Structure.

CO4: Evaluate the behavioural and psychological characteristics of investors.

Course Pre-requisites: Prior knowledge of basic concepts of Finance

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Behavioural finance** Nature, scope, objectives and application; Investment Decision Cycle: Judgment under Uncertainty; Cognitive information perception - Expected Utility Theory- Prospect Theory – Bounded Rationality.	**9 hours**	**1**		

Unit-2	**Investor Biases:** Overconfidence Bias-Representativeness Bias-Anchoring and Adjustment Bias-Cognitive Dissonance Bias-Availability Bias-Self-Attribution Bias-Conservatism Bias-Ambiguity Aversion Bias-Endowment Bias.	**9 hours**	**2**		
Unit-3	**Behavioural Factors and Financial Markets** The Efficient Markets Hypothesis – Fundamental Information and Financial Markets - Information available for Market Participants and Market Efficiency -Market Predictability –Inside Information - The Concept limits of Arbitrage Model - Asset management and behavioural factors - Behavioural Corporate Finance: Systematic approach using behavioural factors in corporate decision-making.	**12 hours**	**3**		
Unit-4	Experimental measurement of risk-related - Measuring Risk - Emotional mechanisms in modulating risk-taking attitude - Neurophysiology of risk taking. Personality traits and risk attitudes in different domains.	**19 hours**	**4**		

TEXT BOOKS

1. Prasanna Chandra, “Behavioural Finance”, McGraw Hill 2016 / I Edition

REFERENCES

1. Michael M. Pompian, “Behavioural finance and wealth management”, John Wiley & Sons, Inc.

2.Ackert and Deaves. “Behavioural Finance: Psychology, Decision-Making, and Markets”, South-western Cengage Learning.

3.M. M. SulpheyBehavioural Finance PHI 2014 / 1st

4.SujataKapoor, Jaya MamtaProsad, “Behavioural Finance”, Sage 2019.

Course Code & Title: PGDFN504 - Corporate Taxation for Managers

Course Description: This course explores the distinctions between Traditional and Behavioural Finance, focusing on investor biases and their impact on financial markets. Students will examine the efficient market hypothesis, behavioural factors in corporate capital structure, and the psychological characteristics of investors.

1. **Course Objectives:**
   To understand the structure and assessment of company taxes, including tax planning, tax avoidance, and tax management.
2. To gain knowledge of customs duty regulations, import and export procedures, and penalties under customs law.
3. To comprehend the Goods and Services Tax (GST) framework in India, including the dual GST model and the roles of CGST, SGST, UTGST, and the GST Council.
4. To learn the procedures for GST registration, valuation of GST liabilities, input tax credit, and the filing of various GST returns.

Course Outcomes:

CO1: Understanding: Explain the concepts of tax planning, tax avoidance, tax evasion, and tax management in the context of company taxes.

CO2: Applying: Apply the rules and procedures related to customs duty, including the provisional assessment of duty, seizure and confiscation of goods, and penalties.

CO3: Analyzing: Analyze the framework and guiding principles of GST in India, including the determination of time, place, and value of supply.

CO4: Evaluating: Evaluate the eligibility for input tax credit and assess the procedures for GST registration and the filing of different types of GST returns.

Course Pre-requisites: Prior knowledge of basic concepts of Finance

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	***ASSESSMENT OF COMPANIES TAX & FINANCIAL PLANNING*** Companies: Definition, Meaning and structure of tax (Direct & Indirect), Types of Companies, Residential Status, Assessment of companies -Concept of Tax planning, Tax	**10hours**	**1**		

	Avoidance, Tax Evasion & Tax Management – Assessment of Companies (Sec 115 B				
Unit-2	***CUSTOMS DUTY*** Introduction to Baggage postal articles and stores rules, import and export procedures, Free Allowance. Provisional Assessment of Duty, Due Dates for Payment of Duty, Penalties under Customs, Seizure of Goods, Confiscation of Goods.	**10 hours**	**2**		
Unit-3	***INTRODUCTION TO GOODS AND SERVICES TAX (GST)*:** Constitutional frame work; Goods and Services Tax Act & Rules, Need for GST in India, Dual GST Model, Orientation to CGST, SGST,UTGST , GSTN), GST Council. Guiding principle and Functions of the GST Council. (Theory). **Time and Value of supply:** Definitions – Supply, Inward supply, outward supply, continuous supply,-Time of Supply, Change in Rate of Tax in respect of Supply of Goods or Services, Place of Supply and Value of Supply.	**8 hours**	**3**		
Unit-4	***VALUATION OF GST LIABILITIES AND INPUT TAX CREDIT***: Registration under GST, Tax invoice, Levy and Collection of GST, scope of supply, Composition scheme, Exemptions Person Liable to pay GST, Exemption from tax. (Simple problems on calculation of value of taxable supply and GST Levy). Due dates for payment of GST, GST returns – Types of return, Monthly returns, Annual return and Final return, Due date for filing of return, final assessment - Introduction and Eligibility to avail Input Tax Credit (ITC). Registration under GST: Persons not liable for Registration, Compulsory Registration in Certain Cases, Procedure for Registration, Deemed Registration. Returns under GST: Furnishing of Returns, First Return, Revision of Returns and Penalty/Late Fee. (Theory)	**12 hours**	**4**		

RECOMMENDED READINGS

Essential Readings

1. Singhania, Vinod, and Singhania, Kapil, ―Direct Taxes – Law and Practice‖, Taxman.
2. H.C.Meharotra, Direct tax law and practice including tax planning‖ Sahitya Bhavan Publications
3. Ahuja, Girish and Gupta, Ravi, ―Direct Taxes – Law and Practice‖, Bharat Publications.
4. Manoharan, T. N and Hari, G.R., ―Direct Tax Laws‖, Snow White Publications.
5. V.S.Datey, Indirect tax laws, Taxmann .

6. Hiregange, Jain and Nayak, ―Student‘s Handbook on Goods and Services Tax‖, Puliani and Puliani.

References:

Study material of the Institute of Chartered Accountants of India available at http://www.icai.org/post.html?post_id=10169and
http://www.icai.org/post.html?post_id=10172

Course Code & Title: PGDMK 511 - B2B Marketing (Business to Business Marketing)

Course Description:

Business to Business Marketing (B2B) has been one of the most discussed topics in marketing. It involves all kinds of industries be it manufacturing or service oriented ones. It encompasses small, medium and large industries and creates employment for large number of people. Business organizations have been constantly trying to optimize their processes and products in order to provide better products and services to other firms and thus constant innovation in such organizations has been the norm. With growing technology, better transport facilities and advanced research it has grown at a much faster pace in comparison to others.

This course aims at building a strong theoretical base as well as enhances the learner's knowledge on designing successful business strategies and programs. As a part of this course, case studies from across the globe would be used to bring in an experiential learning among the learners.

Course Objectives:

1. To understand and identify the opportunities in the B2B Market
2. To study and analyse the customer and their relationship in the B2B Market
3. To assess the Market in the B2B segment
4. To study the Strategic Market Planning for Products and Channels in B2B Market and study the Strategic Market Planning for Pricing, Communication and Branding

Course Outcomes:

CO1: Understanding B2B Markets and Marketing Mix: Identify opportunities in B2B markets and understand the marketing mix, philosophy, and value chain. Recognize current trends and develop strategies to leverage these opportunities.

CO2: Organizational Buying and Customer Relationships: Identify the organizational buying process and study customer relationship management techniques. Learn how to acquire the right customers and build long-lasting relationships.

CO3: Market Segmentation and Product Life Cycle: Analyze business market segmentation and understand the segmentation process. Study the product life cycle stages and the technology adoption life cycle.

CO4: Business Models and Strategic Planning: Learn about business model formation and the principles of strategic planning. Familiarize with direct and indirect marketing channels and apply these concepts to real-world scenarios.

Units	Detailed Syllabus	CH	CO	PO	PSO

Unit-1	How is B2B selling different, Changing trends in sales messages & long-term view in Sales Operations, Strategic Focus of B to B Operations, Key Elements Of Account Management	6hrs	1	1,2	1
Unit-2	Research on B2B markets: - Marketing Information System - Research facilities - Analysis of competition - Benchmarking. Strategic marketing planning: - Segmentation of the market - Methods and devices of strategic marketing planning.	6 hrs	2	2,3	2
Unit -3	Challenges in lead generations, use of webinars and other modern techniques, Use of telemarketing and LinkedIn in business development, generating more enquiries from website & nurturing contact, importance of marketing intelligence.	8 hrs	3	4,9	1,2
Unit-4	Pricing : - Price – Pricing - Pricing strategies - The pricing policy - Price on the Internet - Financial marketing. The policy of distribution: - direct sales - Indirect sales - Management of conflicts on the way - Internet as a distribution channel - Multi-channel distribution. Public relations – Advertising - Trade fairs and exhibitions - B2B Direct marketing: - The Basics – Tasks - Forms.	6 hrs	4	5,8	1,2

Reference Books:

1.Michael. D.Hutt, Thomas W.Speh, “Business Marketing Management,B2B”, Tenth Edition, Cengage Learning. (T1)

2.K.Venkatraman, “B2B Marketing”, First Edition, 2017, Notion Press (T2)

3.Sharma Dheeraj, Michael D.Hutt, Thomas W.Speh, “B2B Marketing: A south-asian perspective”, 11th Edition, 2014, Cengage Learning.

4.Robert Vitale, Joseph Giglierano and Waldemar Pfoertsch, “Business to Business Marketing- Analysis and Practice”, Pearson Learning.

Course Code & Title: PGDMK512 – Retail Marketing

Course Description: Knowledge of retail marketing environment (i.e.) various dimensions, decisions, format, behavior are studied. This course equips students to understand the shopper behavior and design an effective retail store management strategy.

Course Objectives:

1. To Equip students with a comprehensive understanding of retail marketing and its fundamental concepts.
2. To Provide students with in-depth knowledge of various retail formats and distribution channels.
3. To Enable students to understand and analyze different retail formats and make informed retail decisions.
4. To Develop students' ability to evaluate shopper behavior and create efficient retail store management strategies.

Course Outcomes:

CO1: To Understand the students relating to Retail Marketing and its concepts.

CO2: To gain knowledge on retail formats and channels.

CO3: To enable students to understand the retail formats and analyze retail decisions.

CO4: To enable students to evaluate retail shopper behavior and develop an efficient retail store management mechanism.

Course Pre-requisites: prior knowledge of basic concepts of retail marketing.

Pedagogy: ICT and Digital support.

LTP: 2:1:0

Course type: HC

Contact Hours: 36

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTRODUCTION TO RETAILING** An overview of Retail Marketing- Retail trends in India, Technological influences on retail management, retail environment, policy implications on retailing.	**7 hours**	**1**	**1**	**1**
Unit-2	**RETAIL FORMATS** Organized and unorganized retail formats, different organized retail formats and characteristic, emerging	**9 hours**	**2**	**3**	**2**

	trends in retail formats, MNC's role in organized retailing, multichannel retailing.				
Unit-3	**UNDERSTANDING RETAILING DECISIONS** Choice of retail location, internal and external atmospherics, positioning of retail shops, building retail store image, retail service quality management.	**8 hours**	**3**	**4**	**2**
Unit-4	**RETAIL SHOP MANAGEMENT AND RETAIL SHOPPER BEHAVIOUR** Space management, visual merchandise management, retail store brands, retail advertising and promotion, retail management information systems, online retail, emerging trends. Shopper profile analysis, shopping decision process, factors influencing retail shopper behavior, retail sales force management, complaints management, challenges in retailing in India.	**12 hours**	**4**	**4**	**2**

Reference Books:

1. Michael Havy, Baston, Aweitz and Ajay Pandit, Retail Management, Tata Mcgraw Hill, Sixth Edition, 2007.
2. Ogden, Integrated Retail Management, Biztantra, India, 2008.
3. Patrick M. Dunne and Robert F Lusch, Retailing, Thomson Learning, 4th Edition 2008.
4. Dunne, Retailing, Cengage Learning, 2nd Edition, 2008.
5. Ramakrishnan and Y.R. Srinivasan, Indian Retailing text and cases, Oxford University press, 2008.
6. Philip Kotler, Kevin Lane Keller (2015) 15th edition, Marketing Management, Pearson.

Course Code & Title: PGDMK513 – International Marketing

Course Description: Knowledge of international marketing environment (i.e.) various dimensions, strategies, channels, practices, policies are studied. This course equips students to design and implement effective strategies and also make them understand the cultural, legal and regulatory environments.

Course Objectives:

1. To equip students with a comprehensive understanding of international marketing, including its importance, scope, and management process.
2. To enable students to analyze factors affecting international market entry and compare various entry modes.
3. To provide students with the ability to evaluate international distribution channels and product management strategies.
4. To familiarize students with export marketing procedures, functions, and EXIM policy, including pricing strategies.

Course Outcomes:

CO1: Students will explain the scope of international marketing and differentiate it from domestic marketing (Remembering, Understanding)
CO2: Students will analyze factors influencing entry strategies and compare different modes of entry (Analyzing, Evaluating).

CO3: Students will evaluate distribution channels, assess product life cycles, and develop strategies for new product introductions (Evaluating, Creating)

CO4: Students will understand export procedures, explain export functions, and compare pricing strategies (Understanding, Applying).

Course Pre-requisites: prior knowledge of basic concepts of marketing.

Pedagogy: ICT and Digital support.

LTP: 2:1:0

Course type: HC

Contact Hours: 36

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**INTRODUCTION TO INTERNATIONAL MARKETING** International Marketing – importance and scope, nature of international marketing, difference between domestic and international marketing, EPRG Frame work orientation in international marketing, international	**8 hours**	**1**	**1**	**1**

	marketing management process, Challenges in international marketing,				
Unit-2	**STRATEGIES FOR INTERNATIONAL MARKET ENTRY** Introduction, Factors affecting the selection of international market entry strategies, modes of entry- direct and indirect exporting, manufacturing strategies with foreign direct investment – merger – acquisition - strategic alliances - wholly – owned subsidiaries - manufacturing strategies without foreign direct investments – franchise – licensing - management contracts - contract manufacturing - Turnkey projects - comparison between different modes of entry.	**10 hours**	**2**	**3**	**2**
Unit-3	**GLOBAL MARKETING CHANNELS & PRODUCT MANAGEMENT** International distribution channels – direct and indirect, distribution structures – functions of international distribution channels, Factors affecting choice of channels, Objectives and nature of physical distribution, selecting criteria of foreign country market intermediaries, international product life cycle, International product positioning, new products in international market – process and challenges, Brands in international market.	**12 hours**	**3**	**4**	**2**
Unit-4	**EXPORT MARKETING** Export procedure, nature of export marketing, functions of export marketing, importance and process of export marketing, EXIM Policy, price standardisation vs price differentiation	**10 hours**	**4**	**4**	**2**

Reference Books:

1. International Marketing, 18th edition, Philip R. Cateora, R. Bruce Money, Mary C. Gilly, John L.Graham, MC Graw Hill Education (India) Private Limited.
2. International Marketing, Rajagopal, Vikas Publishing House Pvt.Ltd.
3. International Marketing, B.S.Rathore, B.M.Jani, J.S.Rathore, Himalaya Publishing House
4. Global marketing, Warren J.Keegan, Mark C. Green, Pearson education.

Course Code & Title: PGDMK514- Product and Brand Management

Course Description:

Knowledge of Product Management and Brand Management with various dimensions of Product levels and Branding levels. Students able to grasp key concepts such as New Product Development, Product Life Cycle, Packaging and Labelling decisions. This course equips students to understand Brands and Branding decisions, Brand Knowledge, positioning, Brands Equity and Brans Architecture.

Course Objectives:

1. To learn fundamentals of Product and Brand Management
2. To understand competition at product level as well as brand level.
3. To understand New Product Management & Principles of Branding, role of brands, components of Brands, Brand Equity etc.
4. To understand the implications of planning, implementing and evaluating Branding Strategies.

Course Outcomes:

1. Learner will be enabled to remember and understand the concept of product, Brand and its functions.
2. Students will get familiarise with the techniques of Brand and Product Management.
3. This course will help them to understand the brand management decisions.
4. Students are able to analyse various approaches and strategies in Branding. They learn evaluating the branding, Brand positioning and Brand Architecture.

Course Pre-requisites: Basic knowledge of Commerce and Trade is required.

Pedagogy: ICT and Digital support.

LTP: 2:01:0

Course type: HC

Contact Hours: 36 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Product Concepts** What is product. Classification of products, Levels of Product, Product Mix concepts, Product Line, Product Length, Product Depth, Product Breadth, Product Mix decisions, Product Positioning, USP of Products.	8 hrs	1	1,2	1

Unit-2	**Product Management:** New Product Development (Idea generation and screening, Concept testing, Test Marketing, Packaging and Labelling, Product Launch), Product Life Cycle, Product Recalls, Guarantees & Warranties.	9 hrs	2	2,3	2
Unit -3	**Brands and Branding Decisions:** Introduction to Brand, Definition and meaning of Brand, Branding challenges and opportunities, Types of Brands, Methods of Branding, Advantages of Branding and Branding strategies.	9 hrs	3	4,9	1,2
Unit-4	**Brand Knowledge, Identity, positioning and Brand Architecture**: Introduction to Brand knowledge, Brand images in terms of attributes and benefits, Brand positioning and various positioning strategies, Brand equity concept, Brand Building and measuring Brand equity. Introduction to Brand Architecture strategies and its designing	10 hrs	4	5,8	1,2

Reference Books:

1. Product Management in India - Majumdar. R. PHI Learning Pvt Ltd.
2. Product Management – Gupta.S.L Wisdom Publications.
3. Product Management – Lehmann & Winer, TATA McGraw.
4. Strategic Brand Management- Richard Elliott, Percy & Pervan.
5. Brand Positioning Strategies for Competitive Advantage- Sengupta.S.
6. "Strategic Brand Management: Building, Measuring, and Managing Brand Equity" by Kevin Lane Keller (Publisher: Pearson).
7. "Marketing Management" by Philip Kotler and Kevin Lane Keller (Publisher: Pearson)
8. "Product Leadership: Creating and Launching Superior New Products" by Robert G. Cooper (Publisher: Basic Books).

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Course Code & Title: PGDHR 521 - Team Dynamics at work

Course Description: This course explores the principles of team composition, development, and performance, emphasizing leadership, decision-making, and conflict resolution. Students will gain hands-on experience with interpersonal tools and methodologies to enhance communication, trust, and team dynamics. Practical strategies for negotiation, stress management, and team building in the workplace will be covered.

Course Objectives:

1. Develop Team Dynamics: Understand the principles of team composition, development, performance, and motivation, and effectively manage team conflicts and leadership roles.
2. Enhance Decision-Making Skills: Gain insights into team decision-making processes, experiential learning methodologies, and improve interpersonal orientation through tools like FIRO-B and T-group sensitivity training.
3. Understand Group Behavior: Learn the nature of groups, stages of group development, and methodologies like the Johari window to enhance communication skills and interpersonal trust.
4. Manage Conflict and Negotiation: Acquire skills for negotiation, conflict resolution, and stress management, and apply strategies for team building and maintaining team morale in the workplace.

Course Outcomes:

CO1: Effective Team Management: Demonstrate the ability to form, develop, and motivate teams while managing conflicts and providing leadership.

CO2: Improved Decision-Making: Apply decision-making frameworks and interpersonal tools to enhance team performance and experiential learning.

CO3: Group Dynamics Understanding: Analyze and navigate group dynamics, development stages, and improve communication and trust within teams.

CO4: Conflict Resolution and Negotiation: Employ negotiation strategies, manage workplace conflicts, and implement team-building and stress management techniques effectively.

Course Pre-requisites: Basic understanding of business concepts and HRM

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Unit-1	**Team composition**	07 hours	1	1	1

	Formation of teams and development-Team Performance and Motivation-Team Conflict and Leadership-Team Decision Making, Group dynamics, Dynamics of teams and Team building				
Unit-2	**Leadership-Team Decision Making** Discovering the interpersonal orientation through, training needs analysis, FIRO-B, Experiential learning methodologies-T-group sensitivity training, encounter groups.	10 Hours	2	4	1
Unit-3	**Introduction to Groups** Nature of groups, stages of group development, Encounter groups, appreciative enquiry, Discovering facets of interpersonal trust through Johari window, communication skills.	08 hours	3	4	1
Unit - 4	**Conflict &Negotiation** Negotiation skills and strategies for team building - Team morale, Team building strategies at work place – Conflict – Work place Conflict – Resolution - Competitive vs collaborative behavior - Work stress and stress management.	06 hours	4	5	1

Text Books

1. Levi, Daniel. (2014). Group Dynamics for Teams, 5th Edition, SAGE Publications.

2.Simon Hartley, Stronger Together: How Great Teams Work, Little, Brown Book Group UK.

3.Greg L Stewart, Charles C manz, Team Work and Group Dynamics, John Wiley and Sons.

Course Code & Title: PGDHR 522 - HR Metrics and Analytics

Course Description: This course provides a comprehensive introduction to the field of Big Data Analytics, focusing on the principles, techniques, and tools used to analyze and derive valuable insights from large and complex datasets. Students will gain a deep understanding of the fundamental concepts of big data, data management, and analytical methods.

Course Objectives:

5. Overview of analytics and focusing on the elements required for understanding HR analytics.
6. The role and importance of HR analytics, and the ability to track, store, retrieve, analyses and interpret HR data.
7. Types of HR metrics will help in quantifying different HR processes being practiced in organizations.
8. The application and practical implementation will provide hands-on practice of visualize the HR process.

Course Outcomes:

CO1: Students will be able to demonstrate a thorough understanding of the foundational concepts of analytics, with a specific focus on the essential elements necessary for comprehending HR analytics.

CO2: Students will develop the skills to effectively track, store, retrieve, analyze, and interpret HR data, recognizing the critical role and importance of HR analytics in organizational contexts.

CO3: Students will gain the ability to identify and apply various types of HR metrics, enabling them to quantify and evaluate different HR processes within organizations.

CO4: Students will acquire hands-on experience in the practical implementation of HR analytics tools, enhancing their ability to visualize and analyze HR processes through real-world applications.

Course Pre-requisites: Basic understanding of business concepts, Computers Programing and information systems would be beneficial.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	INTRODUCTION TO ANALYTICS Analytics- data; information; data handling; elements; prescriptive, descriptive, predictive and diagnostic; Introducing tools and softwares	10 hours	1	1	1
Unit-2	INTRODUCTION TO HR ANALYTICS HR Analytics-Evolution of HR Analytics, HR information systems and data sources, HR Metric and HR Analytics, Evolution of HR Analytics; HR Metrics and HR Analytics; Intuition versus analytical thinking; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HCM:21I Model.	08 Hours	2	4	1
Unit-3	HR METRICS HR service and software metrics; Recruitment metrics; Employee retention and engagement metrics; time-tracking metrics; Performance management metrics; Training and development metrics	14 hours	3	4	1
Unit - 4	APPLICATION AND PRACTICAL IMPLEMENTATION USING SPSS Predicting and evaluating HR process; Optimizing HR process; informed decision-making process; Using SPSS - Analysis, Interpretation, and Reporting	07 hours	4	5	1

Text Books

1. Michael J.Walsh, “HR Analytics Essentials”, Vibrant Publishers, Jan, 2021.

2. Bharti Motwani, “HR Analytics:Application and Design”, Wiley Publisher, June 2021.

3. Poonam Kaushal, Sakshi Vashisht, “HR Metrics and Analytics”, Walnut Publication, 2020.

4. Jac FITZ-ENZ, “The NEW HR Analytics”, HarperCollins Focus Publisher, 2018.

5. Dipak Kumar Bhattacharya, “HR Analytics”, Sage Publications India Private, May, 2017.

6. Edwards Martin R, Edwards Kirsten,“Predictive HR Analytics: Mastering the HR Metric”,

Course Code & Title: PGDHR 523 - International Human Resource Management

Course Description:

International Human Resource Management deals with the functions of HRM carried out internationally involving employees from multiple countries.

Course Objectives:

1. Equip students with a comprehensive understanding of IHRM, including the importance of globalization, differences from domestic HRM, and the challenges faced in IHRM.
2. Enable students to analyze and evaluate global HRM practices such as human resource planning, recruitment, selection, and cross-cultural training methods in multinational corporations (MNCs).
3. Provide students with the ability to assess international compensation strategies, including objectives, components, incentives, rewards, and performance management systems in MNCs.
4. Develop students' skills in global leadership, expatriate management, repatriation, and understanding the role of trade unions, industrial democracy, and conflict resolution strategies in global organizations.

Course Outcomes:

CO1: Understanding IHRM Concepts: Students will understand key IHRM concepts, globalization reasons, and the differences between IHRM and domestic HRM, including international challenges and HRM practices in various countries.

CO2: Analyzing Global HRM Practices: Students will analyze global HRM practices, including planning, recruitment, selection, and cross-cultural training methods in multinational corporations (MNCs).

CO3: Evaluating International Compensation: Students will evaluate international compensation strategies, performance management systems, and compensation practices in MNCs.

CO4: Developing Global Leadership and IR Skills: Students will develop skills for global leadership, expatriate management, and understand industrial relations, trade unions, and conflict resolution in global organizations.

Course Pre-requisites: HRM

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 36 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO

Unit-1	• Introduction to IHRM, • Reasons for going global • Approaches to IHRM • Difference between IHRM and Domestic HRM, the Challenges of IHRM • Cross Border Mergers and Acquisitions • HRM in USA, UK, • HRM in Japan and China. • Cross Cultural Issues	8 hrs	1	1,2	1
Unit-2	• Global HRM • Global Human Resource Planning, Recruitment • Selection and Staffing in International Context. • Relevant Case studies • Global practices, Issues, and challenges • International Compensation	10 hrs	2	2,5	1
Unit -3	• Objectives and Key Components of International Compensation • Incentives and Rewards • Compensation Practices in MNCs • Performance Management System in MNCs. • Cross Cultural Training Methods • Cross Cultural Training practices in MNC s	8 hrs	3	3,5	1
Unit-4	• Expatriate Management Development in MNCs • Global Leadership Development • Process of Repatriation • IR Scenario in Global Organizations • Role of Trade Unions at International Level • Industrial Democracy in MNCs • Conflict Resolution Strategies adopted.	10 hrs	4	5,6	1

Reference Books:

1. C.S.VenkataRatnam, "Globalisation and Labour Management Relations", Sage, New Delhi .
2. Peter J.Dowling: International Human Resource Management, Excel Publications,.
3. P.L Rao, International Human resource Management, Excel Books.
4. K Aswathappa, Sadhna Das, "International Human Resource Management", McGraw Hill Companies
5. Tony Edwards, "International Human Resource Management", Chris Rees, Pearson Education
6. Tayeb, "International HRM", Oxford University Press, 2005.
7. Evans, Pucik, Barsoux, "The Global Challenge- Framework For International Human Resource Management", Tata McGraw-Hill .
8. S.C.Gupta, "Text Book of International Human Resource Management", Macmillan Publications. Latest Edition.

Course Code & Title: PGDHR 524 - Strategic Human Resources Management

Course Description:

This course delves into the dynamic and critical realm of Strategic Human Resource Management (SHRM), exploring the conceptual foundations, evolutionary trends, and the pivotal linkage between business and HR strategies. Help to gain an in-depth understanding of the HR environment, encompassing technological influences, organizational structures, management of diversity, HR outsourcing, and the challenges posed by global competition and labor sourcing on a global scale.

Course Objectives:

1. Develop a comprehensive understanding of Strategic Human Resource Management (SHRM) and critical factors shaping the HR environment, including technology, diversity management, and global labor markets.
2. Analyze the strategic role of HRM in achieving competitive advantage, explore HR strategy planning and implementation for enhancing organizational performance, and evaluate HR policies aligned with strategic business goals.
3. Investigate the strategic role of HR planning in workforce management, explore effective strategies for employee selection and utilization, and understand managing employee surplus or shortages and designing career paths.
4. Examine the establishment of pay plans, current compensation trends, and the strategic integration of compensation systems with employee development initiatives. Evaluate the design and implementation of performance management systems aligned with strategic objectives.

Course Outcomes:

CO1: Gain a comprehensive understanding of Strategic Human Resource Management (SHRM) and the environmental factors influencing HR practices, including technology, diversity management, and global labor markets.

CO2: Analyze and articulate the strategic role of HRM in enhancing organizational competitive advantage through effective HR strategies aligned with business goals.

CO3: Demonstrate proficiency in HR planning and management by developing strategies for workforce planning, employee selection, utilization, and career path design.

CO4: Evaluate and implement strategic compensation systems and performance management frameworks that align with organizational objectives and foster employee development and productivity.

Course Pre-requisites: Basic Economics

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Strategic Human Resource Management**: Concept, Scope, Evolution, Linking Business Strategic & HR Strategies, The HR Environment –	10 hrs	1	1,2	1

	Technology & Organizational Structure – Management of Diversity – HR Out sourcing – Global Competition – Global sourcing of labor.				
Unit-2	**Strategic Role of HRM**: HR for competitive advantage – Planning & Implementing Strategies, HR Policies, HR Strategies to increase firms Performances.	09 hrs	2	2,5	1
Unit -3	**Strategic Responses of Organizations** **S**trategic Role of HR Planning – Selection of Employees – work force utilization and employment practices – dealing with employee's surplus/ shortages – Career Paths for Technical Professionals.	10 hrs	3	3,5	1
Unit-4	**Strategic Compensation Systems**: Establishing Pay Plans & pay Periods, Compensation trends. Compensation and Employees Development. Strategically Oriented Performances Management System.	10 hrs	4	5,6	1

References:

Text Books:

1. Agarwala, T., Strategic Human Resource Management, Oxford University Press, New Delhi, 1st edition.

Suggested Readings:

1. Jeffrey A., M., Strategic Human Resource Management, Thomson Learning Inc.
2. Prasad, K., Strategic Human Resource Management, Macmillan Publication,1st edition.
3. Belcourt, M. and McBay, K., Strategic Human Resource Planning, Thomson Learning Inc., 2nd edition.

Course Code & Title: PGDBA531 - Big Data Analytics

Course Description: This course provides a comprehensive introduction to the field of Big Data Analytics, focusing on the principles, techniques, and tools used to analyze and derive valuable insights from large and complex datasets. Students will gain a deep understanding of the fundamental concepts of big data, data management, and analytical methods.

Course Objectives:

1. Define and explain the characteristics of big data.
2. Explore the challenges and opportunities associated with big data analytics.
3. Familiarize students with popular big data processing frameworks such as Hadoop and Spark.
4. Provide hands-on experience in utilizing these frameworks for data processing tasks & Introduce various storage solutions for big data, including distributed file systems and NoSQL databases.

Course Outcomes:

CO1: Gain insights into the characteristics and evolution of Big Data, applications, and challenges,

CO2: Master the concepts of HDFS and explore Hadoop Framework, its significance, historical background, and key aspects, understand the special features and limitations of Hadoop Distributed File System (HDFS).

CO3: Understand the MapReduce framework, including its types, components (Mapper, Reducer, Combiner, Partitioner), and its applications.

CO4: Practical investigate Hadoop related tools for Big Data Analytics and perform basic Hadoop Administration.

Course Pre-requisites: Basic understanding of business concepts, Computers Programing and information systems would be beneficial.

Pedagogy: The course will be delivered through a combination of lectures, case studies, hands-on exercises, and discussions. Real-world applications and use cases will be explored to provide practical insights.

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	INTRODUCTION TO BIG DATA Big Data – Characteristic, Evolution of big data, Four V's of Big data, Big Data Applications and used cases, Big Data vs. Traditional Data, Challenges of Big Data, Structure of Big Data, Analytics tool- open source analytics tools. Introduction – Drivers for Big Data Analytics – Applications of Big data Analytics in: Marketing and Sales, Finance Analytics, Human Resource, Healthcare, Product Design, Service Design, Customer Service and Support, SCM, Government operations and functions, different industries and sectors, etc	10 hours	1	1	1
Unit-2	Hadoop Framework Introduction to Hadoop, Why Hadoop, RDBMS versus Hadoop, history of Hadoop, Distributed computing challenges, Hadoop Components, Hadoop conceptual layer, Key aspects of Hadoop. HDFS- special features and limitations.	08 Hours	2	4	1
Unit-3	MAP REDUCE - A Processing technique Introduction, Meaning, Map Reduce Types and Formats - Mapper, Reducer, Combiner, Partitioner, searching, sorting and compression.	14 hours	3	4	1
Unit - 4	Practical tools implementation of big data analytics Different frameworks applications like Essential Hadoop Tools, Hadoop YARN Applications, Managing Hadoop with Apache Ambari, Basic Hadoop Administration Procedures. Capstone project	07 hours	4	5	1

TEACHING /LEARNING RESOURCES

ESSENTIAL READINGS

1. Seema Acharya, Subhashini Chellappan, "Big Data and Analytics", Wiley, 2nd Edition.
2. Reza Zafarani, Mohammad Ali Abbasi, Huan Liu, "Social Media Mining", Cambridge University Press, 2014.

3. GuandongXu, Yanchun Zhang and Lin Li, “Web Mining and Social Networking Techniques and applications”, Springer, 2011.

REFERENCES

1. Zikopoulos, P., Parasuraman, K., Deutsch, T., Giles, J., & Corrigan, D.V Harness the Power of Big Data The IBM Big Data Platform. McGraw Hill Professional, 2012
2. Prajapati, V, “Big Data Analytics with R and Hadoop”, Packt Publishing Ltd, 2013
3. Gates, A. Programming Pig.” O’Reilly Media, Inc.”, 2011.
4. Capriolo, E., Wampler, D., & Rutherglen, J., “Programming Hive”, O’Reilly Media, Inc.”,2012
5. David Loshin, "Big Data Analytics: From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph", 2013.
6. Jay Liebowitz, “Big Data and Business Analytics” Auerbach Publications, CRC press (2013
7. Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, “Essentials of Business Analytics”, Cengage Learning, second Edition, 2016

Course Code & Title: PGDBA532 - Data Visualization for Managers with Tableau (Practical)

Course Description: This course provides a comprehensive training program in Tableau, a powerful tool for data visualization and analytics. Participants will be introduced to fundamental concepts and progressively advance to mastering advanced techniques in Tableau. Through a combination of theoretical learning and hands-on practical exercises, participants will develop the skills needed to create impactful visualizations, build interactive dashboards, and derive valuable insights from data.

Course Objectives:

1. To Gain practical skills in using Tableau to conduct data visualization and analysis tasks effectively.
2. Learn to design visually appealing and interactive dashboards in Tableau that facilitate intuitive data exploration and interpretation.
3. Utilize Tableau's analytical capabilities to analyze large datasets and extract actionable insights that contribute to informed decision-making.
4. Evaluate the effectiveness of various visualization approaches in Tableau for conveying key messages and insights, ensuring clear and impactful communication of data findings.

Course Outcomes:

CO1: Develop proficiency in using Tableau for data visualization and analysis tasks to derive actionable insights from large datasets.

CO2: Design visually appealing and interactive dashboards in Tableau that facilitate data exploration, interpretation, and effectively convey key messages and insights.

CO3: Analyze large datasets using Tableau's analytical capabilities to derive actionable insights, and evaluate the effectiveness of different visualization approaches in conveying insights.

CO4: Gain a solid foundation in Tableau fundamentals, providing a basis for ongoing learning and skill development in data analytics and visualization.

Course Pre-requisites: Python

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	Introduction to Data Visualization – The Visualization imperative – Visual Perception. Tableau File Types, Data Types, Data Terminology.	8 hrs	1	1,2	1
Unit-2	Data Sources, Custom Data View, Extracting Data, Fields Operations, Editing Metadata, Data Joining Data Blending.	8 hrs	2	2,5	1

	Add Worksheets, Rename Worksheet, Save & Delete Worksheet, Reorder Worksheet, Paged Workbook.				
Unit -3	Operators, Functions, Numeric Calculations, String Calculations, Date Calculations, Table Calculations, LOD Expressions, Basic Sorting, Basic Filters, Quick Filters, Context Filters, Condition Filters, Top Filters, Filter Operations Calculated Fields, Sorting & Filtering using Advance Options.	8 hrs	3	3,5	1
Unit-4	Bar Chart, Line Chart, Pie Chart, Crosstab, Scatter Plot, Bubble Chart, Bullet Graph, Box Plot, Tree Map, Bump Chart, Gantt Chart, Histogram, Motion Charts, Waterfall Charts. Dashboard, Formatting, Forecasting, Trend Lines and Story Telling.	15 hrs	4	5,6	1

Reference Books:

1. Tableau 10 for Beginners: - Step by Step Guide to Developing Visualizations in Tableau by Chandresh Sinha.

2. Tableau by George Peck.

Course Code & Title: PGDBA533 - Future Trends in Business Analytics

Course Description: This course explores future trends in business analysis and their significance in organizations. Students will learn current and emerging techniques and tools, develop strategies for incorporating trends, and create a roadmap for implementation. The course equips students with the skills to address challenges and best practices in adopting future business trends.

Course Objectives:

1. To understand the concept of future trends in business analysis and its importance in organizations.
2. To identify and analyze current and emerging business analysis techniques and tools for analyzing future trends.
3. To analyze the impact of future trends on different industries and develop strategies for incorporating future trends in business analysis.
4. To develop a roadmap for planning and implementing future trends in business analysis and understanding the challenges and best practices for implementation.

Course Outcomes:

CO1: Understand the role of business analysis in identifying and analyzing future trends and the impact of technology on business analysis.

CO2; Identify and analyze current and emerging business analysis techniques and tools for analyzing future trends, including artificial intelligence and machine learning.

CO3: Analyze the impact of future trends on different industries and develop strategies for incorporating future trends in business analysis.

CO4: Develop a roadmap for planning and implementing future trends in business analysis, evaluate the impact of future trends on organizations, and understand the challenges and best practices for implementation.

Course Pre-requisites: Python

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	**Introduction to Future Trends in Business Analysis:** Overview of Business Analysis (BA) and its importance in organizations; Understanding the concept of Future Trends and their significance in BA; The role of BA in identifying and analyzing future trends; Identifying and analyzing current	10 hrs	1	1,2	1

	trends in BA; The impact of technology on BA and future trends.				
Unit-2	**Overview of current BA techniques;** The Future of Business Intelligence; Introduction to emerging BA techniques; The role of Artificial Intelligence (AI) and Machine Learning (ML) in BA; Using predictive analytics to identify future trends; Tools and technologies for analyzing future trends;	10 hrs	2	2,5	1
Unit -3	**Future Trends in Business Analysis in Different Industries:** Understanding the different industries that utilize BA; Identifying industry-specific future trends; Analyzing the impact of future trends on different industries; Case studies of successful implementation of BA in different industries; Practical exercises to analyze future trends in a specific industry	10 hrs	3	3,5	1
Unit-4	**Implementing Future Trends in Business Analysis:** Planning and implementing future trends in BA; Evaluating the impact of future trends on Organizations; Developing a roadmap for incorporating future trends in BA; Dashboards 2.0 - The Evolution of an Information-Driven Application; Understanding the challenges of implementing future trends in BA; Best practices for implementing future trends in BA	10 hrs	4	5,6	1

Reference Books:

1. "Business Analysis: Best Practices for Success" by Steven P. Blais.
2. "Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking" by Foster Provost and Tom Fawcett.
3. "The Fourth Industrial Revolution" by Klaus Schwab.
4. "Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die" by Eric Siegel.
5. "Competing on Analytics: The New Science of Winning" by Thomas H. Davenport and Jeanne G. Harris.SS

Course Code & Title : PGDBA534 – Machine Learning using Python (Practical)

Course Description: This course provides hands-on experience in data analysis using Python programming language and its popular libraries such as NumPy, pandas, matplotlib, and seaborn. Students will learn how to manipulate, visualize, and analyze data from various sources using Python's powerful data analysis tools. Emphasis will be placed on practical applications, real-world case studies, and best practices in data analysis. By the end of the course, students will be equipped with the skills and knowledge to conduct data analysis tasks efficiently using Python.

Course Objectives:

1. Understand the fundamentals of Python programming language and its applications in data analysis.
2. Learn how to manipulate and clean data using pandas, a powerful data manipulation library in Python.
3. Master data visualization techniques using matplotlib and seaborn libraries to create insightful visualizations.
4. Perform statistical analysis and hypothesis testing using Python's statistical libraries such as SciPy and StatsModels.
5. Explore machine learning techniques for data analysis using scikit-learn library.
6. Apply Python's data analysis tools to real-world datasets and case studies.

Course Outcomes:

1. To be able to recall and describe the fundamental concepts of Python programming language and its applications in data analysis.
2. To be able to apply Python programming skills to manipulate, clean, and preprocess data using the pandas library.
3. To be able to evaluate data analysis techniques and methodologies for different types of datasets and scenarios.
4. To be able to critically assess the effectiveness and limitations of various data visualization techniques.
5. To be able to design and implement data analysis projects using Python and its libraries to solve real-world problems.

Course Pre-requisites: Python

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: HC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	Overview of Python programming language and its applications in data analysis Introduction to Jupyter Notebook for interactive data analysis , Basics of Python programming: data types, variables, loops, and functions.	8 hrs	1	1,2	1

Unit-2	Introduction to pandas library and its data structures: Series and Data Frame. Data importing and exporting with pandas Data cleaning and preprocessing techniques: handling missing values, data imputation, and data transformation	8 hrs	2	2,5	1
Unit - 3	Introduction to data visualization and its importance in data analysis Creating basic plots: line plots, bar plots, scatter plots, and histograms using matplotlib Advanced visualization techniques using seaborn: box plots, violin plots, pair plots, and heatmaps	8 hrs	3	3,5	1
Unit-4	Machine Learning Algorithms Linear Regression – Multiple Linear Regression – Logistic Regression – Decision Tree – K-Means – Random Forest.	8 hrs	4	5,6	1

Course Code & Title: PGDABM 541 – Organic Food Production and Certification Management

Course Description: This course covers with the information deluge in the agriculture sector aiming at the organic food production; to understand the organic ecosystem and their concepts which includes organic manure, and also know the quality control and certification procedure of organic food product as well as marketing and export potential of organic products.

Course Objectives:

1. Enhancing to learn about the meaning, importance, need, scope and principal of organic food production in India and also enable the student to learn initiatives taken by the government and different NGOS.
2. It helps to understand organic ecosystem and their concepts which includes organic manure, FYM, oilcakes, animal waste bio-Fertilizer and its fortification and also fundamentals of insects, pest disease and weed management under organic mode of production
3. It helps to understand operational structure of NPOP, quality control, also enable learner to understand marketing and export potential of organic products.
4. To help the students understand how to make resource management decisions based on proven trends

Course Outcomes:

CO1: Define and analyze the principles of organic food production

CO2: Analyze the concepts of organic ecosystem.

CO3: Helps to understand restrictions to nutrients use in organic farming.

CO4: Assess and understand the quality control and certification procedure of organic food product as well as marketing and export potential of organic products.

Course Pre-requisites: prior knowledge of basics of agriculture and organic food production

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: SC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Introduction to Organic Food Production** Meaning – concept – need – importance - principles and its scope in India - Types of organic food production - pure organic farming and integrated farming systems - Initiatives taken by Government (Central/State) - NGOs and other organizations for promotion of organic food production	**9 hours**	**1**	**1**	**1**
Unit-2	**Organic ecosystems** Organic ecosystems and their concepts - Organic nutrient resources - organic manure – FYM - oil cakes - animal waste - green manure - liquid manure - bio-fertilizer - vermin compose and its fortification; Fundamentals of insect – pest - disease and weed management under organic mode of production.	**10 hours**	**2**	**6**	**2**

Unit-3	**Restrictions** Restrictions to nutrient use in organic farming; Choice of crops - cereals/ pulses/ oil seeds/ fruits/ vegetables/ mushrooms and their varieties in organic food production.	**10 hours**	**3**	**6**	**1**
Unit-4	**Certifications and Export Procedure** Operation of NPOP – Quality control - certification procedure of organic food product - Marketing and export potential of organic products.	**10 hours**	**4**	**4**	**3**

Suggested Readings:

1. Mukund Joshi and Prabhakarasetty, T.K. 2006. Sustainability through organic farming. Kalyani publishers, New Delhi. 349p.
2. Balasubramanian, R., Balakishnan, K and Siva Subramanian, K. 2013. Principles and practices of organic farming. Satish Serial Publishing House. 453p 39
3. Tarafdar, J.C., Tripathi, K.P and Mahesh Kumar, 2009. Organic agriculture. Scientific Publishers, India. 369p.
4. Tiwari, V.N., Gupta, D.K., Maloo, S.R and Somani, L.L. 2010. Natural, organic, biological, ecological and biodynamic farming. Agrotech Publishing Academy, Udaipur. 420p.
5. Dushyent Gehlot. 2005. Organic farming- standards, accreditation, certification and inspection. Agrobios, India. 357p

Reference Book

3. P. L. Maliwal., 2021, Principles of Organic farming: Textbook. Scientific Publishers
4. S S Acharya and N L Agarwal, 2019, Agricultural Marketing in India. Oxford and IBH publishing.

Course Code & Title: PGDABM 542 - Risk Management in Agricultural Commodity Markets

Course Description: This course is designed to instruct students the basics of commodity marketing, the use of futures and option contracts to manage price risk, and other forms of market risk facing agricultural producers, and some basic strategies to mitigate that risk.

Course Objectives:

1. To understand the need for commodity markets and futures trading,
2. To gain knowledge to students how to get profit from anticipated trends as well as arbitrage opportunities to traders,
3. Students will come to know about the major participants in commodity markets, and
4. Commodity futures exchanges allow for risk transfer and provide a valuable price discovery mechanism that reflects the collective views of all market participants about the future supply and demand prospects of a commodity.

Course Outcomes:

1. Students will be able to know about the transparency in the price mechanism, low margins, risk management, benefits to farmers by way of price clarity and an organized marketplace.
2. Students will be able to participate in the commodity and future markets in the future and to diversify their portfolios and increasing demand due to populations' growth.

Course Pre-requisites: Basics of Commodity Markets

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: SC

Contact Hours: 39 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	Risks involved in marketing of Agricultural commodities- Risk taking/Risk Bearing- Types of Risks-Minimization of risks;Fundamentals of Commodity markets- History and Evolution-Types with examples-Commodities available for trading-Exchange Vs. Bilateral trading(OTC);Role and Functions of Derivatives: Types of	10 hrs	1	1,2	1

	derivatives(Forwards, futures, options and Swaps)- Difference between commodity and financial derivatives- Functions of derivative markets- pricing in these markets;				
Unit-2	Concepts of price risk management - Speculation, Hedging, arbitrage; Challenges and opportunities in commodity trading to farmers; Commodity Future Markets: Its role- Economic functions of future markets- Types of future markets in India-Economic benefits of future markets to other stakeholders- Scheme of regulation in future markets	9 hrs	1	2,5	1
Unit -3	Role and performance of Commodity Exchange: Transactions and Settlement,Advantages and Disadvantages to various market participants- Role of banks as intermediaries in the commodity derivative markets-National Commodity Exchanges: NCDEX,MCX,NMCE,ICEX, ACE and regional exchanges;Myths and Misconceptions about commodity Exchange; Portfolio Diversification: meaning,benefits - Relation between commodities, bonds and equities;	8 hrs	2	3,5	1
Unit-4	Establishment and constitution of Forward Market Commission (FMC)-Forward Contract (Regulation) Act 1952 and Rules 1954. Securities and Exchange Board of India (SEBI): Functions and Power-Merger of FMC and SEBI: Causes, Process and its benefits; Fundamental Vs Technical analysis – construction and interpretation of charts and chart patterns for analyzing the market trend – Market indicators back testing;	12 hrs	2	5,6	2

	Case Study : IFFCO- Cooperatives as an Aggregator;				

Reference Books:

1. Acharya, S. S. and Agarwal, N.L. 2004. *Agricultural Marketing in India*. 4th Ed. Oxford & IBH.
2. Sridhar, A. N., 2008, *Future and Options – Equities and Commodities*. Third edition, Shroff Publishers and distributors (P) Ltd.
3. Mary B. Holihan, 2008, *Complete Guide to Investing in Commodity Trading and Futures: How to Earn High Rates of Returns Safely.* Atlantic publishing group, Florida.

Smita Diwase, 2017, *Indian Agriculture and Agri-Business Management.* 3rd Edition, Krishi Resource Management Network.

Course Code & Title: PGDABM 543 - Rural And Agricultural Marketing

Course Description: This course is designed to sensitize students on the nuances of rural marketing environment and develop capabilities for clearly identifying, complex, real life rural and agricultural marketing problems in a holistic perspective.

Course Objectives:

1. To give the students an understanding of the opportunities and challenges in rural and agricultural marketing
2. To impart the students a clear foundation of professional *rural and agricultural* marketing skills & knowledge,
3. To apprise students regarding assessment of rural and agricultural market potential for products and services and
4. To impart the students to evaluate different marketing strategies used in rural and agricu marketing

Course Outcomes:

1. Students will be able to explore the interest towards rural and agricultural marketing.
2. Students will understand and appreciate the structure and working of the rural and agricultural marketing system in India.
3. Students will learn how rural and agricultural marketing system affects the farmers, consumers and intermediaries.
4. Students will learn the dynamic future manager and entrepreneur one should be aware of challe and opportunities in the area of rural and agricultural marketing.

Course Pre-requisites: Basics of Rural and Agricultural Marketing

Pedagogy: Direct Method and ICT

LTP: 2:01:0

Course type: SC

Contact Hours: 38 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO
Unit-1	Introduction to Rural Marketing: meaning - definition and Scope of Rural Marketing, Characteristic features, scope of rural marketing, nature, importance, flow of goods frame work and classification of rural markets, Rural vs. Urban Markets, classification of rural consumer, Rural Retail outlets, process, problems and strategies in Rural Marketing, reasons for increase in the importance of rural markets, profile of rural consumer, Rural Markets – becoming important destination for	10 hrs	1,2	1, 2, 5	1

	marketing companies, major opportunities available in rural market, strategies for improving business in rural India. **Case Study 1: Hero Honda's Rural Marketing Initiatives in India**				
Unit-2	Rural Marketing Environment – meaning, features, elements and factors affecting rural marketing environment, rural consumer behaviour – profile and classification of rural consumer, Basis, approaches & importance of rural m segmentation, factors affecting growth of rural market, 4A's of rural marketing, rural marketing strategy, E – initiatives in rural India, ICT initiatives in rural market, Rural Market Research Process, eight step model, sources and methods of data collection in marketing research, types of rural studies, four types marketing research techniques, Participatory Rural Approach (PRA), SHGs, ITC e- choupal, Do's and Don'ts in rural market research, potential in rural market, market size and structure of rural market, influences in rural marketing, Government initiatives in rural market. **Case study 2: Patanjali**	10 hrs	1, 2	2, 4, 5	1, 3
Unit -3	Introduction to Agricultural Marketing – Concept, definition, scope and subject matter, new role of Agricultural Marketing, differences in Agricultural and manufactured goods, Characteristics of Agricultural commodities, importance of Agricultural Marketing, producers surplus – meaning and types – marketable surplus and marketed surplus, Market information (MI) – meaning, importance and types of MI, collection and dissemination of MI, suggestions for improvement in MI, IT applications in Agricultural Marketing. **Case study 3: Right crop for the right market is the key – Success story of Mr. Muthu**	8 hrs	2, 4	3,5	1
Unit-4	Agricultural Input Marketing – Seeds – importance and types of seeds, difference between seed and grain, production & consumption, export potential, policy initiative in seed sector, private & public seed companies, Fertilizers – meaning & types, initiatives by Government, Biofertilizers – meaning and types, advantages & constraints, Pesticides – meaning & classification, benefits & hazards of pesticides, Government regulations, IPM (Integrated Pest Management) – meaning & importance, benefits, IPM implementation, Electricity – problems with electricity in Agriculture, Farm Mechanization – meaning, Tractors and Power tillers – importance, advantages	10 hrs	2, 4	4, 5,6	2, 3

	& dis advantages, Irrigation – importance and methods of irrigation, Administered prices. **Assignment and Presentation**				

Reference books:

1. Acharya, S. S. and N. L. Agarwal, 2011, *Agricultural Marketing in India.* Fifth Edition, Oxford & IBH Publishing Co Pvt. Ltd. New Delhi.
2. Krishnamacharyulu and Lalitha Ramakrishnan, 2011, *Rural Marketing: Texts and Cases*, Second Edition, Pearson Education, New Delhi.
3. Gopalaswamy, T. P., 2009, *Rural Marketing- Environment, Problems and Strategies*, Vikas Publishing house Pvt. Ltd., New Delhi.
4. Gunaseelan, G. and Smitha, N. S., 2020, *Rural and Green Marketing*, 1st Edition, Thakur Publication, Bengaluru.

Course Code &Title: PGDABM 544 - International Agribusiness Management

Course Description: This course is designed to sensitise students with respect to trading goods, services, and technology across countries, offering businesses access to bigger markets and new growth opportunities. Exports facilitate international trade and stimulate domestic economic activity by creating employment, production, and revenues.

Course Objectives:

1. To provide in-depth knowledge and skills needed for international agribusiness management including international trade and agricultural exports.
2. To build knowledge on the key aspects of export / import management, knowhow on international agribusiness, market and buyer identification.
3. To know about new foreign trade policy, changing domestic regulatory framework on farm bills and its impact on exports, and tools for enhancing price competitiveness toward surviving in agribusiness in light of limited and reduced global demand.

Course Outcome:

1. Students will be able to develop customized agribusiness plans and market entry strategies.
2. Students will be able to understand countries to expand their markets and access goods and services
3. Students will learn the planning, organizing, coordinating and control export efforts or activities to achieve desired export objectives.
4. Students will be able to understand international product decision and product adaptation, entry mode in foreign markets choosing appropriate marketing channels, export pricing methods, social media/digital marketing and finally establishing their own brand.

Course Pre-requisites: Basics of Agribusiness Environment and policy

Pedagogy: Direct Method and ICT

LTP: 3:01:0

Course type: SC

Contact Hours: 38 Hours

Units	Detailed Syllabus	CH	CO	PO	PSO

Unit-1	International trade- basic concepts, importance, international trade theories – country-based trade theories, theory of absolute advantage, theory of comparative advantage, Heckscher-Ohlin theory, Porter's national competitive advantage theory, Free trade VS. Protectionism, Export regulations and procedure, External Trade in Agricultural Commodities – Balance of Trade and Balance of payment, components of balance of payment, importance of balance of payments, Terms of trade, Trade policy- latest trade policy measures.	10 hrs	1	1, 2, 5	1
Unit-2	Role of Agriculture in Indian Economy, GATT- WTO and its implications for Indian economy in general and agriculture sector in particular, WTO Agreement on Agriculture, Market access commitment – Green subsidy, Amber subsidy, Domestic subsidies, Export subsidies and SPS measures, Trade related intellectual property rights (TRIPS), Impact of WTO on Indian Agriculture and trade, WTO and high potential Agriculture, Special focus initiatives, Special Economic Zones (SEZs). **Case Study 1: Agreement of WTO for developing countries**	10 hrs	1, 2	2, 4, 5	1, 3
Unit -3	Export and Imports performance of Indian agriculture, Trade Liberalization, economic integration subsidies, green and red boxes, Commodity board – National Horticulture board-objectives, organizational structure, Coffee Board –role and functions, Spice Board – functions, Rubber Board –functions, Tobacco Board – functions, Coconut Development Board – functions and thrust areas, Role of APEDA in facilitating export of farm products. **Case Study 2: Special Problems of Special Economic Zones**	8 hrs	2, 4	3,4,6	1,2
Unit-4	Export Competitiveness, Export regulations and procedure – importance to study export regulations, Export Management – Need for Export management, Exim policy, Foreign Exchange Management Act (FEMA), Export finance, New Export promotion Schemes, Agri-Export Zones, EXIM Bank-objectives, functions, forfeiting scheme, Composition of Trade, import composition, Direction of trade, Guide to Export – A dozen steps to Export, Importer Exporter Code (IEC), Benefits of IEC, Registration cum membership certificate, Phytosanitary certificate, Support schemes for Exports, Key challenges of international trade in Agriculture. **Assignment and Presentation**	10 hrs	2, 3	4, 5,6	2,3

Reference Books:

1. Banumathy, V. and S. Ravichandran, 2011, *Agricultural Marketing, Finance and Export-import of Agricultural Commodities,* Aman Publishing House, Meerut, UP.
2. Michael Reed, 2016, *International Trade in Agricultural Products,* Amazon Digital Services.
3. Francis Cherunilam, 2019, *International Trade and Export Management*. Himalaya Publishing House, New Delhi.
4. Joginder Singh and R. K. Lekhi, 2018, *Agricultural Marketing, Trade and Prices,* Kalyani Publishers, New Delhi.
5. Justin Paul, Rajiv Aserkar., 2013, *Export Import Management,* Second Edition, Oxford, New Delhi.

Course Code & Title: PGDOM551 – Advanced Operations Research

Course Description:

This course addresses the challenges posed by the information overload in the field of behavioral operations and management. It aims to explore and resolve operational and managerial issues through the application of computer science concepts and methods. The course emphasizes innovative ideas, techniques, and scientific knowledge tailored to enhance decision-making, human resource management, and organizational behavior in the context of modern operational environments

Course Objectives:

1. Students will demonstrate a comprehensive understanding of the foundational principles and key concepts in Behavioral Operations Management, integrating insights from behavioral science and traditional operations management.
2. Develop a deep understanding of how perception, motivation, and performance psychology influence decision-making in business contexts.
3. Develop emotional intelligence and resilience through experiential learning, understanding how emotions influence decision-making and learning outcomes.
4. Cultivate a global perspective by examining how advanced topics and future trends in constraint mismanagement impact organizations on a global scale.

Course Outcomes:

CO1: Understanding interdisciplinary knowledge by integrating principles from behavioral and operations management, demonstrating a holistic understanding of management concepts.
CO2: Develop a comprehensive understanding of gamification principles and their impact on experiential learning.
CO3: Acquire hands-on experience applying theoretical concepts in a dynamic business simulation environment, enhancing decision-making skills in real-world scenarios.
CO4: Evaluate the practicability of incorporating behavioral insights into operations management through real-world case studies

Course Pre-requisites: Foundational knowledge in management, operations, and business ethics for effective engagement in Behavioral Operations Management.

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: SC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Foundations of Behavioral Operations Management** The Background of Behavioral Operations Management. The role of Human Behavior in decision making- role of Psychology and Sociology in Operations. Introduction to temporal choices	**6 hours**	**1**	**1**	**1**
Unit-2	**Introduction to Gamified Learning, Adaptive Losses and Iterative Growth:** The virtuous cycles of experimental learning, The Wait Game or Buy Game, developing strategies for	**8 hours**	**2**	**4**	**2**

	emotional resilience. A game of Gains and Losses and Equity- positive effect of loss, iterative growth in experiential learning.				
Unit-3	**Enhancing Work Design: The Dynamics of Perception, Motivation, and Performance in Business Simulation Games** Understanding Process, Perception and motivation in Work Design. Considerations for aligning decision-making strategies with individual and team motivations. Applying theoretical concepts in a practical setting through business simulation games.	**10 hours**	**3**	**1**	**1**
Unit-4	**Advanced Topics and Emerging Trends** Future of Work: Behavioral Operations in the Digital Era. Factors contribute to the variability of constraints in operational settings. Pitfalls and mismanagement scenarios in dealing with constraints..	**10 hours**	**4**	**5**	**3**

Reference Books:

1. Elliot Bendoly, Wout Van Wezel, Daniel G. Bachrach, The Handbook Of Behavioural Operations Management, Oxford University Press, 2015
2. R. Dan Reid, and Nada R. Sanders, Operations Management, Blinder Ready Version: An Integrated Approach, 6th Edition, Wiley Ninder Version, 2015
3. Jones, Nigel Slack, and Robert Johnston, Pearson Publication, Operations Management, 8th Edition, Alister Brandon, 2016
4. Behavioral Operations Management" by David J. Ketchen and Mark P. Sharfman
5. "Behavioral Operations in Planning and Scheduling" by Torben Tambo
6. "The Behavioral Foundations of Strategic Management" by Michael G. Jacobides, Joseph T. Mahoney, and Anita M. McGahan.

Course Code & Name: PGDM552 – Behavioral Operations and Management

Course Description:

This course addresses the challenges posed by the information overload in the field of behavioral operations and management. It aims to explore and resolve operational and managerial issues through the application of computer science concepts and methods. The course emphasizes innovative ideas, techniques, and scientific knowledge tailored to enhance decision-making, human resource management, and organizational behavior in the context of modern operational environments

Course Objectives:

1. Students will demonstrate a comprehensive understanding of the foundational principles and key concepts in Behavioral Operations Management, integrating insights from behavioral science and traditional operations management.
2. Develop a deep understanding of how perception, motivation, and performance psychology influence decision-making in business contexts.
3. Develop emotional intelligence and resilience through experiential learning, understanding how emotions influence decision-making and learning outcomes.
4. Cultivate a global perspective by examining how advanced topics and future trends in constraint mismanagement impact organizations on a global scale.

Course Outcomes:

CO1: Understanding interdisciplinary knowledge by integrating principles from behavioral and operations management, demonstrating a holistic understanding of management concepts.
CO2: Develop a comprehensive understanding of gamification principles and their impact on experiential learning.
CO3: Acquire hands-on experience applying theoretical concepts in a dynamic business simulation environment, enhancing decision-making skills in real-world scenarios.
CO4: Evaluate the practicability of incorporating behavioral insights into operations management through real-world case studies

Course Pre-requisites: Foundational knowledge in management, operations, and business ethics for effective engagement in Behavioral Operations Management.

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: SC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	**Foundations of Behavioral Operations Management** The Background of Behavioral Operations Management. The role of Human Behavior in decision making- role of Psychology and Sociology in Operations. Introduction to temporal choices	**6 hours**	**1**	**1**	**1**
Unit-2	**Introduction to Gamified Learning, Adaptive Losses and Iterative Growth:** The virtuous cycles of experimental learning, The Wait Game or Buy Game, developing strategies for	**8 hours**	**2**	**4**	**2**

	emotional resilience. A game of Gains and Losses and Equity- positive effect of loss, iterative growth in experiential learning.				
Unit-3	**Enhancing Work Design: The Dynamics of Perception, Motivation, and Performance in Business Simulation Games** Understanding Process, Perception and motivation in Work Design. Considerations for aligning decision-making strategies with individual and team motivations. Applying theoretical concepts in a practical setting through business simulation games.	**10 hours**	**3**	**1**	**1**
Unit-4	**Advanced Topics and Emerging Trends** Future of Work: Behavioral Operations in the Digital Era. Factors contribute to the variability of constraints in operational settings. Pitfalls and mismanagement scenarios in dealing with constraints. Impact of behavioral considerations on the overall practicability of operational strategies.	**10 hours**	**4**	**5**	**3**

Reference Books:

1. Elliot Bendoly, Wout Van Wezel, Daniel G. Bachrach, The Handbook Of Behavioural Operations Management, Oxford University Press, 2015
2. R. Dan Reid, and Nada R. Sanders, Operations Management, Blinder Ready Version: An Integrated Approach, 6th Edition, Wiley Ninder Version, 2015
3. Jones, Nigel Slack, and Robert Johnston, Pearson Publication, Operations Management, 8th Edition, Alister Brandon, 2016
4. Behavioral Operations Management" by David J. Ketchen and Mark P. Sharfman
5. "Behavioral Operations in Planning and Scheduling" by Torben Tambo
6. "The Behavioral Foundations of Strategic Management" by Michael G. Jacobides, Joseph T. Mahoney, and Anita M. McGahan

Course Code & Title: PGDOM 553 – Supply Chain Analytics

Course Description: This course provides a comprehensive study of supply chain and logistics management, examining the end-to-end processes involved in the movement and delivery of goods and services. Participants will explore key concepts, strategies, and technologies used in optimizing supply chain operations. Emphasis will be placed on developing analytical and managerial skills to enhance efficiency, reduce costs, and improve overall supply chain performance.

Course Objectives:

1. Enable students to comprehend and articulate the importance of aligning supply chain strategies with organizational goals for enhanced business performance.
2. Equip students with the skills to apply logistics planning and optimization techniques for designing efficient logistics systems that improve supply chain performance.
3. Teach students to analyze the impact of logistics planning and assess inventory management strategies using demand forecasting to maintain optimal inventory levels.
4. Enable students to create strategies that reduce environmental impact and improve overall sustainability within the supply chain, incorporating best practices in environmental management.

Course Outcomes:

CO1. Students will be able to summarize the importance of aligning supply chain strategies with organizational goals and articulate how strategic alignment enhances overall business performance.

CO2. Students will be able to apply logistics planning and optimization techniques, demonstrating proficiency in designing efficient logistics systems that improve supply chain performance.

CO3 : Students will be able to evaluate the impact of logistics planning on overall supply chain performance and assess inventory management strategies using demand forecasting to ensure optimal inventory levels.

CO4. Students will be able to design strategies for reducing environmental impact and improving overall sustainability within the supply chain, incorporating best practices in environmental and sustainability management.

Course Pre-requisites: prior knowledge of basic concepts of Supply Chain and Logistics Management

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Introduction to Operations Management concepts; Differences between Services & Goods; Role of Operations Manager; Introduction to SCM.	**5 hours**	**1**	**1**	**1**
Unit-2	Demand Forecasting : Types of Forecasting - Qualitative and Quantitative. Types of Supply Chain Management – Participants of Supply Chain & Sourcing Decisions.	**10 hours**	**2**	**6**	**2**
Unit-3	Introduction to Materials Management - Purchasing Concept; Vendor Rating & Value Analysis; Role of Purchase Manager; P2P Cycle; Make or Buy Decisions.	**10 hours**	**3**	**6**	**1**
Unit-4	Inventory Control - Economic Order Quantity; EOQ with Quantity Discounts; Inventory Management Techniques; Risk Management & Concept of Material Handling.	**7 hours**	**4**	**4**	**3**
Unit 05	Packaging; Warehousing & Distribution. Transportation : Fundamentals & Planning; Green Logistics; Reverse Logistics & Supply Chain Sustainability.	**7 hours**	**4**	**4**	**3**

REFERENCES

1. **Operations Management Sustainability & Supply Chain Management :** Jay Heizer and Barry Render - Pearson Publication.

2. **Exploring the SUPPLY CHAIN (Theory & Practice) -** Upendra Kachru

Course Code: PGDOM 554 – Advanced Quality Metrics

Course Description: This course offers an in-depth exploration of advanced quality metrics and their applications in quality management. Students will delve into sophisticated statistical methods, data analytics techniques, and performance metrics used to evaluate and improve product and service quality. Emphasis will be placed on understanding the principles of Six Sigma methodologies, statistical process control (SPC) techniques, design of experiments (DOE), reliability engineering, and Total Quality Management (TQM) principles. Through lectures, case studies, and hands-on exercises, students will develop the knowledge and skills necessary to analyze complex quality data, optimize processes, and drive continuous improvement initiatives.

Course Objectives:

1. Understand the principles and applications of advanced quality metrics in quality management.
2. Apply Six Sigma methodologies and DMAIC process for process improvement and variation reduction.
3. Utilize statistical process control (SPC) techniques to monitor and control processes effectively.
4. Design and analyze experiments using design of experiments (DOE) techniques for process optimization.
5. Evaluate product and process reliability using reliability engineering principles and metrics.
6. Apply Total Quality Management (TQM) principles and advanced quality management practices to drive continuous improvement.

Course Outcomes:

1. To be able to recall and describe the principles and methodologies of Six Sigma, SPC, DOE, reliability engineering, and TQM.
2. To be able to apply Six Sigma methodologies and DMAIC process to analyze and improve processes.
3. To evaluate the effectiveness of advanced quality metrics and methodologies in improving product and service quality.
4. To be able to develop and implement quality management strategies tailored to organizational needs and objectives.
5. To be able to create actionable insights and recommendations based on analysis of advanced quality metrics and data.

Course Pre-requisites:

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Overview of advanced quality metrics and their importance in quality management-Evolution of quality management systems and the role of advanced metrics-Introduction to Six Sigma methodologies and DMAIC (Define, Measure,	**5 hours**	**1**	**1**	**1**

	Analyze, Improve, Control) process-Statistical concepts and tools for advanced quality measurement				
Unit-2	Advanced statistical process control (SPC) methods for monitoring and controlling processes-Control chart selection and interpretation for variables and attributes data-Multivariate control charts and their applications in complex processes. Process capability analysis and performance indices (Cp, Cpk, Pp, Ppk)	**10 hours**	**2**	**6**	**2**
Unit-3	Introduction to design of experiments (DOE) and its applications in quality improvement-Factorial experiments, response surface methodology (RSM), and optimization techniques-Reliability engineering principles and techniques,Reliability metrics, mean time between failures (MTBF) and mean time to repair (MTTR).	**10 hours**	**3**	**6**	**1**
Unit-4	Principles of Total Quality Management (TQM) and its evolution in modern organizations.Quality function deployment (QFD) and failure mode and effects analysis (FMEA). Advanced quality management practices, including Lean Six Sigma, Kaizen, and advanced quality metrics with organizational strategy.	**7 hours**	**4**	**4**	**3**

REFERENCES

1. The Six Sigma Handbook" by Thomas Pyzdek and Paul Keller
2. "Design and Analysis of Experiments" by Douglas
3. C. Montgomery "Reliability Engineering: Theory and Practice" by Alessandro Birolini.

Course Code: PGDOM 591 – Procurement, Storage and Warehouse Management

Course Description: This course provides a comprehensive understanding of procurement, warehousing, and storage management systems. Students will learn about the strategic role of procurement, efficient warehousing processes, inventory control methods, and advanced technologies in storage and logistics. Emphasis will be placed on optimizing operations, cost management, and enhancing supply chain performance.

Course Objectives:

1. Understand Procurement Fundamentals: Students will learn the objectives, principles, and evolution of procurement, focusing on strategic value, procurement cycles, and supplier selection processes.
2. Grasp Warehousing Concepts and Processes: Students will explore the roles, types, functions, and processes of warehousing, including e-commerce warehousing, stock management, and value-adding services.
3. Manage Storage and Inventory Systems: Students will study storage management, inventory classification, stock control methods, and the implementation of Warehouse Management Systems (WMS).
4. Apply Warehouse Technology and Cost Management: Students will learn about advanced storage technologies, equipment, cost analysis, and warehouse information systems to enhance efficiency and performance.

Course Outcomes:

CO1: Analyze Procurement Strategies: Students will be able to analyze procurement objectives, principles, and cycles, applying strategic approaches to supplier selection and bidding processes.

CO2: Implement Warehousing Processes: Students will be able to implement effective warehousing processes, including receiving, storage, picking, and dispatching, tailored to various types of warehouses.

CO3: Manage Inventory and Storage Systems: Students will be able to manage inventory effectively using classification and control methods, and evaluate the implementation of Warehouse Management Systems (WMS).

CO4: Utilize Warehouse Technologies and Optimize Costs: Students will be able to utilize advanced storage technologies and equipment while managing warehouse costs and improving return on investment through performance management and outsourcing decisions.

Course Pre-requisites: Basic Knowledge in supply chain management.

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Objectives of Procurement System, Principles of Procurement, History of procurement function: from	**10 hours**	**1**	**1**	**1**

	administrative to strategic, value added role, Procurement Cycle, Procurement Planning, Purchasing Mix: Six Rights, Selecting the right supplier, Source of information and process, Supplier appraisal/vendor capability, Bidding process.				
Unit-2	Introduction to Warehousing Concepts -Role of warehouse-types of warehouse- warehouse location- Need for warehousing- Supply chain trends affecting warehouse –Warehouse functions- Role of warehouse manager-Warehouse process: e-commerce warehouse- Receiving and put away- Warehouse process – pick up preparation-Receiving - Pre-receipt - In- handling - Preparation - offloading - Checking - Cross-docking - Quality control - Put-away - Pick preparation - Pick area layout - Picking strategies and equipment -order picking methods - Warehouse processes- Replenishment to dispatch- Value adding services - Indirect activities - Stock management - Stock or Inventory counting - Perpetual inventory counts - Security - Returns processing – Dispatch.	**10 hours**	**2**	**6**	**2**
Unit-3	Strorage Management system – Storage Inventory Management – Functions of storage & Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system- Warehouse Management Systems (WMS) - choosing a WMS-the process implementation-cloud computing- Warehouse layout-Data collection-space calculation-aisle width- finding additional space.	**10 hours**	**3**	**6**	**1**
Unit-4	Storage and Warehousing Information system - Storage Equipment: storage option - shuttle technology - very high bay warehouse - warehouse handling equipment - vertical and horizontal movement - Automated Storage/ Retrieval System (AS/RS)-specialised equipment- Technical advancements- Resourcing a warehouse-	**9 hours**	**4**	**4**	**3**

	warehouse costs- Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing Information System (WIS)- Performance management- outsourcing decisions.				

REFERENCES

Text Books:

1. GWYNNE RICHARDS (2014) Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited.

2. DAVID E. MULCHY & JOACHIM SIDON (2008) A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications

References

1. Bowersox, D.J., Closs, D.J., Cooper, M.B., & Bowersox, J.C. (2013). Supply Chain Logistics Management. (4 th ed.), McGraw Hill/Irwin.

2. Arnold, J.R., Chapman, S.N. (2012). The Introduction to Materials Management. (7 th ed.), Prentice-Hall. Coyle, J.J., Jr. Langley, C.J., Novack, R.A, & Gibson, B.J. (2013). Managing Supply Chains: A Logistics Approach. (9 th ed.), McGrawHill. Edward, F. (2002).

3. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill. Muller, M. (2011). Essentials of Inventory Management. (2 nd ed.), American Management Association.

Course Code: PGDOM 592 – International Logistics and Management

Course Description: This course provides an in-depth understanding of employee relations, including the evolution, scope, and contemporary practices, with a focus on the roles of government, management, and trade unions. It covers key labor laws, dispute resolution mechanisms, and grievance handling procedures. Additionally, the course explores Employee Relations Management (ERM) strategies, conflict resolution, and techniques for fostering a positive work culture.

Course Objectives:

1. Understand International Trade and Logistics: Students will learn the importance, trends, and components of international trade, focusing on logistics subsystems and documentation for global trade.
2. Explore Marketing and Transportation Modes: Students will study customer-focused marketing, international marketing channels, roles of clearing agents, and the characteristics and costs of various transportation modes.
3. Grasp Transportation and Freight Basics: Students will understand transportation principles, multimodal transport systems, air transport, and freight structure, focusing on cost and rate considerations.
4. Learn Containerization and Inventory Management: Students will explore the concepts of containerization, chartering, inventory management, and packaging, including the roles of ICDs, packaging designs, and marking for transportation.

Course Outcomes:

CO1: Analyze International Trade and Logistics Components: Students will understand global trade trends, logistics subsystems, and documentation required for efficient international trade operations.

CO2: Evaluate Transportation and Marketing Strategies: Students will assess different transportation modes, their costs, and customer-focused marketing channels for effective international distribution.

CO3: Apply Transportation Principles and Freight Management: Students will apply knowledge of multimodal transport systems, air cargo tariffs, and freight structures to optimize transportation efficiency.

CO4: Implement Containerization and Inventory Management Techniques: Students will manage containerization processes, chartering options, inventory control, and effective packaging strategies for international shipping.

Course Pre-requisites: Basic Knowledge in supply chain management.

Pedagogy: ICT and Digital support

LTP: 2:1:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	International Trade: Need and Importance – Recent Trends in World Trade – Leading players – India's	**10 hours**	**1**	**1**	**1**

	Foreign Trade – Commodity Composition and Destination - Overview of International Logistics- Components, Importance, Objectives; Logistic Subsystem;- Integrated Logistics; - Barrier to Internal Integration – Logistics Documents for International Trade.				
Unit-2	Marketing and Logistics Customer Focused Marketing; International Marketing: International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost Characteristics. Basics of Transportation Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice	**11 hours**	**2**	**6**	**2**
Unit-3	Containerization and Chartering Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.	**8 hours**	**3**	**6**	**1**
Unit-4	Inventory Management and Packaging Inventory Management: Introduction, Characteristics, Functionality, Components, Planning; Packaging and Packing: Labels, Functions of Packaging, Designs, Kinds of Packaging; Packing for Transportation and Marking: Types of Boxes, Container, Procedure, Cost, Types of Marking, Features of Marking.	**9 hours**	**4**	**4**	**3**

REFERENCES

1. International Marketing by SakOnkvisit& John J. Shaw, Publisher: Prentice Hall of India
2. International Marketing by Gupta and Varshing, Publisher: Sultan Chand and Sons
3. Logistic Management and World Sea Borne Trade by MultiahKrishnaveni, Publisher: Himalaya Publication
4. Logistic and Supply Chain Management by Donald J. Bowerson, Publisher: Prentice Hall of India.

Course Code: PGDOM 593 – Distribution Management for Global Supply Chain

Course Description: This course provides an in-depth understanding of physical distribution, focusing on distribution channels, control and evaluation processes, and organizational structures. Students will learn about material handling, logistics outsourcing, and the role of logistics in supporting distribution channels. Emphasis is placed on optimizing distribution efficiency and managing channel relationships effectively.

Course Objectives:

1. Understand Physical Distribution and Trends: Students will learn the need, functions, and marketing forces impacting physical distribution, along with current distribution trends.
2. Analyze Distribution Channels and Intermediaries: Students will explore the roles, structures, and functions of distribution channels, including the selection, motivation, and evaluation of channel intermediaries.
3. Implement Distribution Control and Evaluation: Students will understand distribution control processes, organizational structures, and methods for managing and resolving distribution conflicts.
4. Explore Material Handling and Logistics Support: Students will study material handling techniques, logistics outsourcing options, and the role of logistics in enhancing distribution channel efficiency

CO1: Analyze Physical Distribution Needs and Trends: Students will evaluate the functions of physical distribution and understand the impact of marketing forces on distribution systems.

CO2: Design and Optimize Distribution Channels: Students will develop skills to design distribution channels, select appropriate intermediaries, and manage channel relationships effectively.

CO3: Implement Distribution Control Measures: Students will apply distribution control techniques, set performance standards, and take corrective actions to optimize distribution efficiency.

CO4: Evaluate Material Handling and Logistics Strategies: Students will understand material handling guidelines, logistics outsourcing, and the role of logistics in supporting distribution

Course Pre-requisites: Basic Knowledge in supply chain management.

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO
Unit-1	Need for physical distribution – functions of distribution –marketing forces affecting distribution. The distribution concept – systems perspective. Physical distribution trends.	**10 hours**	**1**	**1**	**1**

	Channels of distribution: role of marketing channels – channel functions – channel structure –designing distribution channel – choice of distribution channels – factors affecting. Intermediaries: functions of intermediaries – types of intermediaries – variables in selecting channel members – motivating – training – evaluating channel members – modifying channel arrangements.				
Unit-2	Distribution control & Evaluation: Distribution control – stages of control process – standards & goals– performance report - measurement – monitoring – corrective action. Organization for Distribution: Distribution Organization structure – Private & Public organizations - conflict resolution – rising costs& need for control – complexities of physical distribution.	**11 hours**	**2**	**6**	**2**
Unit-3	Role of Material Handling in Logistics – Material Handling Guide lines – Material Handling Equipment and Systems – Automated Material Handling, Benefits of Logistics Outsourcing – Third Party Logistics – Fourth Party Logistics – Value Added Services	**8 hours**	**3**	**6**	**1**
Unit-4	Role of Logistics in Distribution Channel – Distribution Channel Structure – Logistic Requirements of Channel Members – Logistics Support to Distribution Channel. Reverse Logistics – Collaboration with Third-Party Logistics (3PL) Providers – Impact of E-commerce on Distribution Logistics.	**9 hours**	**4**	**4**	**3**

Text Books:

1. Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', Prentice Hall of India
2. D K Agrawal, 'Distribution and Logistics Management: A Strategic Marketing Approach', Macmillan publishers India
3. Alan Ruston, Phil Crouches, Peter Baker, 'The Handbook of Logistics and Distribution Management kogan page
4. Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', prentice hall off India 5. D K Agrawal, 'Distribution and Logistics Management: A Strategic Marketing Approach', Macmillan publishers India

Course Code: PGDOM 594 – Containerisation and Multimodal Transport

Course Description: This course provides a comprehensive understanding of containerization, cargo handling, and multimodal transportation systems. Students will learn about different types of containers, cargo stowage, and safety regulations, as well as the principles and operational aspects of multimodal transport. Emphasis is placed on international conventions, compliance, and efficient logistics strategies.

Course Objectives:

1. Understand Containerization Concepts: Students will learn the basics of containerization, including types, dimensions, planning considerations, and equipment used for both containerized and non-containerizable cargo.
2. Comprehend Cargo Handling and Safety: Students will explore the stowage of cargo, handling equipment, packaging types, marking, and safety regulations for dangerous cargo, including the IMDG code.
3. Grasp Multimodal Transportation Systems: Students will understand the principles of multimodalism, including trade routes, intermodal systems, and factors influencing the development and strategy of multimodal transportation.
4. Analyze Multimodal Operations and Regulations: Students will examine the operational aspects of different transport modes and understand the international conventions and liability regulations governing multimodal transport and the handling of specific cargo types.

Course Outcomes:

CO1: Analyze and Apply Containerization Methods: Students will evaluate container types and planning considerations to manage both containerizable and non-containerizable cargo.

CO2: Implement Cargo Handling and Safety Standards: Students will apply appropriate stowage, handling, and safety practices, adhering to international regulations for various cargo types, including dangerous goods.

CO3: Optimize Multimodal Transportation: Students will apply principles of multimodal transport to optimize trade routes and interface different transport modes effectively.

CO4: Evaluate Compliance with International Conventions: Students will understand and apply international regulations and conventions to manage liability, safety, and operations in multimodal transport.

Course Pre-requisites: Basic Knowledge in supply chain management.

Pedagogy: ICT and Digital support

LTP: 3:0:0

Course type: HC

Contact Hours: 39

Units	Detailed Syllabus	Contact hours	CO	PO	PSO

Unit-1	Basic concepts of Containerisation :Meaning - Major Container Trades - Container Operators - Container Ships - Terminal- Consideration of Container Terminal Planning - Container Distribution – Container types - ISO Container Dimension by types - Non- Containerisable cargo - Features of Containerization - Equipment for non-containerisable cargo.	**10 hours**	**1**	**1**	**1**
Unit-2	Cargos: International Trade Distribution - Stowage: Meaning - Stowage of cargo – Factor Consideration - Types of cargo - Characteristics - Cargo and Container handlingequipment - Types of Packing-Marking of cargo - Dangerous Cargo - IMDG Code –Classes. Multi modalism: Multi-modal Trade Routes - Evolution - Basic Intermodal System - Modal Interface Factors outline why shipper favour Multi-modalism - Factors in Development Features -Multi-Modalism Strategy – Components.	**10 hours**	**2**	**6**	**2**
Unit-3	Physical multi modal operations: Liners - Tramps - Specialized Vessels - Terms - Road transport vehicle – Road Transport Weight and Measurement - Rail Transport Vehicle and Equipment - AirTransport - Ports - LCL - FCL - NVOCC - Freight forwarders - Consolidator - ICD CFS- Free Trade Area - SEZ - Factors affecting mode and route choice.	**10 hours**	**3**	**6**	**1**
Unit-4	Conventions relating to multimodal transport: Cargo Liability Convention: International Conventions relating to Bill of Lading (The Hague and Hague/Visby Rules (Appendix 8) - Hamburg Rule - Convention relating to Through Transport operation by Land, Rail, Air - Conventions relation to Dangerous Cargo - Carriage of Perishable Goods - International Convention for safe containers1972 (CSC).	**hours**	**4**	**4**	**3**

Text Books:

Sixth Trimester Dissertation format

The chapters may broadly be divided into five as follows:

Chapter	CONTENTS	% of Total Length
1	Introduction	15%
2	Review of literature and Research design	10%
3	Profile of the Selected Organization and Respondents	20%
4	Data Analysis and Interpretation	40%
5	Findings, conclusions and Recommendations	15%
	Bibliography	
	Annexures	

The Chapters mentioned above should have the following subdivisions:

Chapter 1: Introduction: Introduction includes

- Industry Profile
- Theoretical background of the study
- Importance of the topic
- Need to study the topic

Chapter 2: Review of Literature and Research Design

- Review of Literature and Gaps
- Statement of the Problem
- Scope of the Study
- Objectives of the Study
- Hypotheses (if any)
- Sampling
- Tools for Data Collection
- Data Analysis
- Limitations of Study

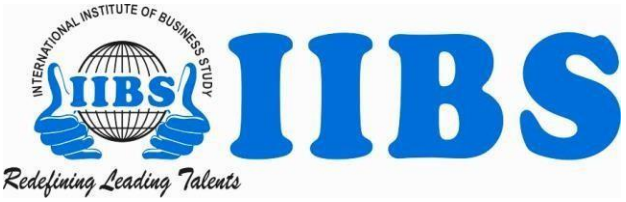
Chapter 3: Profile of the Selected Organization and Respondents

Chapter 4: Data Analysis and Interpretation

Chapter 5: Summary of Findings, Conclusions and Suggestions

- Summary of Findings
- Conclusion
- Suggestions to the Organization

Appendix 1



Registration Form

1. Name of the Student :

2. Name of the Organization:

3. Name and details of Co Guide in the Organization

4. Proposed dissertation area : ABM / HR / Marketing / Finance / BA / Operations

5. Proposed dissertation topic :

6. Write a brief note on your topic: (Minimum 100 words)

Student's Signature:

Approved or Disapproved If it is disapproved, the reasons for revision

……

…..

Faculty Guide's Signature with date

Appendix 2

Format of Synopsis

- The synopsis should have minimum of 250 words
- The first page carries the Name of the student, Registration Number, and Title of dissertation.
- The subsequent pages should contain:
    - Title of the study
    - Need for the Study
    - Statement of the problem
    - Objectives
    - Sampling
    - Sources of Data
    - Tools for data collection
    - Plan of Analysis

The synopsis should be neatly typewritten in A4 Size paper with 1 inch margin on all the sides. This has to be signed by the student and Faculty Guide

APPENDIX 3

PGDM Dissertation PROGRESS REPORT format

Sl. No.	Particulars	
1	Name of the Student	
2	Registration Number	
3	Name of College Guide	
4	Name and contact no of the Co-Guide/External Guide (Corporate)	
5	Title of the Dissertation	
6	Name and Address of the Company/Organisation where dissertation undertaken with Date of starting Dissertation	
7	Progress report: A brief note reflecting, Number of meeting with Guides, places visited, libraries visited, books referred, meeting with persons, activities taken up, preparations done for collection and analysis of data etc.,)	

Date:

Signature of the Candidate **Signature of the College Guide**

COVER PAGE & TITLE PAGE

Title < Font size Arial Narrow 18-All caps & Bold> Organization logo and Name

Dissertation submitted in partial fulfillment of the requirements for the award of the Degree of<Font Size Arial Narrow 14>

Post Graduate Diploma in Management

of

International Institute of Business Study

< Font size Arial Narrow 14-All caps &Bold>

By(Font Size 14-Italic)

Name<Font size Arial Narrow 14-Title Case)

Reg. No. …

Under the guidance of

Name of guide .<Font size Arial Narrow 14-Title Case)

Designation of guide <Font size Arial Narrow 12-Title Case)

2022–2024(Font Size 14)

PREFATORY PAGES

DECLARATION BY THE STUDENT

I hereby declare that "*Title of the project*" is the result of the dissertation t work carried out by me under the guidance of *Name of the Guide* in partial fulfillment for the award of Post Graduate Diploma in Management by IIBS College.

I also declare that this project is the outcome of my own efforts and that it has not been submitted to any other university or Institute for the award of any other degree or Diploma or Certificate.

Place: **Name :**

Date: **Register Number:**

CERTIFICATE BY CO-GUIDE

[Under The Seal and Signature]

This is to certify that Mr/Ms .....of …… College, has undertaken dissertation in our organization on the topic …… between ……. and ..... His/Her Conduct and work is Not satisfactory/Satisfactory/Good/Excellent.

Signature

Seal

CERTIFICATE OF ORIGINALITY

(To be given by the Institution on its letterhead)

Date:

This is to certify that the dissertation titled" ----------"is an original work of Mr./Ms._____; bearing University Register Number _____and is being submitted in partial fulfillment for the award of the Master's Degree in Post Graduate Diploma in Management by IIBS College. The report has not been submitted earlier either to this University /Institution for the fulfillment of the requirement of a course of study .Mr./Ms…… is guided by Mr./Ms. /Dr….....who is the Faculty Guide as per the regulations of IIBS college.

Signature of Faculty Guide **Signature of Principal Date**

Date

Table of Contents

LIST OF TABLES

LIST OF FIGURES/GRAPHS

Bibliography (System of Referencing)

References should be indicated in your dissertation in the following format: Books

Abraham, K. (2001) The Dynamics of Economic Reforms (Economic Liberalisation and Political Transformation), New Delhi: McGraw Publishers.

Edited Volume

Aharoni, Y. (2009) "On Measuring the Success of Privatisation", in Ramamurthi, R. and Vernon,

R. (eds) Privatisation and Control of State Owned Enterprises. Washington, D.C.: World Bank.

Journals

Boardman, D. and Vining, S. (1989) "Ownership in Competitive Environments: A Comparison of the Performance of Mixed, Private and SOEs", Journal of Law and Economics, April, Vol. 1, No,32, pp.16-9.

Reports and Gazettes

Asian Development Bank (2008) India: Statistical Abstract 2008, April, 2008, Manila, ADB.

Newspapers and Magazines

Ahluwalia, M. (2003) 'Some of the criticism directed at the IMF is not valid', an exclusive interview, **D+C [Development & Cooperation**], September, vol.30.

Websites

Ministry of Finance(2008) "Privatisation", Viewed on 06/11/2003 in the MoF Website, http://www.mof.in/~epa/Privatise/index.html.

Ram Mohan, T.T. (2004) "Privatisation in China: Softly, Softly Does it", accessed on 02/10/2010 at http://www.iimahd.ernet.in/publications/public/Fulltext.jsp?wp-no=2004-09- 04