



**School of Management and Business Studies**  
Mahatma Gandhi University  
Kottayam

**MASTER OF BUSINESS ADMINISTRATION (Full-time)**

**Regulations, Scheme and Syllabus**  
*under CSS Regulations 2020 with effect from 2021 admission*

June 2021

# **School of Management and Business Studies**

Mahatma Gandhi University

Kottayam



## **MASTER OF BUSINESS ADMINISTRATION (Full-time) (Programme code : MBM)**

### **Regulations, Scheme and Syllabus**

*under CSS Regulations 2020 with effect from 2021 admission*

**June 2021**

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Board of Studies, School of Management and Business Studies (SMBS)

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## **Preface**

MBA curriculum document presents the regulations, structure, contents and learning outcomes of two-year Master of Business Administration (MBA) of School of Management and Business Studies (SMBS), Mahatma Gandhi University, Kottayam. The curriculum has been modified in order to align with the Credit and Semester System (CSS) regulations 2020 of Mahatma Gandhi University and to incorporate the Outcome Based Education (OBE) philosophy, where there is greater focus on programme and course outcomes. Further, the revised curriculum emphasises on an intensive and flexible management education with large number of electives considering the latest industry trends, digital economy and market requirements.

OBE is an educational approach and a learning philosophy, focusing and organising the entire academic programmes (curriculum) and instructional efforts around clearly defined 'outcomes' that an institution wants all students to demonstrate when they complete the programme. Outcome Based Education (OBE) has been incorporated for enhancing employability of graduates through curriculum reforms based on a learning outcomes-based curriculum framework, upgrading academic resources and learning environment. The National Assessment and Accreditation Council (NAAC), for promoting international quality standards for higher education in India, has incorporated OBE into the Accreditation process. OBE syllabus has been prepared in School of Management and Business Studies of Mahatma Gandhi University, as a quality-assurance approach to improving teaching and learning outcomes and processes.

The content of the syllabus is directional in scope and permits the much desirable flexibility to keep pace with the ever-growing body of knowledge, experiments and explorations in management education.

The modified MBA syllabus will be in force with effect from the academic year 2021-2022.

June 2021

P.D. Hills

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## **1. Introduction**

The Master of Business Administration (MBA) programme aims to develop students into leaders and entrepreneurs who are ready to take the challenges of ever changing global business environment. This objective is accomplished through various initiatives and a pedagogy which emphasises on participatory learning.

The revised MBA Curriculum 2021 builds on the implementation of Outcome Based Education initiated in Mahatma Gandhi University in the year 2020. The curriculum takes the MBA programme to the next level in terms of Outcome Based Education along with the Credit and Semester System (CSS) regulation 2020.

## **2. Outcome Based Education (OBE)**

The OBE Framework is a paradigm shift from traditional education system into OBE system where there is greater focus on programme and course outcomes. It guarantees that curriculum, teaching and learning strategies and assessment tools are continuously enhanced through a continuous improvement process. All decisions including those related to curriculum, delivery of instruction and assessment are based on the best way to achieve the predetermined outcomes. Traditionally, educators have measured learning in terms of standardised tests. In contrast, outcome-based education defines learning as what students can demonstrate that they know. The term clearly means focusing and organising everything in an education system around “what is essential for all learners to be able to do successfully at the end of their learning experiences”. By the end of educational experience, each student should have achieved the outcomes. One of the main objectives of OBE is to ensure continuous improvement of programmes in terms of maintaining the relevance in curriculum as well as responding to the requirements of the stakeholders.

*Benefits of OBE:*

- More directed & coherent curriculum.
- Graduates will be more “relevant” to industry & other stakeholders
- Continuous Quality Improvement is in place.

An OBE system has been implemented in School of Management and Business Studies, as a quality-assurance approach to improving teaching and learning outcomes and process.

## **3. Vision and Mission of SMBS**

### **3.1. Vision**

To emerge as country’s foremost destination in the domain of management for all those aspiring superior learning and research, and for organization seeking effective advice and consulting.

### **3.2. Mission**

The mission statement of School of Management and Business Studies has been revised in the year 2020 in consultation with the various stakeholders. The various activities of the department is driven by the mission.

- The mission of School of Management and Business Studies (SMBS) is
  - To develop professionally competent and socially sensitive future leaders with a motivation for lifelong learning
  - To create knowledge in management through impactful research and collaboration.

#### **4. Programme Duration**

The duration of the MBA (Full-time) programme of the School of Management and Business Studies will be two years consisting of four semesters. Each semester shall consist of 18 weeks of five days each of five hours per day.

#### **5. Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)**

Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) are the core elements of OBE. Programme Outcomes are the abilities the students acquire at the end of the programme. Programme Outcomes are formulated on the basis of the mission and graduate attributes of Mahatma Gandhi University.

Programme Specific Outcomes (PSOs) are statements that describe what the graduates of a specific educational Programme should be able to do. Programme Specific Outcomes (PSOs) of School of Management and Business Studies are formulated by a team of faculty and reviewed by the entire faculty after getting suggestions from the relevant stakeholders.

Following section states POs and PSOs of MBA programme of SMBS.

##### **5.1. Programme Outcomes (POs) of Mahatma Gandhi University**

###### **PO 1: Critical thinking and Analytical reasoning**

Capability to analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories to develop knowledge and understanding; critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.

###### **PO 2 : Scientific reasoning and Problem solving**

Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective; capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations.

###### **PO 3: Multidisciplinary/interdisciplinary/transdisciplinary Approach**

Acquire interdisciplinary /multidisciplinary/transdisciplinary knowledge base as a consequence of the learning they engage with their programme of study; develop a collaborative-multidisciplinary/interdisciplinary/transdisciplinary- approach for formulate constructive arguments and rational analysis for achieving common goals and objectives.

###### **PO 4: Communication Skills**

Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.

###### **PO 5: Leadership Skills**

Ability to work effectively and lead respectfully with diverse teams; setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.

**PO 6: Social Consciousness and Responsibility**

Ability to contemplate of the impact of research findings on conventional practices, and a clear understanding of responsibility towards societal needs and reaching the targets for attaining inclusive and sustainable development.

**PO 7: Equity, Inclusiveness and Sustainability**

Appreciate equity, inclusiveness and sustainability and diversity; acquire ethical and moral reasoning and values of unity, secularism and national integration to enable to act as dignified citizens; able to understand and appreciate diversity (caste, ethnicity, gender and marginalisation), managing diversity and use of an inclusive approach to the extent possible.

**PO 8: Moral and Ethical Reasoning**

Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour.

**PO 9: Networking and Collaboration**

Acquire skills to be able to collaborate and network with educational institutions, research organisations and industrial units in India and abroad.

**PO 10: Lifelong Learning**

Ability to acquire knowledge and skills, including "learning how to learn", that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

**5.2. Programme Specific Outcomes (PSOs) of MBA & PSO-PO mapping**

<b>PSO number</b>	<b>Intended Programme Specific Outcomes (PSO)</b> <i>Upon completion of MBA programme, the graduates will be able to:</i>	<b>MGU PO No.</b>
PSO 1	Describe a business problem and identify its stakeholders	PO 2
PSO 2	Apply tools/techniques to analyse business problems.	PO 2
PSO 3	Evaluate and make choices among alternatives that indicate a deep comprehension of the business problem.	PO 2
PSO 4	Explain how a given decision or intervention affects each of the key functional areas of a firm	PO3
PSO 5	Apply analytical tools and techniques from more than one functional areas to address a problem or a case.	PO3
PSO 6	Make oral presentations effectively in a professional business context.	PO4
PSO 7	Write effectively in business context	PO4
PSO 8	Articulate prominent leadership concepts/theories, analyse and critique these concepts/theories.	PO5
PSO 9	Practise team leadership through active group participation.	PO5
PSO 10	Discuss and apply principles of corporate social responsibility to business issues and operations	PO6
PSO 11	Identify and evaluate different strategies for responding to social/ethical/ environmental/ sustainability issues.	PO6, PO7, PO8
PSO 12	Define key components of countries' business environments and give examples of how environmental components differ across countries	PO9
PSO 13	Explain the position/role of Indian business in global environment	PO9



## 6. Eligibility for Admission

A pass in any Bachelor's Degree Examination of Mahatma Gandhi University or an equivalent degree of any other universities duly recognised by Mahatma Gandhi University with not less than 50% marks in the aggregate for all parts of examination OR a Masters Degree in any subject. Only a pass in the qualifying exam is required for SC/ST candidates. Those who are awaiting final semester results of qualifying exam can also apply provided that they should produce certificates and mark list of qualifying exam before the commencement of their first semester MBA examination. Candidates should have valid CMAT/CAT/ KMAT score. Relaxation of marks and Reservation of seats are based on University/ Government Rules.

## 7. Admission Procedure

Admission to MBA (Full-time) Degree programme of the School is based on the score obtained in CMAT/CAT/KMAT, Group Discussion and Personal Interview in the ratio 80:10:10. Based on the performance on the Entrance Test, Group Discussion and Interview, the Rank list for MBA admission will be prepared. While preparing the rank list, if there is same index marks for more than one candidates, he/she will be ranked on the basis of actual marks obtained in the qualifying exam. Even after this, if there is a tie, they will be ranked on the basis of date of birth that is the elder person is to be ranked higher.

## 8. MBA Programme - Course types and Credit requirements

The programme structure of MBA consists of Core courses and a set of elective courses. Core courses are the compulsory courses for all the students. All the courses offered during first and second semester of the programme are core courses. Further, there are 2 and 1 core courses respectively during third and fourth semesters. Elective courses are offered in the second year and the students get an opportunity to choose from a list of courses with functional specialisation.

In order to complete the MBA programme, a student is required to obtain a total of 109 credits consisting of 19 core courses with 57 credits, 11 elective courses with 44 credits; internship and project work of 4 credits each, over four semesters.

### MBA Programme Credit requirements

Course type	Number of courses	Credits of each course	Total Credits
Core Courses	19	3 each	57 credits
Electives	11	4 each	44 credits
Internship and Comprehensive viva voce – II Sem	1	4	04 credits
Problem Centered Project Work and Comprehensive viva voce – IV sem	1	4	04 credits
<b>Total</b>	<b>32</b>		<b>109 credits</b>

## 9. Scheme of the Programme

The duration of the MBA (Full-time) programme of the School of Management and Business Studies will be two years consisting of four semesters. Each semester shall comprise of a minimum of 18 weeks. Every semester will be adjusted to have at least 90 working days.

Continuous Assessment (CA) based evaluation during the course period and End Semester Examination at the end of each semester shall be conducted.

### **Semester I and Semester II**

The first and second semesters will have eight courses each. All these courses are core courses which carries 100 marks each. In addition to 8 core courses, Internship and a comprehensive viva voce for 100 marks is also included in the second semester.

Every student has to undergo one month duration Internship in a reputed national or international (preferably listed companies in NSE/BSE) organisation at the end of second semester. The objective is to provide an exposure to the students to the real life business situations. The organisations selected for this purpose can have more than one functional departments like marketing, finance, human resources, production, information systems etc and the students should prepare a comprehensive study report about the organisation. This study report shall be carried out under the supervision of a faculty in the School. The continuous assessment marks for the Internship will be awarded by means of seminar presentation cum viva voce conducted by a board appointed for this purpose by the faculty council of the School.

### **Semester III**

The third semester will have eight (8) courses. Out of the eight (8) courses, two are core and the other six (6) are electives. The electives can be chose from the different functional areas like Marketing, Finance, Human Resource Management, Operations and Business Analytics.

### **Semester IV**

Fourth semester will have five (6) full courses of which one course is core, and the other five (5) are electives. In addition, the students are required to do their problem centered study in a reputed national or international (preferably listed companies in NSE/BSE) organisation for a period not less than eight (8) full weeks. The Project work shall be carried out under the supervision of a faculty in the School. The report of problem centered project work is to be submitted on or before the commencement of the End Semester Examination or on a date fixed by the faculty council. A total of 100 marks are granted for the project report. Further, a comprehensive viva voce will be conducted for 100 marks along with the project report.

## **10. Electives offered**

The elective courses are offered on following domains or functional areas:

- Marketing
- Finance
- Human Resource Management
- Operations Management
- Business Analytics

## 11. Semester-wise Programme Structure

Course Code	Course Title	CA	ESE	Total	Credits	Type
	<b>First Semester</b>					
MBM21C01	Principles and Practice of Management	40	60	100	3	Core
MBM21C02	Business Economics	40	60	100	3	Core
MBM21C03	Business Communication and Soft Skills	40	60	100	3	Core
MBM21C04	Accounting for Managers	40	60	100	3	Core
MBM21C05	Quantitative Methods	40	60	100	3	Core
MBM21C06	Environmental Management	40	60	100	3	Core
MBM21C07	Business Law	40	60	100	3	Core
MBM21C08	Corporate Governance and Ethics	40	60	100	3	Core
	<b>Total</b>	<b>320</b>	<b>480</b>	<b>800</b>	<b>24</b>	
	<b>Second Semester</b>					
MBM21C09	Human Resource Management	40	60	100	3	Core
MBM21C10	Financial Management	40	60	100	3	Core
MBM21C11	Marketing Management	40	60	100	3	Core
MBM21C12	Operations Management	40	60	100	3	Core
MBM21C13	Management Information System	40	60	100	3	Core
MBM21C14	Organisational Behaviour	40	60	100	3	Core
MBM21C15	Management Science	40	60	100	3	Core
MBM21C16	Entrepreneurship Development and Project Management	40	60	100	3	Core
MBM21C17	Internship and Comprehensive viva voce	40	60	100	4	Core
	<b>Total</b>	<b>360</b>	<b>540</b>	<b>900</b>	<b>28</b>	
	<b>Third Semester</b>					
MBM21C18	Research Methodology	40	60	100	3	Core
MBM21C19	Enterprise Resource Planning and Business Analytics	40	60	100	3	Core
	Elective I	40	60	100	4	Elective
	Elective II	40	60	100	4	Elective
	Elective III	40	60	100	4	Elective
	Elective IV	40	60	100	4	Elective
	Elective V	40	60	100	4	Elective
	Elective VI	40	60	100	4	Elective
	<b>Total</b>	<b>320</b>	<b>480</b>	<b>800</b>	<b>30</b>	
	<b>Fourth Semester</b>					
MBM21C20	Strategic Management	40	60	100	3	Core
	Elective I	40	60	100	4	Elective
	Elective II	40	60	100	4	Elective
	Elective III	40	60	100	4	Elective
	Elective IV	40	60	100	4	Elective
	Elective V	40	60	100	4	Elective
MBM21C21	Problem Centered Project Work and Comprehensive viva voce	40	60	100	4	Core
	<b>Total</b>	<b>280</b>	<b>420</b>	<b>700</b>	<b>27</b>	
	<b>Grand Total (I+II+III+IV Semesters)</b>	<b>1280</b>	<b>1920</b>	<b>3200</b>	<b>109</b>	

(CA- Continuous Assessment Marks, ESE- End Semester Examination Marks, Total : Total Marks)

## 12. List of Elective courses

### Elective Courses offered under Marketing

Course Code	Course title	Credits
MBM21E01	Consumer Behaviour	4
MBM21E02	Marketing Research	4
MBM21E03	Sales Management	4
MBM21E04	Marketing Analytics	4
MBM21E05	Services Marketing	4
MBM21E06	Rural Marketing	4
MBM21E07	B2B Marketing	4
MBM21E08	Product and Brand Management	4
MBM21E09	Retail Management	4
MBM21E10	Strategic Marketing	4
MBM21E11	Integrated Marketing Communication	4
MBM21E12	Digital Marketing	4
MBM21E13	Global Marketing	4
MBM21E14	Retailing Analytics	4

### Elective Courses offered under Finance

Course Code	Course title	Credits
MBM21E15	Management of Banks and Financial Institutions	4
MBM21E16	Financial Analysis and Business Valuation	4
MBM21E17	Financial Derivatives and Risk Management	4
MBM21E18	Personal Financial Planning	4
MBM21E19	Security Analysis and Portfolio Management	4
MBM21E20	Behavioural Finance	4
MBM21E21	International Financial Management	4
MBM21E22	Modern Banking and Financial Services	4
MBM21E23	Management Control System	4
MBM21E24	Financial Modelling	4
MBM21E25	Corporate Restructuring Strategies	4
MBM21E26	Strategic Financial Management	4
MBM21E27	Direct Taxation	4
MBM21E28	Corporate Tax Planning	4
MBM21E29	Goods and Services Tax	4

### Elective Courses offered under Human Resource Management

<b>Course Code</b>	<b>Course title</b>	<b>Credits</b>
MBM21E30	Human Resource Planning	4
MBM21E31	Participative Management	4
MBM21E32	Training and Development	4
MBM21E33	Organisational Change and Transformation	4
MBM21E34	Talent Management	4
MBM21E35	Performance Management	4
MBM21E36	Industrial Relations	4
MBM21E37	Managing of Interpersonal and Group Process	4
MBM21E38	Managerial Counselling	4
MBM21E39	Mentoring, Coaching and Management Consulting	4
MBM21E40	Organisational Effectiveness and Development	4
MBM21E41	Strategic Human Resource Management	4
MBM21E42	International Human Resource Management	4
MBM21E43	Leadership for Managerial Performance	4

### Elective Courses offered under Operations Management

<b>Course Code</b>	<b>Course title</b>	<b>Credits</b>
MBM21E44	Supply Chain Management	4
MBM21E45	Technology Management	4
MBM21E46	Production Planning and Control	4
MBM21E47	Materials and Purchase Management	4
MBM21E48	Advanced Operations Research	4
MBM21E49	Maintenance Management	4
MBM21E50	Service Operations Management	4
MBM21E51	Work Study and Ergonomics	4
MBM21E52	Business Forecasting	4
MBM21E53	Total Quality Management	4
MBM21E54	Innovation Management and R&D	4
MBM21E55	World Class Manufacturing	4
MBM21E56	Global Transportation and Export/Import Documentation	4
MBM21E57	Industry 4.0	4

### Elective Courses offered under Business Analytics

Course Code	Course title	Credits
MBM21E58	Database and Data Mining Applications in Business	4
MBM21E59	Advanced Excel and Business Applications	4
MBM21E60	Business Analytics using R	4
MBM21E61	Advanced Statistical Methods using SPSS	4
MBM21E62	Data Visualisation Using Tableau	4
MBM21E63	Introduction to Big data and Cloud computing	4
MBM21E64	Industry 4.0 and Internet of Things	4
MBM21E65	Machine Learning using Python	4
MBM21E66	Artificial Intelligence in Business Applications	4
MBM21E67	Marketing and Retail Analytics	4
MBM21E68	Social Media, Web and Text Analytics	4
MBM21E69	HR Analytics	4
MBM21E70	Digital Marketing and Search Engine Optimisation	4
MBM21E71	Financial Modelling and Predictive analytics	4

### 13. Evaluation and Outcome based Assessment

Evaluation consists of continuous Assessment (CA) and End Semester Examination (ESE). Continuous assessment (CA) accounts for 40% of the evaluation in both theory and practical. The End Semester Examination (ESE) accounts for the remaining 60% of the evaluation. A separate minimum of 40% of marks is required in the Continuous Assessment (CA) as well as in the End Semester Examination (ESE) for a pass in a course. The minimum mark for the Continuous Assessment, End semester examination and Aggregate for a pass, course wise can be fixed as per the norms put forward by Regulatory bodies, wherever Programmes are governed by Regulatory bodies.

Outcome based assessment process must be aligned with the course outcomes and hence both CA and ESE focus on assessment of the course outcomes.

#### Continuous Assessment (CA)

The student's participation and classroom performance as well as the evaluation of tests, tutorials, assignments and term papers shall form the basis for continuous assessment (CA). It accounts for 40% of the evaluation. This assessment shall be based on a predetermined transparent system involving periodic written tests, assignments, seminars, viva and attendance. Continuous assessment components of a course need to be related to the intended course outcomes and measured using rubrics. The percentage of marks assigned to various components for Continuous Assessment is as follows:

#### Components for Continuous Assessment (CA)

Sl. No	Components	% of CA marks	OBE Assessment (based on rubric)
1	Two Tests	50%	Course outcomes based
2	Assignments/Book review/projects	25%	Course outcomes based
3	Seminars/Presentation of case study	25%	Course outcomes based

**Tests:** For each course there shall be at least two class tests during a semester. Average of the best of the marks obtained in the two tests (in the case of more than two tests) or the

average of the tests (if there are only two tests) will be counted as the test paper component of Continuous Assessment (CA).

**Assignments:** Each student shall be required to do two assignments/book reviews for each course. Assignments includes homework, problem solving, group discussions, quiz, term project, spot test, software exercises etc. The faculty shall define the expected quality of the above in terms of structure, content, presentation etc and inform the same to the students. Punctuality in submission of assignments/records is given a weightage in continuous assessment.

**Seminar:** Every student shall deliver one seminar as a continuous assessment component of every course and must be evaluated by the respective course teacher in terms of structure, content, presentation and interaction.

### End Semester Examination (ESE)

The End Semester Examination accounts for 60% of the evaluation. Students must secure a minimum attendance of 75% to appear for the End Semester Examination. The evaluation of the End Semester Examination of the first and third semesters shall be done by the faculty who taught the course. Evaluation of the 2<sup>nd</sup> and 4<sup>th</sup> semester courses based on questions set by external question paper setters shall be evaluated by two examiners; one, the external (as far as possible the question paper setter shall evaluate the examination answer sheets as well) and the other, internal examiner. The double valuation of answer scripts in the second and the fourth semester courses shall be done by external examiners and the concerned faculty respectively as approved by the Faculty Council.

### 14. End Semester Examination - Question paper pattern

The End Semester Examination (ESE) will be of three hours duration and carry 60 marks. The ESE for the core and elective courses shall be conducted based on the following pattern of question paper.

Section	Cognitive level	Choice and marks of questions	Question specification	Total Marks	Alignment with Course outcomes (COs)
Section A	Remembering/ Understanding	5 out of 5 questions; 3 marks each	One qn from each unit	15	Aligned with COs
Section B	Applying/ Analysing/ Evaluating	5 out of 7 questions; 5 marks each	minimum one qn from each unit	25	Aligned with COs
Section C	Analysing/ Evaluating/ Creating	3 questions 10 marks each <ul style="list-style-type: none"> <li>one question is compulsory</li> <li>1 out of 2 questions.</li> </ul>	Higher levels of learning	20	Aligned with COs
				60	

The **cognitive levels** of questions in ESE are summarised as :

- Lower levels of learning (Remembering/Understanding/Applying) : 30 to 40%
- Higher Levels of Learning (Analysing/Evaluating/Creating) : 60 to 70%

The **difficulty levels** of questions in ESE are categorised as Low, Medium and High. The percentage of questions in each level of difficulty are given below :

- Low : 20 to 30%
- Moderate : 50 to 60%
- High : 20 to 30%

## 15. Grading System

The performance of a student in each course is evaluated in terms of percentage of marks with a provision for conversion to grade points. The grading system followed is that of relative grading on a ten-point scale.

The following table indicates the performance range and the relative value of the grades (grade points) on the scale.

**Performance range and the Relative value of the Grades (Grade points)**

Range of % of marks	Letter Grade	Performance	Grade points
95 to $\leq$ 100	O	Outstanding	10
85 to $\leq$ 95	A plus	Excellent	9
75 to $\leq$ 85	A only	Very Good	8
65 to $\leq$ 75	B plus	Good	7
55 to $\leq$ 65	B only	Above Average	6
45 to $\leq$ 55	C	Average	5
40 to $\leq$ 45	P	Pass	4
< 40	F	Fail	0
Absent	Ab	Absent	0

**Minimum grade for passing in a course or programme:** The minimum for a pass in a course is 'P' grade. The minimum credit point requirement (CGPA) for the programme is five.

### **Revaluation:**

The answer scripts of examinations under CSS shall have provisions for revaluation.

Revaluation or Scrutiny of answer scripts for the first and third semester is provided. There is no provision for revaluation or scrutiny of answer scripts for the End Semester Examinations of 2<sup>nd</sup> and 4<sup>th</sup> Semesters as double valuation is performed on the scripts.

The application for scrutiny and revaluation of answer scripts shall be submitted to the Head of the concerned School/ Department/ Centre within 15 days from the date of publication of the results.

## 16. Reappearance and improvement in Examinations

A student who failed for a course in a semester can register for Reappearance in the forthcoming examination, subject to the conditions set forth in these regulations.

Improvement of marks/grades in the forthcoming examination can be done, subject to the conditions set forth in this regulations.

### **Registration for Improvement**

A candidate has to apply for registration for Improvement by paying the requisite fee. Candidates are not permitted to Register for improvement of grades for Individual course. Candidates in the 1<sup>st</sup> and 2<sup>nd</sup> semesters, who have secured SGPA letter grade 'P' or above in the End Semester Examination can improve their grade by reappearing for all the semester courses along with the next immediate batch.

In such cases a candidate will be awarded a new grade only if there is an improvement in grade in the new examination; otherwise, the candidate is eligible to retain the grade already awarded.



Candidates in the 3<sup>rd</sup> semester, who have secured the SGPA letter grade 'P' or above in the End Semester Examination, can improve their grade by reappearing for all the semester courses, along with the 3<sup>rd</sup> semester supplementary examination being conducted for failed candidates immediately after the completion of End Semester Examination of Fourth semester. This provision is applicable only for third semester. Improvement of 4<sup>th</sup> semester can be done along with the immediate lower batch.

If the improvement is meant to obtain minimum CGPA requirement, a candidate has the option to decide which semester (3<sup>rd</sup> or 4<sup>th</sup>) is to be improved; however, the grade given to the candidate shall be that obtained for the entire semester improvement examination. 1<sup>st</sup> and 2<sup>nd</sup> semester SGPA cannot be improved after the completion of the 4<sup>th</sup> semester. Only 3<sup>rd</sup> and 4<sup>th</sup> semester SGPA can be improved after the completion of a programme. The marks/grades awarded for Continuous assessment and that for the Project/dissertation cannot be improved. SGPA secured in the 4<sup>th</sup> semester can be improved only for the purpose of fulfilling the minimum CGPA requirement.

### ***Reappearance***

Candidates in the 1<sup>st</sup> and 2<sup>nd</sup> semesters who have secured a letter grade of 'F' or 'Ab' in any of the courses can avail two immediate consecutive chances to reappear for examination, course wise, provided the candidate has applied for the same and paid the required fee.

Candidate in the 3<sup>rd</sup> semester who has secured letter grade of 'F' or 'Ab' in any of the courses can reappear for exams course-wise in the 3<sup>rd</sup> semester supplementary examination, which will be conducted immediately after the completion of End Semester Examination of Fourth semester, provided the candidate has applied for the same and paid the required fee (fee for supplementary examination of any course shall be full semester examination fee irrespective of number of courses involved).

Candidates who secured the grade of only 'F' or 'Ab' in a course in the 4<sup>th</sup> semester examination can reappear course wise, along with the immediate lower batch. Candidates who secured the grade of only 'F' or 'Ab' in a course in the 3<sup>rd</sup>/4<sup>th</sup> semester examinations will be given two additional chances for course-wise reappearance even after the completion of the programme; but it has to be done within a period of two years after the completion. In such cases a candidate has to apply for the same as a supplementary exam and pay the required fee (Fee for supplementary examination of any course shall be full semester examination fee irrespective of number of courses involved).

## 17. Detailed syllabus based on OBE

### 17.1. Semester 1

Course Name	Principles and Practice of Management					
Type of Course	Core					
Course Code	MBM21C01					
Course Summary & Justification	This course allows the students to learn the basics of principles and practices of Management. In Management career, professionals should have an in-depth knowledge of Principles and Practices in management to succeed in career. How employees take decisions in organisations will be learned in this course. Based on several theories and practical exposures, students are able to analyse the principles and practices in organisations and behave accordingly.					
Semester	1		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	41	10	-	5	60
	Case based learning	4				
	Total	45				
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis, Book review, Seminars ,discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	Explain and evaluate planning, organising, Staffing aspects of Principles and Practices in management	U	2
2	Evaluate the Directing, Controlling and Co-ordination aspects in Principles and Practices in management	E	2
3	Explain the concept of Corporate social responsibility as a principle and practice of management	U	10
4	Compare and Evaluate various leadership theories	An	8
5	Explain principles and practices of management from an Indian perspective	A	13
6	Practise team leadership through active participation in team based activities.	A	9
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT - Contact teaching hours 45

		Hrs	CO
<b>Unit 1 : Management</b>		12 Hrs	
1.1	Meaning, Definition and Nature; Evolution of Management Management Thoughts - Early - Modern - Postmodern	3	1
1.2	Contributions of F.W. Taylor – Henry Fayol – Hawthorne Studies- Behavioural School of Management Approach. Levels of management, Skills required for a manager, managerial roles.	2	1
1.3	Management Lessons from religious scripters Management gurus - India	2	5
1.4	Vision, Effectiveness, Efficiency and Teamwork Perception and theories in perception	2	1
1.5	Belief, Values and theories in Belief, Values; Introducing the concept of Corporate Social Responsibility of Business	3	3
<b>Unit 2 : Functions of Management</b>		12 Hrs	
2.1	POSDCORB; Characteristics of Management <b>Planning:</b> meaning, nature, importance, levels of planning. Objectives - setting objectives	3	1,2
2.2	Policies – planning premises, types of plans - process of planning	3	1, 2
2.3	J Decision Making; MBO	3	1, 2
2.4	Principles in Planning	3	1, 2
<b>Unit 3 : Organising and Staffing</b>		12 Hrs	
3.1	<b>Organising</b> , nature-purpose-principles-organisational structure and types. Departmentation - centralisation vs. decentralisation - Collective Bargaining- Promotion; principles in Staffing, Leadership & Power- theories and concepts	3	1,2
3.2	Span of control- delegation- principles in Organising Concepts and Theories Trait,; Transactional and Transformational Leaderships.	2	1,2
3.3	<b>Staffing:</b> - Meaning, Nature - HR Planning – Recruitment – Selection.	2	1,2
3.4	Training and Development - Performance Management- Potential Management	2	1,2
3.5	Placement, Induction and Orientation.	3	1,2
<b>Unit 4 : Directing</b>		05 Hrs	
4.1	Motivation – motivation theories – motivational techniques – job satisfaction – job enrichment -Grapevine.	1	4
4.2	Leadership – definition, styles of leadership and theories of leadership.	2	5, 6
4.3	Communication – process of communication – barriers in communication – effective communication Group Norms; Cohesiveness; Group Effectiveness.	1	1,2
4.4	Grapevine; Principles in Directing.	1	1,2
<b>Unit 5 : Control</b>		04 Hrs	
5.1	System and process of Controlling - Requirements for effective control. The Budget as Control Technique - Information Technology in Controlling.	1	1,2
5.2	Control Techniques- Control and planning- Types of Control Change Management; Work Stress; Sources and Consequences, Organisational Role Stress.	1	1,2
5.3	Reporting - Co-ordination	1	1,2
5.4	Principles in Control and Co-ordination. Creating and Sustaining Organisational Culture, Emotional Intelligence & EQ. Work Stress, Organisational Climate	1	1,2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>a. Tests</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Assignments. Case analysis and Book Review</li> </ul> </li> <li>End Semester Examination</li> </ul>

## REFERENCES

R1.	Management	Stoner. J	Prentice Hall India,(2009).
R2.	Management	Koontz H. and Wechrich H.	Tata Mc Graw Hill (2009)
R3.	Emotional Intelligence at work	Singh Dalip	Sage Publications, Delhi
R4.	Decenzo David, Robbin Stephen A,	"Personnel and Human Reasons	Prentice Hall India (2008).
R5.	Organisational theory	Jones G. R.	Addison Wesley(1995)
R6	Principles of Personnel Management	Edwin P. Flippo	McGraw Hill(2008)
R7	Personnel Management	Mamoria	Himalaya(2000)
<i>Others : (Web / Journals / Course Packets / Class Notes / etc.</i>			
Case studies for analysis would be provided from time to time in advance by the faculty.			

## SUGGESTED READINGS

1. Fred Lufthans: *Organisational Behaviour*, McGraw Hill International Edition.
2. Koontz & Weirich: *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
3. Prasad, L.M.: *Principles of Management*, Sultan Chand and Co , New Delhi, 2002
4. Rao, VSP and Krishna, V. Hari, *Management: Text and Cases*, Excel Books, 1st edn. 2004.
5. Robbins, S: *Organisational Behaviour*, 10<sup>th</sup> edn., Prentice-Hall India, New Delhi.
6. Robbins, S.P: *Fundamentals of Management*, Pearson, 2003.
7. Robbins, Stephen R : *Organizational Behaviour*, Prentice Hall of India, New Delhi, 1990.
8. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition

Course Name	Business Economics					
Type of Course	Core					
Course Code	MBM21C02					
Course Summary & Justification	To provide a foundation with the concepts and tools of economic analysis as relevant for managerial decision making and to provide an understanding of the aggregate economic system within which a firm operates.					
Semester	1		Credit		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	45			15	60
Pre-requisite	Nil, as per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion, etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Explain the micro and macro-economic aspects relating to business.	U	11
2	Demonstrate how to apply the tools of economic analysis in business decisions.	A	4, 5, 2
3	Analyse the economic situations and business.	An	13
4	Understand the economic aspects of International Trade and Globalisation	U	12
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### Course Content

	Hrs	CO. No.
<b>Unit 1 : General Foundations of Managerial Economics</b>	10 Hrs	
1.1 Managerial economics – Meaning, Nature, Scope.	1	1
1.2 Fundamental concepts of managerial economics	2	1
1.3 Micro and macro environments – Relevance of Microeconomics	2	1
1.4 Application of economic theories and basic techniques of managerial decision-making.	2	2
1.5 Structure and Sectors of Indian economy.	2	3
1.6 Nature of firm - Forms of Organisation	1	3
<b>Unit 2 : Demand analysis and estimation</b>	15 Hrs	
2.1 Utility analysis and the demand curve	2	2
2.2 Indifference curve – Concept - Analysis	2	2
2.3 Substitution effect – Income effect – Price effect	2	2
2.4 Equilibrium of Demand and Supply	2	2
2.5 Demand – Meaning – Determinants -Types	2	2

2.6	Elasticity measures – Law of demand – Elasticity of demand.	3	2
2.7	Demand forecasting – Essentials - Methods	2	2
<b>Unit 3 : Production and Cost Analysis</b>		10 Hrs	
3.1	Production function - Laws of production	2	1,2
3.2	Economies and diseconomies of scale - laws of returns.	2	1,2
3.3	Break-Even Analysis – uses	2	2
3.4	Various concepts of costs - Cost output relationship	2	1,3
3.5	Application of marginal costing in business decisions - Cost control and cost reduction	2	2,3
<b>Unit 4 : Pricing Concepts</b>		10 Hrs	
4.1	Price – Meaning - Determination	2	1
4.2	Price determination under different market structures – Perfect competition – Monopoly- Monopolistic competition- Oligopoly.	3	2,3
4.3	Pricing policies - Practices - Price cartels – Price leadership.	3	1,3
4.4	Profit concepts & analysis.	2	2,3
<b>Unit 5 : National Income Analysis</b>		15 Hrs	
5.1	National Income Concepts – Determination - Accounting.	2	1
5.2	Macro-Economic Problems – Unemployment – Inflation – Stagflation - Business Cycle.	2	1,3
5.3	Factors influencing International Trade	2	1,4
5.4	Balance of Payments	2	3,4
5.5	Instruments of Macroeconomic Policy – Fiscal policy - Monetary policy – Exchange rate policy – International trade policy – Prices and income policy – Employment policy.	3	1,2,3
5.6	Globalisation and emerging India	2	3,4
5.7	Global recession and Indian Economy	2	3,4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

1. Yogesh, Maheswari, Management Economics, PHI learning, New Delhi, 2012.
2. D.M. Mithanil, Money and Banking – International Trade and Public Finance, Himalaya Publishing House, Mumbai, 1992.
3. Uma Kapila, Indian Economy since Independence, Academic Foundation, Gaziabadh, 2011.
4. Peterson, Craig H., Lewis, Chris and Sudhir Jain, Managerial Economics, Pearson Education, 2006.
5. Mark Hirshey, Economics for Managers, 2007, Thomson Learning.
6. Samuelson, Paul, Economics, 18th edition, 2005, Tata-McGraw Hill.
7. Gupta, G., Managerial Economics, 2004, Tata-McGraw Hill.
8. Rangarajan and Dholkia, Macroeconomics, Tata-McGraw Hill.

Course Name	Business Communication and Soft skills						
Type of Course	Core						
Course Code	MBM21C03						
Course Summary & Justification	This course enables the students to: A. To analyse and demonstrate writing and speaking processes through invention, organisation, drafting, revision, editing, and presentation. B. To understand the importance of specifying audience and purpose and to select appropriate communication choices. C. To interpret and appropriately apply modes of expression, i.e., descriptive, expository, Narrative, scientific, and self-expressive, in written, visual, and oral Communication D. To participate effectively in groups with emphasis on listening, critical and reflective thinking and responding. E. To develop the ability to research and write a documented paper and/or to give an oral presentation.						
Semester	1			Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	45	5	-	10	60	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Apply business communication strategies and principles to prepare effective communication for domestic and international business situations.	A	6, 7
2	Participate in team activities that lead to the development of collaborative work skills and leadership skills	C, S	8, 9
3	Select appropriate organisational formats and channels used in developing and presenting business messages	E	6,7
4	Communicate via electronic mail, Internet, and other technologies and deliver an effective oral business presentation	An	6,7
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		7 Hrs	
1.1	Importance of Communication in business -Types of Business Communication-Methods and media of Communication	2	1
1.2	Principles of Business Communication, Process of Business Communication	2	1, 3
1.3	Barriers to poor Organisational Communication- Strategies for improving Business Communication effectiveness.	3	1,3,4
<b>Unit 2</b>		9 Hrs	
2.1	Types of Organisational Communication	2	1,3, 4
2.2	Communication for interpersonal influences	2	3,4
2.3	Effective Leadership Communication	2	2, 3
2.4	Cross Culture Communication	3	4
<b>Unit 3</b>		12 Hrs	
3.1	Verbal and non-verbal Communication in business	2	1,2
3.2	Public Speaking Skills	2	2
3.3	Business presentations –Role of audio visual aids and computers in oral presentations	2	2,3
3.4	Interviewing- Art of negotiation & Listening skills	2	4
3.5	Mannerisms	2	2
3.6	Body Language, postures and gestures, handshakes, gaze, smiles, hand movements,voice modulation, Eye contact, use of expression	2	2,3
<b>Unit 4</b>		12 Hrs	
4.1	Written communication- Writing Process	2	1, 2, 3
4.2	Writing Business Letters – Formats and Styles of business letters	2	1, 2, 3
4.3	Types of business letters -Request, Enquiry, Placing Order, Instruction, Action, Complaint, Adjustment, Sales, Reference, Good News &Bad News, Acknowledgement.	2	1, 2, 3
4.4	Memoranda- Directives and instructions- Notices -Reports	2	1, 2, 3
4.5	Conducting meetings-Procedure, Agenda - Proposals -Minutes - Professional papers - Agreement documents -Press releases	2	2,3
4.6	Preparation of resumes	2	4
<b>Unit 5</b>		5 Hrs	
5.1	Group discussion	2	3
5.2	Drafting speech	2	3
5.3	Time Management	1	2,3



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.			
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CD1	Lecture by use of boards/LCD projectors	CO1	CD1,CD2,CD4
	CD2	Tutorials/Assignments	CO2	CD1,CD2, CD4
	CD3	Seminars	CO3	CD3, CD4
	CD4	Mini projects/Projects	CO4	CD1,CD2,CD3,CD4
	CD5	Laboratory experiments/teaching aids		
	CD6	Industrial/guest lectures		
	CD7	Industrial visits/in-plant training Self- learning such as use of NPTEL materials		
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester examination</li> </ul>			

## REFERENCES

1. Boyee Courtland L and Thrill John V. Business Communication Today, Prentice Hall International.
2. Atkinson, Business Writing & Procedures, Reynolds American Book Co
3. Mary Ellen Guffey, Business Communication: Process and Product, 5e, South- Western Thomson Publishing, Mason, OH, 2005
4. Namita Gopal, Business Communication, New Age International Publishers, New Delhi, 2009
5. Penrose and Rasberry, Business Communication for Managers: An advanced approach, 5e, South-Western College Pub, 2007
6. Asha Kaul, Business Communication, Prentice Hall of India, New Delhi, 2007
7. Harvard Business Essentials: Business Communication, Harvard Business School Publishing 2003

Course Name	Accounting for Managers					
Type of Course	Core					
Course Code	MBM21C04					
Course Summary & Justification	Participants in this course will develop the essential ability of all managers, to use complex accounting information as a platform for decision-making. As the course unfolds, participants will build an increasingly sophisticated level of understanding of the language of accounting and its key concepts. In addition, the course develops skills in interpreting earnings statements, balance sheets, and cash flow reports. This ability to analyse financial statements will enable participants to deal more effectively with strategic options for their businesses or business units. From this second phase of the course students will take away highly relevant skills in areas such as budgeting, product and service costing and short-run decision making. Such skills, ability and knowledge will enable participants to more effectively identify profitable opportunities and to contribute significantly to better management within their own organisations.					
Semester	1		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	45	5	-	10	60
Pre-requisite	As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Outline the accounting concepts, principles, Methods, and Techniques used in the process of accounting	U	1
2	Applying the accounting concepts, principles, Methods, and Techniques used in the process of accounting so that they are able to appreciate the nature of item presented in the annual accounts of an organisation	A	2
3	Apply the Marginal Costing Techniques and Concept of Breakeven Point in the areas of business decision making	A	2
4	Critically analyse & interpret the financial data, and demonstrate the ability to communicate the results with knowledgeable recommendations	An	5,7
5	To prepare and analyse the statement of cost & profits, and estimate the elements of cost.	A	2
6	To employ budgeting and standard costing techniques as a tool to control and measure performance reporting of business organisations	An	5,7
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		<b>10 Hrs</b>	
1.1	Branches of accounting – Financial Accounting – Importance and Functions –Book Keeping – Systems of Book Keeping- Double Entry Book Keeping- Generally Accepted Accounting Principles (GAAP) - Accounting concepts and conventions- International Accounting Standards – IFRS	5	1
1.2	Journal – Ledger– Cash Book – Bank Reconciliation Statement- Trial Balance	5	2
<b>Unit 2</b>		<b>10 Hrs</b>	
2.1	Capital and Revenue – Final Accounts-Trading and Profit and Loss Account- Balance Sheet-Understanding Corporate Financial Statements and Reports	10	1
<b>Unit 3</b>		<b>10 Hrs</b>	
3.1	Comparative financial statements-Common-size financial statements-Trend Analysis-Ratio Analysis – Funds Flow Analysis – Cash Flow Analysis.	10	4
<b>Unit 4</b>		<b>10 Hrs</b>	
4.1	Cost Sheet Preparation – Absorption Vs Marginal Costing –Cost –Volume – Profit Analysis – Cost Behaviour – Breakeven Analysis – Contribution Approach –Profit Planning-Cost Concepts for Decision making	10	3,5
<b>Unit 5</b>		<b>05 Hrs</b>	
5.1	Types of Budgets –Flexible Budget – Master Budget – Management Control and Budgeting – Performance Budgeting and Zero-Based Budgeting-Cost Control-Standard Costs -Cost Variances Analysis - Revenue and Profit Variance Analysis.	5	1,6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester Examination</li> </ul>

## REFERENCES

1. Maheshwari S.N & Maheshwari S K – *Accounting for Management*, Vikas
2. Bhattacharya; *Essentials of Financial Accounting* (based on IFRS), PHI
3. Ramachandran Kakani- *Financial Accounting for Management*, TMH.
4. PC Tulsian- *Financial Accounting*, Pearson.
5. Dhamija - *Financial Accounting for Managers*, Prentice Hall.
6. Anthony, R.L. *Accounting Principles*, Richard D. Irwin Inc., Homewood, Illinois.
7. Horngren, C.T., *Introduction of Management Accounting*, Prentice Hall of India.
8. Khan and Jain, *Management Accounting*, Tata Mc Graw Hill, Delhi.
9. Blocher, Chen, Cokins and Lin, *Cost Management- A Strategic Emphasis*, TMH, ND

Course Name	Quantitative Methods					
Type of Course	Core					
Course Code	MBM21C05					
Course Summary & Justification	This course covering the essentials of Mathematical, Statistical and computational methods required by a management professional					
Semester	1	Credits			3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	25	10	10	---	45
	Collaborative learning	5	1	1	---	7
	Independent learning	4	2	2	---	8
Pre-requisite	Basic Knowledge of Mathematics, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE all basic formulae covered in the syllabus, SELECT appropriate menus and functions of MS Excel to Create, Format, Import, Merge, Save, Print Spreadsheets	R	1
2	EXPRESS numbers in various forms such as fractions, percentages, equivalent simplest fractions. SHOW how to do basic troubleshooting and fix mistakes most people make when working with spreadsheets.	U	1
3	CALCULATE Percentages, Profit & Loss, Simple & Compound Interest, frequency, cumulative frequency, Central Tendency Measure and Dispersion, Correlation and Regression ratios, USE various functions of MS Excel, Execute pivot table analysis, common (and powerful functions), Applying various Mathematical and Statistical formulae in EXCEL	A	2
4	ILLUSTRATE relationships using direct and inverse proportion, simple graphs, linear and quadratic equations, Analysing relationships. ILLUSTRATE the use of the most commonly used data-manipulation commands in MS Excel, Charts using business data	An	3
5	INTERPRET basic statistical data, graphs, and venn diagrams, Prediction using Regression and Time Series Models. DERIVE insights from multiple data sources in MS EXCEL and work with it to answer relevant business questions.	E	1
6	CREATING and SOLVING simple simultaneous equations. CREATE standard Excel Templates for routine business data management and analysis activities	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Mathematical Operations for Business</b>		15 Hrs	
1.1	Basic <b>set operations</b> : Venn diagrams, interpretation, Applications of set theory in business; Matrices –Basic operations, Solving System of Linear Equations with Matrix Methods	3	1,3
1.2	<b>Numbers</b> : Integers and fractions, squares, cubes, square roots and cube roots by prime factorisation, negative numbers; Examples of very large and very small numbers such as million/billion/trillion, positive, negative, zero and fractional indices, laws of indices.	4	1,3
1.3	<b>Ratio, rate and proportion</b> : Applications of Ratio and Proportions	2	2,3
1.4	<b>Fractions &amp; Percentages</b> : Expressing one quantity as a percentage of another, comparing two quantities, by percentage, percentages greater than 100%, increasing/decreasing a quantity by a given percentage, reverse percentages, problems involving percentages, Applications in Business	4	2,3
1.5	Profit & Loss Simple Interest & Compound Interest in Finance	2	3
<b>Unit 2 : Basic Statistics and its Applications in Business</b>		10 Hrs	
2.1	Frequency Tables	2	2
2.2	Data Presentation using Charts& Graphs	4	1,3
2.3	Measures of Central Tendencies: Mean, Median, Mode	7	3
2.4	Combined and Weighted Averages, Percentile	2	3,5
2.5	Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficients of Variation	5	3,5
<b>Unit 3 : Correlation and Regression Analysis</b>		15 Hrs	
3.1	Introduction, Different Types of Correlation	2	3
3.2	Karl Pearson's coefficient of correlation	3	3,5
3.3	Spearman's rank correlation coefficient, Coefficient of Determination	3	3,5
3.4	Prediction using Regression Equations and related problems	4	5
3.5	Concept and Applications of Multiple Regressions.	2	3
<b>Unit 4 : Probability Distribution &amp; Time Series Analysis</b>		15 Hrs	
4.1	Concept of Probability theory, Simple Business Problems	2	1
4.2	Simple Business Problems using Normal Distribution	3	3
4.3	Time Series Analysis – Definition, Applications, Components of Times Series	4	5
4.4	Trend Analysis- Graphic, Semi Average Methods Smoothing techniques – Moving average, Exponential smoothing	4	3,5
4.5	Application of Time series in Business forecasting.	2	5
<b>Unit 5 : Spread sheet Applications</b>		10 Hrs	
5.1	Features of MS Excel – managing data – all basic excel operations	2	1
5.2	Conditional if function – sorting - filters	3	1,3
5.3	Functions in Excel: Financial functions – NPV, IRR, PMT, IPMT – Statistical functions: MEAN,MEDIAN, AVERAGE, AVEDEV, CORREL, STDEV and RANK. Database functions – DMAX, DMIN,DSUM, DAVERAGE,DCOUNT- Date & Time	6	4
5.4	Functions-Lookup & Reference Functions-Text Functions-Engineering Functions; Goal seek – pivot table and scenario management for decision making	5	5
5.5	Charts & Graphics in Excel- Printing and page formatting of excel sheets, Managing multiple sheets, Using Macros.	4	4.5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ol style="list-style-type: none"> <li>1. Continuous Assessment (CA)             <ol style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ol> </li> <li>2. End Semester Examination</li> </ol>

#### REFERENCES

1. Rajagopalan and Sattanathan, Business Mathematics
2. Praveen, R. V., Quantitative Aptitude and Reasoning, PHI Learning
3. K. B. Akhilesh & S. Balasubramanyam, Mathematics and Statistics for Management, Vikas Publishing House Pvt Ltd

#### SUGGETED READINGS

1. Richard L .Levin and David S. Rubin, Statistics for Management, Prentice Hall of India, New Delhi.
2. Qazi Zameeruddin, Khanna, Business Mathematics, Vikas Publications, 2004.
3. Edward C.Willet, MS Office, Wiley Publishing Co, New Delhi
4. Martin Anthony and Normanbiggs, Mathematics for Economics and finance, Low price Edition – Cambridge University press.
5. BM. Aggarwal , Business mathematics and statistics, Ane books Pvt Ltd

Course Name	Environmental Management					
Type of Course	Core					
Course Code	MBM21C06					
Course Summary & Justification	The course acquaints the students with the environmental issues surrounding business and helps them to develop a perspective for effectively managing these issues.					
Semester	1		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	45	--	-	15	60
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Apply the concept of environment and environmental issues when making business decisions	A	3
2	Explain the importance of natural assets, biodiversity and ecosystem services as the foundation of economic and societal well-being.	U	11
3	Analyse the ways in which the nature of future can be made more sustainable developments in the context of business	An	11
4	Evaluate the importance of Corporate Social Responsibility (CSR) in the context of environment management	E	10
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Introduction</b>		6 Hrs	
1.1	Introduction to Environment Environment: Components of environment : Lithosphere, hydrosphere, Atmosphere, Biosphere, Ecology,	2	1,2
1.2	Ecosystem: components- Biotic and abiotic components, Food chain	2	1, 2
1.3	Biodiversity: Definition, principles, Biodiversity in India.	2	1, 2
<b>Unit 2 : Natural resources and energy management</b>		8 Hrs	
2.1	Natural resources and energy management: Depletion of natural resources, Fossil fuels	2	1,2
2.2	Energy sources: Conventional sources, Renewable sources	2	2, 3
2.3	Energy Management: Definition, Energy management techniques	2	1, 2
2.4	Energy Audit, global warming, climate change, carbon credit.	2	1,2, 3
<b>Unit 3 : Environmental degradation</b>		10 Hrs	
3.1	Impact of industrial and business activities on the environment	2	1,2
3.2	Environmental degradation, Industrial pollution – Types and impacts, environmental, economic, and social impacts	2	1,2
3.3	Managing industrial pollution, Waste management	2	1,2

3.4	Eco-friendly farming and sustainable agriculture	2	1,2
3.5	International Environmental issues	2	1,2
<b>Unit 4 : Sustainable Development</b>		12 Hrs	
4.1	Sustainable Development: Definition, elements, indicators, principles	2	2, 3, 4
4.2	Guidelines for sustainable development	2	2, 3, 4
4.3	Corporate Social Responsibility and Environmental Management : Environmental aspect of CSR	2	2, 3, 4
4.4	CSR through triple bottom line and Sustainable Business	2	2, 3, 4
4.5	Concern for environment: Eco-friendly manufacturing, packaging, Green marketing, Green funding, Green taxes	2	2, 3, 4
4.6	Environment friendly products	2	2, 3, 4
<b>Unit 5 : Initiatives for Environment Management</b>		9 Hrs	
5.1	Environment impact assessment: Environment impact studies and assessment	2	2, 3
5.2	Environment management system, ISO 14000	2	2, 3
5.3	Environmental legislations	1	2, 3
5.4	Institutional support for establishing and maintaining environment friendly business.	2	2, 3
5.5	International initiatives for environment management	2	2, 3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

### SUGGESTED READINGS

1. N K Uberoi, *Environmental Management*, Excel Books, 2004.
2. Pandey G.N, *Environmental Management*, Vikas publishing house, 2009.
3. Alasdair Blair, David Hitchcock, *Environment and Business*, Routledge, 2001.
4. Bruce. W. Piasecki, Kevin. A. Fletcher, Frank. J. Mendelson, *Environmental Management and Business strategy*, John Wiley & Sons, 1999.
5. Michael V. Russo, *Environmental Management: Readings and Cases*, Sage, 2008.
6. Kiran. B. Chhokar, Mamta Pandya, Meena Raghunathan, *Understanding Environment*, Sage Publications, 2008.
7. Aloka Debi, *Environmental Science & Engineering*, Universities Press, 2008.
8. Bala Krishnamurthy, *Environmental Management: Text and Cases*, PHI, 2008
9. Arindita Basak, *Environmental Studies*, Pearson Education, 2009
10. Kaushik, Anubha, *Environmental Studies*, New Age International, 2010



Course Name	Business Law					
Type of Course	Core					
Course Code	MBM21C07					
Course Summary & Justification	This course is designed to familiarise the students with important features of law relating to business like Contract Law, Company Law and other laws applicable to business.					
Semester	1		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	45	--	--	15	60
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	To equip each student with the basic knowledge of the legal and regulatory environment affecting business so as to be able to identify, avoid, and manage legal issues they will encounter in business.	A	2
2	To describe the ways in which various effect governmental regulations affect contemporary business practices.	A	2, 6
3	To apply the various legal matters related to the establishment, running, CSR and winding up of a company as manager in an organisation.	A	2,10
4	To realise the importance of International Law in dealing with disputes arising from the globalisation of society and business	A	12
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction and The Indian Contract Act 1872</b>	13 hours	
1.1	Introduction of legal System; Sources of Law	1	1
1.2	Classification of law	1	1
1.3	Ethics, justice and the Law Interrelationships between the legal system and the social system Ethics and Social Responsibility of Business	2	1, 4
1.4	The Indian Contract Act 1872; Nature and Classification of contracts	2	1, 2

	Application of contract Act in business context		
1.5	Essential elements of a valid contract	2	1, 2
1.6	Provisions Relating to Performance and Discharge of Contracts	2	1, 2
1.7	Breach of Contract and its remedies	1	1, 2
1.8	Special contracts - Indemnity and Guarantee, Contract of Agency	2	1, 2
<b>Unit 2</b>	<b>Negotiable Instruments Act, Sale of Goods Act and Partnership Act</b>	12 hours	
2.1	Negotiate instruments Act 1881; Cheques, Bills of exchange, Promissory Notes Characteristics	2	1, 2
2.2	Dishonor and Discharge of negotiable instruments	2	1, 2
2.3	Sale of goods Act 1930; Conditions, Provisions relating to Conditions and Warranties	2	1, 2
2.4	Indian Partnership Act, 1932; Important features - Formation of partnership firms, Types of partnership firms	2	1, 2
2.5	Kinds of partners - Rights and duties of partners, Dissolution of partnership	2	1, 2
2.6	Limited Liability Partnership Act, 2008- meaning of LLP, features, Incorporation by registration, Insolvency and winding up	2	1, 2
<b>Unit 3</b>	<b>Companies Act</b>	8 hours	
3.1	Companies Act 2013; Company – meaning, features and types of companies Incorporation of a company - Memorandum, Articles of Association– MOA, AOA	2	1, 2
3.2	Prospectus, Share Capital, Management of companies - Directors, Appointment of directors including woman Director, Meetings	2	1, 2
3.3	Winding up of Companies	2	1, 2
3.4	Corporate Social Responsibility (CSR) as per Companies Act	2	3
<b>Unit 4</b>	<b>Consumer Protection, IT and Competition Acts</b>	6 hours	
4.1	The Consumer Protection Act, 2019, Introduction, Consumer Protection Authority Dispute Redressal Forums	2	1, 2
4.2	Information Technology act, 2000 - Introduction, Digital Signature, cybercrimes and remedies. Electronic records, Controlling and certifying authority, cyber regulation appellate tribunals	2	1, 2
4.3	Competition Act 2002 – definition, salient features and provisions; Competition Commission of India	2	1, 2
<b>Unit 5</b>	<b>Legal environment of international business</b>	6 hours	
5.1	Intellectual Property rights – Patents, trademarks, copyright and industrial designs	2	4
5.2	International Law & Transactions	2	4
5.3	Managing transactions in the 21st century - Sales, Licensing, and E-Commerce	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Assignment</li> <li>○ Presentation</li> </ul> </li> <li>• End semester Examination</li> </ul>

### SUGGESTED READINGS

1. M.C Shukla , Mercantile Law, Sultan Chand & Sons.
2. Gulshan S. S. & Kapoor G. K. (2006), Business Law Including Company Law, Twelfth Edn., New Age International (P) Ltd.
3. Kuchchal M. C. (2009), Business Law, Fifth Edn., Vikas Publishing House, New Delhi.
4. K Aswathappa (2009). Essentials of Business Environment, Himalaya Publishing House.
5. Pathak, Legal Aspects of Business, Tata McGraw- Hill Publishing Company Limited, New Delhi, 2010.
6. Keith-Davis & William Frederick, Business and Society, McGraw-Hill, Tokyo.
7. M.M. Sulphay & Az-har Basheer, Laws for Business, PHI Learning Pvt. Ltd. New Delhi, 2011
8. Maheswari & Maheswari, Mercantile Law. Himalaya Publishing House. Mumbai
9. Rudder Dutt & Sundaram, Indian Economy, Vikas Publishing House, New Delhi.
10. Veena Keshav Pailwar, Economic Environment of Business, PHI Learning Pvt. Ltd, New Delhi, 2010

Course Name	Corporate Governance and Ethics					
Type of Course	Core					
Course Code	MBM21C08					
Course Summary & Justification	The expected outcome of the course is to elucidate the historical development and pioneers of corporate governance, explain and critically examine the corporate governance system, principles, models and theories of corporate governance ethics in organisations in India and abroad, and critically discuss the problems of corporate governance and identify its stakeholders in the business sector.					
Semester	1		Credit		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	45	-	-	15	60
Pre-requisite	Nil As per the requirement of the course.					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion, etc.						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Elucidate the Corporate governance system, its historical development, and principles.	U	10,11
2	Evaluate the importance of effective leadership for good governance using case studies of companies	An	8
3	Explain and contrast the models and theories of corporate governance.	An	2
4	Evaluate the governance issues and identify its stake holders in the corporate sector.	E	1
	Explain Business Ethics and contrast the importance of Business Ethics and ethical issues to the organisation.	An	12
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## Course Content

	Hrs	CO. No.
<b>Unit 1 : Corporate governance an overview</b>	12 Hrs	
1.1 Corporate governance – Meaning - definition	2	1
1.2 History of Corporate Governance	2	1
1.3 Characteristics of Good Governance	2	1
1.4 Essentials of a sound corporate governance system.	2	1

1.5	4 Ps of Corporate Governance.	2	1
1.6	Consequences of failure of Corporate Governance System	2	1, 4
<b>Unit 2 : Theoretical base of corporate governance</b>		12 Hrs	
2.1	Models of Corporate Governance – Anglo Saxon – German - Japanese – Control – Indian Model.	3	3
2.2	Principles of corporate governance.	2	1
2.3	Theories of Corporate Governance – Agency Theory -Stewardship Theory – Resource Dependency Theory – Stakeholder Theory – Transaction Cost Theory – Political Theory.	2	3
2.4	Effective leadership for good Governance – Qualities of effective leadership and its impact on Good governance.	2	2
2.5	Stake Holders of Corporate Governance – Obligations.	3	1,2,4
<b>Unit 3 : Regulatory frame work of Corporate Governance</b>		8 Hrs	
3.1	Legal aspects of CG - SEBI Act – Companies Act – Clause 49 of Listing Agreement.	2	1, 4,5
3.2	Standardisation of CG.	2	1,2
3.3	Corporate Governance Committees.	2	1,2,4,5
3.4	OECD principles	2	1,4
<b>Unit 4 : Corporate governance practices in Global scenario</b>		12 Hrs	
4.1	Development of CG in various countries.	3	1,3
4.2	Pioneers in CG practices.	3	1,2
4.3	Emergence of CG issues in India – Implementation of Birla Committee recommendations.	2	1,2,3,4
4.4	Land mark cases in corporate frauds in recent years – Enron – World com – AIG Insurance – Baring Bank – Lehman Brother-Sathyam - Tata – Sahara – Harshad Mehta – Mundra.	4	1,2,4,5
<b>Unit 5 : Ethics</b>		16 Hrs	
5.1	Ethics – Meaning - Objective.	2	5
5.2	Business ethics – Characteristics – Need – Evolution – Arguments against Business Ethics.	2	5
5.3	Views of Business Ethics – Unitarian – Separatist view- Integration view.	2	5
5.4	Relationship between ethics & corporate governance.	2	1,4,5
5.5	Value-oriented Holistic Management – Needs.	2	5
5.6	Quality of work life in Indian philosophy – Concept of ethics in work-life according to Bhagavat Gita.	2	5
5.7	Ethics for transnational business in view of globalization.	2	5
5.8	Ethical Issues in Business Organisation	2	3,4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

1. SK Bhatia, Business Ethics and Managerial Values, Deep and Deep.
2. CVS Murthy, Business Ethics and Corporate Governance, Himalaya.
3. SK Mandal, Ethics in Business and Corporate Governance, Tata Mc Graw Hill
4. Manisha Paliwal, Business Ethics, New age international press. New Delhi.
5. Patrick J. A. & Quinn J. F. Management Ethics, Response Publishing, New Delhi.

## 17.2. Semester 2

Course Name	Human Resource Management					
Type of Course	Core					
Course Code	MBM21C09					
Course Summary & Justification	The objective of this course is to sensitise students to various facets of managing people and to create an understanding of the various practices of human resource management.					
Semester	2		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	45	--	--	15	60
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	To be aware of the role, functions and functioning of human resource department of the organisations.	U	2
2	To design and formulate various HRM processes such as Recruitment, Selection, Training, Development, Performance appraisals and Reward Systems and Compensation Plans	C	2
3	Identify emerging issues and trends in HRM process in a global context	U	12
4	Compare the HRM practices of Indian organisations with that of global companies	E	13
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction to HRM</b>		5 Hrs	
1.1	Introduction to Human Resource Management: Human Resource Management - Definition, nature, scope and features	1	1,2
1.2	Functions of HRM- HRM and Personnel Management, Role of HR Manager	1	1
1.3	Human Resource Planning: Concept, Objectives and Process; Demand and Supply Forecasting	1	1, 2
1.4	Job Analysis, Job evaluation, Job enrichment, Job enlargement	1	1, 2
1.5	Labour codes in India	1	1, 2

<b>Unit 2 : Employment, Training and Development</b>		<b>9 Hrs</b>	
2.1	Employment, Training and Development : Employment - Recruitment: Recruitment process, Sources of recruitment, E- Recruitment	2	2
2.2	Selection Process- types of Tests and Interviews. Assessment Centers, Placement and Induction	2	2
2.3	Training and Development- Objectives and Needs-Training Process-Methods of Training –Tools and Aids- Evaluation of Training Programs	2	2
2.4	Executive development programmes	1	2
2.5	Employee hiring practices in Global and Indian organisations	2	3, 4
<b>Unit 3 : Performance and career Management</b>		<b>10 Hrs</b>	
3.1	Performance and career Management : Performance Management- Definition, Purpose and Principles	2	2
3.2	Performance Appraisal: Concept, Need, Objectives, Uses	2	2
3.3	Process of Performance Appraisal, Different methods of PA, Talent Management	2	2
3.4	Career Management : Career Planning, Career Path, Career Anchors, Career Development, Succession planning	2	2
3.5	Occupational stress, Performance Management practices in Global and Indian organisations	2	3, 4
<b>Unit 4 : Compensation Management</b>		<b>11 Hrs</b>	
4.1	Compensation Management - purpose and importance	2	2
4.2	Wage & salary administration, incentive plans & fringe Benefits	2	2
4.3	Executive Compensation	2	2
4.4	Performance Linked Compensation, Performance incentives and Gain sharing, Participative Management	2	2
4.5	Employee welfare programmes, Employee mobility- Promotion, Transfer and Separation	2	2
4.6	Employee welfare - Practices in Global and Indian organisations	1	3, 4
<b>Unit 5 : Industrial Relations</b>		<b>10 Hrs</b>	
5.1	Industrial Relations : Industrial Relations- Philosophy and Concept, Trade Unions: Concept, Objectives, Functions	2	2
5.2	Collective Bargaining- Process, Trends and Practices of Collective Bargaining in India and MNCs	2	2, 3, 4
5.3	Employee discipline, Employee Grievance handling and redressal, Employee counselling	2	2
5.4	Industrial Disputes-Causes, Unfair Labour Practices, Dispute Settlement Machinery- Conciliation, Voluntary Arbitration and Adjudication.	2	2
5.5	Industrial relations and trade unions in the context of Indian and international companies	2	3, 4



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>• End Semester Examination</li> </ul>

### Books for Study

1. Gary Dessler, Biju Varkkey, *Fundamentals of Human Resource Management*, Pearson Education, 2010.
2. K. Ashwathappa, *Human Resource Management - Text & Cases*, Tata McGraw Hill, 2010.
3. V. S. P. Rao, *Human Resource Management - Text & Cases*, Excel Books, 2010

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1. Lawrence. S. Kleiman, *Human Resource Management – A Managerial tool for competitive advantage*, Biztantra, 2003.
2. Robert. L. Mathis, John. H. Jackson, *Human Resource Management*, Thomson South-Western, 2003.
3. Angelo. S. DeNisi, Ricki. W. Griffin, *Human Resource Management*, Biztantra, 2009
4. Mizra S. Saiyadain, *Human Resources Management*, Tata McGraw Hill, 2009
5. Wayne Mondy, *Human Resource Management*, Pearson, 2008

Course Name	Financial Management					
Type of Course	Core					
Course Code	MBM21C10					
Course Summary & Justification	This course has the objective of creating an understanding of the basic issues involved in raising of funds for investments, evaluation of investment projects and proper management of fund					
Semester	1		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	45	5	-	10	60
Pre-requisite	As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	DESCRIBE the basic concepts and theories related to Financial Management, Various techniques of Financial Statement Analysis, Working Capital, Capital Structure, Leverages, Dividend. and Capital Budgeting.	U	1
2	PERFORM all the required calculations through relevant numerical problems	A	2
3	ANALYSE the situation and <ul style="list-style-type: none"> <li>FV, PV and NPV of cash flows</li> <li>estimate working capital required</li> <li>decide ideal capital structure</li> <li>evaluate various project proposals</li> </ul>	An	2,5
4	EVALUATE impact of business decisions on Financial Statements, Working Capital, Capital Structure, Dividend and Capital Budgeting of the firm	E	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1</b>		5 Hrs	
1.1	Meaning and Definition of Business Finance and Financial Management; Finance Functions; Aims of Finance function : Scope of Finance Functions; Objectives of Financial Management; Financial Decisions; Role and functions of Finance manager	10	1
<b>Unit 2</b>		15 Hrs	
2.1	Sources of Finance: Security Financing, Internal financing, Loan financing. Cost of different sources of capital : Concept of cost of capital, Significance	15	1,2, 3, 4

	cost of capital, computation of component costs of capital : cost of debt; cost of preference share capital, cost of equity, cost of retained earnings, Computation of composite cost of capital. Capital structure Decision : Meaning and patterns of capital structure; Theories of capital structure : Net income approach, Net Operating Income approach, Traditional approach and MM approach; Concept of Optimum capital structure, factors affecting capital structure. Operating and Financial leverages: Meaning of leverage, Types of leverages; operating, Financial and composite Leverages		
<b>Unit 3</b>		15 Hrs	
3.1	Time value of money – concept, future value of a single amount; Present value of a single amount; Future value of an annuity; Present value of an annuity. Capital Budgeting decisions : concept of capital budgeting, need, types and importance of capital investment decisions; capital budgeting appraisal methods : Payback period method, Net Present Value Method, Internal Rate of Return method and Present Value Index method	15	1,2, 3, 4
<b>Unit 4</b>		5 Hrs	
4.1	Management of Working Capital – Concept, types, importance and factors affecting working capital, sources of working capital	5	1,2,3
<b>Unit 5</b>		5Hrs	
5.1	Dividend Policy : Dividend and its forms, Objectives of Dividend Policy, Relevance and Irrelevance theories of dividend decision : Walter's Approach; Gordon's Approach and MM approach	5	1,2, 3, 4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester Examination</li> </ul>

### Suggested Readings

1. James C. Van Horne, John M. Wachowicz Jr. *Fundamentals of Financial Management*, Prentice Hall of India, New Delhi.
2. Richard A. Brealey, Stewart C. Myers, Franklin Allen, Pitabas Mohanty, *Principles of Corporate Finance*, Tata McGraw Hill Publishing Company Ltd. New Delhi.
3. Pandey I. M.: *Financial Management*, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Prasanna Chandra, *Financial Management – Theory and Practice*, Tata McGraw Hill Publishing Company Ltd. New Delhi.
5. Khan M. Y., Jain P. K. *Financial Management – Text and Problems*, Tata McGraw Hill Publishing Company Ltd. New Delhi.
6. Lawrence D. Schall, Charles W. Haley, *Introduction to Financial Management*, McGraw Hill, Inc., New York.

Course Name	Marketing Management					
Type of Course	Core					
Course Code	MBM21C11					
Course Summary & Justification	This course enables the students to:  A. Get introduced to the nature and significance of the Marketing Function and the Marketing management process. B. Develop an understanding of the STP Process C. Outline the key aspects of the Buying Behaviour of consumers D. Explain the factors affecting various product and pricing decisions. E. Explain the factors affecting various channel management and Marketing communication decisions.					
Semester	2		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	45	5	-	10	60
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Analyse the environment and recommend appropriate Segmentation, Targeting and Positioning Strategy for a product, to achieve the business goals.	An	2
2	Analyse and explain the buying behaviour of a given target market segment.	An	2
3	Recommend suitable product, pricing, distribution and Marketing Communication strategies for a brand to achieve the Marketing objective in a global context	C	12
4	Analyse the position of Indian business in global environment in the marketing context	An	13
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction</b>		8 Hrs	
1.1	Meaning and Scope of Marketing; Marketing Philosophies and corporate orientation towards market place	2	1, 2
1.2	Marketing Management Process an Overview; Concept of Marketing Mix, global marketing mix	2	1,2,3
1.3	Understanding Marketing Environment	1	2,3
1.4	Marketing information system and Fundamentals of Marketing Research.	2	1
1.5	Marketing in the 21 <sup>st</sup> century – challenges and opportunities	1	3
<b>Unit 2 : Market Analysis</b>		12 Hrs	
2.1	Consumer Markets, Factors affecting consumer behaviour & consumer decision making process	2	2
2.2	Business Markets, Factors affecting consumer behaviour & consumer decision making process,	2	2
2.3	Steps involved in Market oriented strategic planning, Preparation of a marketing plan.	2	2
2.4	Purpose of Segmentation, Basis of segmenting Consumer and Business Markets.	2	2
2.5	Market Targeting and Product Positioning, Choosing and creating points of parity and Points of difference.	2	2,3,4
2.6	Planning for global marketing, emergence of India in the global market	2	2,3,4
<b>Unit 3 : Product and Price Mix</b>		12 Hrs	
3.1	Classification of products, product levels	2	1,2
3.2	Analysis of product line & product mix	2	2,3
3.3	Concept of Product Life Cycle and Strategies to be adopted at each stage of the product life cycle.	2	4
3.4	New Product Development and the steps involved in NPD.	2	3,4
3.5	Steps involved in setting a Price, Various pricing methods.	2	3,4
3.6	Global marketing strategies – product and pricing	2	3
<b>Unit 4 : Promotion and Distribution</b>		8 Hrs	
4.1	Meaning and Role of IMC, designing effective communication programme	1	3, 4
4.2	Meaning and role of the elements of communication mix (Advertising, Sales Promotion, Direct marketing, Personal Selling & Public Relations)	2	3, 4
4.3	Distribution channel decisions: Types and functions of intermediaries	1	3, 4
4.4	Selection and management of intermediaries; Wholesaling, retailing, Clearing & Forwarding agencies.	2	3, 4
4.5	Logistics decisions: Introduction to Inventory management, warehousing, transportation and insurance.	2	3, 4
<b>Unit 5 : Emerging trends and issues in marketing</b>		05 Hrs	
5.1	Controlling the marketing effort & Marketing Audit	1	3, 4
5.2	Emerging trends and issues in marketing: Consumerism, Social marketing; direct and online marketing; digital marketing, Green Marketing	2	3, 4
5.3	Introduction to Marketing analytics	2	3, 4

Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.																
	<table><tr><td><b>CD</b></td><td><b>Course Delivery methods</b></td></tr><tr><td>CD1</td><td>Lecture by use of boards/LCD projectors</td></tr><tr><td>CD2</td><td>Tutorials/Assignments</td></tr><tr><td>CD3</td><td>Seminars</td></tr><tr><td>CD4</td><td>Mini projects/Projects</td></tr><tr><td>CD5</td><td>Laboratory experiments/teaching aids</td></tr><tr><td>CD6</td><td>Industrial/guest lectures</td></tr><tr><td>CD7</td><td>Industrial visits/in-plant training Self- learning such as use of NPTEL materials</td></tr></table>	<b>CD</b>	<b>Course Delivery methods</b>	CD1	Lecture by use of boards/LCD projectors	CD2	Tutorials/Assignments	CD3	Seminars	CD4	Mini projects/Projects	CD5	Laboratory experiments/teaching aids	CD6	Industrial/guest lectures	CD7	Industrial visits/in-plant training Self- learning such as use of NPTEL materials
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Assessment Types	<b>Mode of Assessment</b> <ul style="list-style-type: none"><li>Continuous Assessment (CA)<ul style="list-style-type: none"><li>Tests</li><li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li><li>Assignments</li></ul></li><li>End Semester Examination</li></ul>																

## REFERENCES

1. Philip Kotler, Kevin Lane Keller, Abraham Koshy, Mithileswar Jha; "Marketing Management – A South Asian Perspective", Pearson Education India Limited, New Delhi,
2. Etzel, M., Walker, B., Stanton, W. and Pandit, A (2009). Marketing Management, Tata McGraw Hill, New Delhi
3. Ramaswamy, V.S and Namakumari, S. (2009) Marketing Management: Global Perspective, Indian Context, 4th Edition, Macmillan Publishers India Ltd., New Delhi
4. Saxena, Rajan (2009), Marketing Management, Fourth Edition, Tata McGraw Hill Education Pvt. Ltd. New Delhi.
5. Louis E. Boone and David L. Kurtz (2007). Principles of Marketing, 12<sup>th</sup> Edition, Cengage

<b>Course Name</b>	<b>Operations Management</b>					
Type of Course	Core					
Course Code	MBM21C12					
Course Summary & Justification	This course includes introduction to operations in a firm, concepts of quality management, inventory management, maintenance management and production management. It also includes concepts like production planning, plant location, layout, materials handling. The course provides an understanding on the basic activities and process in the production function.					
Semester	2		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Case/Video	Others	Total Learning Hours
	Collaborative learning	45	9	5	1 (Industry visit etc)	60
Pre-requisite	MBM21C05 Quantitative Methods					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the importance of operations as a function in a firm	U	1
2	The student will be able to analyse and evaluate inventory management practices in a firm.	A	2
3	The student will be able to suggest proper quality management processes in a firm.	C	5
4	The student will be able to analyse and critically examine production planning practices and maintenance activities in a firm.	A	5
5	The student will be able to analyse and critically examine location and layout planning practices of a firm.	A	4
6	The student will be able to analyse and critically examine the issues related cases of a firm as a team.	A	9
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

	Hrs.	CO No.
<b>Unit 1 : Production as an organisation function</b>	<b>9 Hrs</b>	
1.1 Importance of Production Function	2	1
1.2 Scope of Production and Operations Management	2	1
1.3 Types of Production Systems	2	1

1.4	Strategic Operations Management, Operations Strategies, Elements of Operations Strategy	1	1
1.5	5 Ps of Operations	1	1
1.6	System view in operations, Decisions in operations	1	
<b>Unit 2 : Plant location &amp; Layout</b>		<b>8 Hrs</b>	
2.1	Nature - Location Theories, Steps in Location, Location Models	3	5
2.2	Plant Layout, Factors influencing lay out, Principles of lay out, Layout Tools and Techniques	3	5
2.3	Materials Handling, Material Handling Principles, Types, Selection of Handling System	2	2
<b>Unit 3 : Materials Management</b>		<b>10 Hrs</b>	
3.1	Vendor rating	1	2
3.2	Inventory Models, EOQ, Reorder point, EOQ with Discounts	3	2
3.3	MRP-I, MRP-II	1	2
3.4	Selective Inventory Control (SIC)	1	2
3.5	Just In Time (JIT), Basics of Kanban	1	2
3.6	VMI and ERP	1	2
3.7	Work Study, Work Measurement, Work Sampling	2	2
<b>Unit 4 : Production /Operations Planning &amp; Control</b>		<b>10 Hrs</b>	
4.1	Role of production planning & control in Operations Management, Factors determining production planning	1	4
4.2	Aggregate Planning	2	4
4.3	Master Production Schedule	1	4
4.4	Scheduling, Loading, Routing, Gantt Charts	1	4
4.5	Product Planning for Various Production Systems, Line Balancing and sequencing, EBQ	2	4
4.6	Capacity Planning	1	4
4.7	Basics of Maintenance management, Maintenance Decisions	1	4
4.8	Overview of FMS and Robotics.	1	4
<b>Unit 5 : Quality Management</b>		<b>8 Hrs</b>	
5.1	Statistical Quality Control (SQC)	3	3
5.2	Total Quality Management (TQM), Kaizen, Six sigma	2	3
5.3	ISO Systems	1	3
5.4	Supply chain management basic Concepts	1	2
5.5	Team presentations, Cases and examples on issues related to operations	1	6



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests : Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>• Field visit report: Each student shall individually or in group visit an institution with demonstrated experience of alternative thoughts and prepare a report</li> </ul> End Semester Examination

## REFERENCES

1. Aswathappa, Production & Operations Management
2. Buffa E.S., Modern Production and Operations Management
3. Chari, Production & Operations Management
4. Paneer Selvam, Operations Management

## SUGGESTED READINGS

1. Prof. Wilson, Operations Management
2. Dilworth James B., Operations Management
3. Adams Evertie E., Ebert Ronald J., Operations Management
4. Norman Gaither, Production and Operations Management
5. Kanishka Bedi, Production and Operations Management
6. Joseph G. Monks, Operations Management
7. Everette Adam Jr., Ronald Ebert, Production and Operations Management
8. S.C. Sharma, Production and Operations Management

<b>Course Name</b>	<b>Management Information Systems</b>					
Type of Course	Core					
Course Code	MBM21C13					
Course Summary & Justification	This course is to acquaint the students with the role, functions and development of information systems at different levels and functional areas of the organisation.					
Semester	2	Credits			3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	25	10	10	---	45
	Collaborative learning	5	3	2	---	10
	Independent learning	5	-	-	---	5
Pre-requisite	Basic Knowledge in management, processes, models					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE all basic formulae covered in the syllabus, basic definitions	R	1
2	EXPRESS different business requirements in automated system, life cycles, processes, documentations	U	1
3	ILLUSTRATE relationships , relationship between processes, data flow	An	3
4	INTERPRET basic definitions, graphs, and diagrams identify different automation system work with it to answer relevant business questions.	E	1, 4
5	CREATING and SOLVING simple simultaneous equations. CREATE information system models, data flow, documents, SDLC models	C	2, 4
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1: Foundation of Information Systems</b>		10 Hrs	
1.1	<b>Evolution of MIS concept-</b> framework for understanding and designing MIS in an organisation, Concept of information-definition, features, types, Information generation and communication, Quality and value of information, information overload	5	1,3
1.2	<b>System-</b> Concept and definition, Different types and characteristics of system, Control in system <b>Feedback-</b> Positive and negative feedback system, negative feedback control system, control flow- input, process, output Law of requisite variety	5	1,3

<b>Unit 2 : Types of information System</b>		13 Hrs	
2.1	Classification based on levels of management Transaction Processing Systems, Office Automation Systems, Information Reporting Systems, Decision Support Systems	3	1,5
2.2	DSS- software, models	3	1
2.3	Decision making process- Structured ,semi structured and Unstructured problems	2	4
2.4	Analysis- sensitivity analysis, Goal seeking Analysis and Optimising Analysis	2	4
2.5	Executive Support Systems, Expert Systems and Enterprise Resource Planning Systems.	3	2,4
<b>Unit 3: Information Systems Development and Implementation</b>		16 Hrs	
3.1	Software development life cycle: Spiral model, prototyping and user development approach	2	1,2
3.2	Systems Analysis in Life Cycle Approach: Fact Finding, Feasibility study, Cost Benefit Analysis, Structured Analysis	4	1,2
3.3	Data Flow diagram- systems Design; Concepts of Input, output and database design- system implementation	5	4,4
3.4	Concepts of Testing, Training and Conversion - system documentation – information system audit.	5	5
<b>Unit 4 : Business Information Systems in Functional Domain</b>		11 Hrs	
4.1	Marketing Information Systems:- Manufacturing Information Systems , Human Resource Information Systems, Accounting Information Systems, Financial Information Systems,	5	1,4
4.2	Strategic roles of IS- Breaking Business Barriers, Reengineering Business Processes-Improving Business Quality – Creating Virtual Company – Challenges of Strategic IS	6	1
<b>Unit 5 : Managing Information Systems</b>		10 Hrs	
5.1	Enterprise Management – Enterprise Collaboration System	3	1
5.2	IS planning methodologies, Critical Success Factors, Security & Ethical Challenges Backup & Recovery Process	4	1,3
5.3	Computer Crime – Privacy Issues.	3	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. O'Brien, James A, Management Information Systems, Tata McGraw Hill, New Delhi, 2004.
2. Marvin Gore, Elements of Systems Analysis & Design, Galgotia Publications.
3. S.A. Kelkar, Management of Information systems, PHI Learning
4. Alexis Leon and Mathews Leon, Introduction to Information Systems, Tata McGraw Hill
5. Waman S. Jawadekar , Management of Information Systems , Tata McGraw Hill
6. Robert Schultheis and Mary Summer, Management Information System –The Managers view, Tata Mcgraw Hill
7. S. Sadagopan, Management Information Systems, PHI Learning
8. Ralph Stair and George Reynolds, Principles of Information Systems, Thomson/Course Technology, 2003

Course Name	Organisational Behaviour					
Type of Course	Core					
Course Code	MBM21C14					
Course Summary & Justification	This course allows the students to learn the basics of Organisational behaviour. In Management career, professionals should have an in-depth knowledge of organisational behaviour principle how employees behave in organisations – in individual, group and organisational dimensions- . Based on several theories and practical exposures, students are able to analyse the behaviour in organisations and behave accordingly.					
Semester	2		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	41	10	-	5	60
	Case based learning	4				
	Total	45				
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis, Book review, Seminars ,discussion etc.						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Organisational Behaviour	A	1, 2
2	Examine the different aspects of organisational behaviour	A	1, 2
3	Evaluate the individual aspects of Organisational Behaviour	E	1, 2, 3
4	Explain and evaluate the Group aspects of Organisational Behaviour	U	1, 2
5	Explain various theories, concepts related to Organisational Behaviour	U	1, 2
6	Compare and Evaluate various leadership theories	An	8
7	Practise team leadership through active participation in team based activities.	A	9
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

**COURSE CONTENT – Contact teaching hours 45 hours**

		Hrs	CO. No.
<b>Unit 1 : Individual Behaviours</b>		13 Hrs	
1.1	Personality and theories in Personality	3	1, 2, 3
1.2	Belief, Values and theories in Belief, Values	3	1, 2, 3
1.3	Attitudes and theories in Attitudes	2	1, 2, 3
1.4	Perception and theories in perception	3	1, 2, 3
1.5	Attribution and theories in Attribution	2	1, 2, 3
<b>Unit 2 : Individual Behaviours</b>		10 Hrs	
2.1	Motivation- Theories of Motivation; Application of Motivation at work place.	2	1, 3, 5
2.2	QWL, Job Enlargement,	2	1, 3
2.3	Job Enrichment, Job Rotation, Job re-engineering.	2	1, 3
2.4	Motivation, Job Satisfaction and Morale.	2	1, 3
<b>Unit 3 : Individual Behaviour</b>		10 Hrs	
3.1	Leadership & Power- theories and concepts	2	6, 7
3.2	Concepts and Theories Trait, Transactional and Transformational Leaderships.	2	6, 7
3.3	Leader vs. Manager, Leadership Styles Leadership Effectiveness; Tools for measuring Leadership.	2	6, 7
3.4	Concepts and Theories- Leadership Effectiveness; Behavioural and Situational.	2	6, 7
3.5	Power; Power and Authority, Sources of Power	2	1, 3
<b>Unit 4 : Group Behaviour</b>		06 Hrs	
4.1	Group Formation and Development; Group Dynamics; Group Efficiency.	2	4, 7
4.2	Team Building, Structure of Groups; Forward market.	1	4, 7
4.3	Group Norms; Cohesiveness; Group Effectiveness.	1	4, 7
4.4	Group Decision Techniques; Application of Fundamental Interpersonal Orientation Behaviour (FIRO-B).	2	4, 7
<b>Unit 5 : Organisational Aspects</b>		06 Hrs	
5.1	Creating and Sustaining Organisational Culture	1	1, 5
5.2	Change Management; Work Stress; Sources and Consequences, Organisational Role Stress.	2	1, 5
5.3	Conflict, T.A. & JOHARI Window.	1	1, 5
5.4	Emotional Intelligence & EQ. Work Stress, Organisational Climate	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments. Case analysis and Book Review</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

R1.	Management	Stoner. J	Prentice Hall India, (2009).
R2.	Management	Koontz H. and Wehrich H.	Tata McGraw Hill (2009)
R3.	Emotional Intelligence at work	Singh Dalip	Sage Publications, Delhi
R4.	Management and Organisational Behaviour	Mullins I. J.	Prentice Hall of India (2008).
R5.	Organisational theory	Jones G. R.	Addison Wesley(1995)
R6	Principles of Personnel Management	Edwin P. Flippo	McGraw Hill(2008)
R7	Personnel Management	Mamoria	Himalaya(2000)
<i>Others : (Web / Journals / Course Packets / Class Notes / etc.</i>			
	Case studies for analysis would be provided from time to time in advance by the faculty.		

## SUGGESTED READINGS

1. Fred Luthans., *Organisational Behaviour*, Mc Graw Hill International Edition.
2. Koontz & Weirich., *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
3. Prasad, L.M., *Organisational Behaviour*, Sultan Chand and Co , New Delhi, 2002
4. Rao,VSP and Krishna, V. Hari , *Management: Text and Cases*, Excel Books,1<sup>st</sup> edn. 2004.
5. Robbins, S., *Organisational Behaviour*, X edn., Prentice-Hall India, New Delhi.
6. Robbins,S .P., *Fundamentals of Management*, Pearson, 2003.
7. Robbins, Stephen R, *Organizational Behaviour*, Prentice Hall of India, New Delhi,1990.
8. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition

<b>Course Name</b>	<b>Management Science</b>					
Type of Course	Core					
Course Code	MBM21C15					
Course Summary & Justification	This course covering the essentials of applications of Operations Research to business and industry and help them to grasp the significance of resource optimisation and analytical techniques in decision making with familiarisation of relevant software packages for optimisation					
Semester	2	Credits			3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	25	10	10	---	45
	Collaborative learning	5	1	1	---	7
	Independent learning	4	2	2	---	8
Pre-requisite	Basic Knowledge of Mathematics, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

<b>CO. No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, students will be able to;</i>	<b>Learning Domains</b>	<b>PSO No.</b>
1	ENUMERATE the key terms associated with Management Science	R	1
2	COMPARE and CONTRAST Different types of optimisation methods	U	1
3	CONSTRUCT appropriate Mathematical model to convert business problem into operations research problems	A	2
4	ILLUSTRATE how to apply the various methods in solving business problems	An	3
5	EVALUATE the various solutions obtained in alternate methods	E	1
6	COMBINE the solutions of operations research methods and the parameters of the business environment to take business decisions	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction to Operations Research.</b>		10 Hrs	
1.1	Definition, Evolution, scope, Applications	3	1,3
1.2	Concept of optimisation,– Decision making through operation research.	4	1,3
1.3	Nature & Significance of operation research, Operations Research in India	2	2,3
1.4	Models and modelling in OR	4	2,3
1.5	General methods for solving OR models –Methodology of OR. Limitations of Operations Research	2	3
<b>Unit 2 : Linear programming Problem and its applications(LPP)</b>		15 Hrs	
2.1	Definition of LPP, Applications of LPP in Business Modelling an LPP	2	2
2.2	Solving LPP by graphical methods	4	1,3
2.3	Graphical Methods with different types of solutions set	7	3
2.4	Simplex method	2	3,5
2.5	Maximisation problems and Minimisation Problems solving in Simplex Method, Concept of Big M Method and Sensitivity Analysis	5	3,5
<b>Unit 3 : Transportation problem</b>		10 Hrs	
3.1	Introduction, Definitions, Mathematical Model of Transportation Problem	2	3
3.2	North West corner method (NWCM) – least cost method (LCM)	3	3,5
3.3	Vogels approximation method (VAM), Modi method	3	3,5
3.4	Degeneracy in transportation problem, Maximisation Problem	4	5
3.5	Assignment problem – Solution to assignment problem – Hungarian method, Maximisation Problem, Impossible Assignment.	2	3
<b>Unit 4 : Network Analysis and Project Scheduling</b>		15 Hrs	
4.1	Definition, Basic Terms, Construction of Project Network	2	1
4.2	Critical Path Method, Determination of Critical Path and computation of Project Duration, Time Estimation	3	3
4.3	PERT methods and Problems solving	4	5
4.4	Basic concepts of crashing, Resource levelling, Resources Smoothing	4	3,5
4.5	Familiarisation of Project Management Software Packages.	2	5
<b>Unit 5 : Inventory and waiting line models</b>		10 Hrs	
5.1	Inventory control: Deterministic models, EOQ	2	1
5.2	Queuing models	3	1,3
5.3	Simulation: Basic Concept of Simulation, Monte-Carlo simulation	6	4
5.4	Sequencing Problems	5	5
5.5	Game Theory: Saddle point, Mixed Strategy, Dominance Rule.	4	4.5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ol style="list-style-type: none"> <li>1. Continuous Assessment (CA)             <ol style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ol> </li> <li>2. End Semester Examination</li> </ol>

### Suggested Readings

1. Fredrick S. Hiller and Gerald J. Lie Berman, Operations Research concepts and cases, Tata McGraw Hill company.
2. R. Panneer Selvam, Operations Research, PHI Learning
3. J K Sharma, Operations Research, Macmillan India Limited, 2006
4. G.Srinivasan, Operations Research principles and Applications, PHI Learning
5. S. Kalavathy, Operation Research with C programs, Vikas Publishing House
6. Rathindra P. Sen, Operation Research, PHI Learning
7. Billy E. Gilett, Introduction to operations Research, McGraw Hill

Course Name	Entrepreneurship Development and Project Management					
Type of Course	Core					
Course Code	MBM21C16					
Course Summary & Justification	To provide a basic understanding to the students of the significance and role of Entrepreneurship and small business in an economy and to impart practical tips to set up and manage micro, small, medium enterprises. This course will also enable the students to learn the various aspects of project formulation and implementation.					
Semester	2		Credit		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	45	--	-	15	60
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Develop an entrepreneurial mind-set by learning key aspects of entrepreneurship	A	5
2	Design business plans which are suitable for funding by considering all dimensions of business.	C	5, 9
3	Comprehend entrepreneurial process by way of studying different case studies of successful entrepreneurs	A	6
4	Identify and evaluate different strategies for responding to social/ethical/environmental/sustainability issues.	U	11
5	Explain the position of Indian entrepreneurship firms in global environment	U	13
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hrs	CO
<b>Unit 1</b>	<b>Introduction</b>	<b>12 hours</b>	
1.1	Entrepreneurship – concept and Definitions, Key attributes/skills of an entrepreneur, myths and realities of entrepreneurship	3	1
1.2	Types of entrepreneurs; role of entrepreneur in economic development, Entrepreneur and Professional manager	3	1
1.3	Intrapreneurship- concept, corporate practices, select cases	3	1, 3
1.4	Social entrepreneurship, rural entrepreneurship and women entrepreneurship, Family businesses	3	1, 3, 4
<b>Unit 2</b>	<b>Entrepreneurship Theories and innovation</b>	<b>12 hours</b>	
2.1	Entrepreneurship theories	3	1
2.2	Entrepreneurial motivation	3	1
2.3	Innovation- Process and techniques, Innovation and invention	3	1, 3
2.4	Types of innovation, Select cases	3	1, 3
<b>Unit 3</b>	<b>Entrepreneurship Development</b>	<b>12 hours</b>	
3.1	Entrepreneurial Development – Entrepreneurial Development Programmes (EDPs): Need and objectives of EDP.	3	3

3.2	MSME policy and schemes	2	1
3.3	Institutional Support systems for small entrepreneurs - DIC, SFCs, Commercial Banks, SIDBI, Entrepreneurship Development Institutes (EDIs)	2	1
3.4	Entrepreneurship development indicators at global level. Position of India and Indian entrepreneurship firms in global environment	2	5
3.5	Start-up: meaning, start-up policies, start-up revolution in India, start-up ecosystem – Kerala state Start-up Mission Business Incubators	3	3, 5
<b>Unit 4</b>	<b>Developing a business plan/project report</b>	<b>12 hours</b>	
4.1	Identification of Business Opportunity – Market survey and opportunity identification	3	2, 4
4.2	Preparation of Feasibility Report – market, Financial, Technical feasibility studies	3	2, 4
4.3	Social cost benefit Analysis – Project Formulation – Common Errors in Project Formulation	3	2, 4
4.4	Business plan and project report preparation – Ownership Structures – Sole Proprietorship, Partnership, Company	3	2
<b>Unit 5</b>	<b>Project Financing and implementation</b>	<b>12 hours</b>	
5.1	Project Financing: Financing of projects	3	1, 2
5.2	Concept of Venture Capital, difference between Venture Capital and Private Equity, institutional finance to entrepreneurs	3	1, 2
5.3	Project Implementation: Project planning and control	3	1, 2
5.4	Network techniques for project management	3	1, 2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment <ul style="list-style-type: none"> <li>Tests, Assignment, Presentation</li> </ul> </li> <li>End semester Examination</li> </ul>

## SUGGESTED READINGS

1. Gupta C . B. & Srinivasan, *Entrepreneurship Development in India*, Sultan Chand. 2010
2. Robin Lowe and Sue Marriott, *Enterprise: Entrepreneurship and Innovation: Concepts, Contexts and Commercialization*, Butterworth-Heinemann, 2006.
3. John Bessant and Joe Tidd, *Innovation and Entrepreneurship*, John Wiley and Sons, U.K, 2011
4. Vasant Desai, *Project Management and Entrepreneurship*, Himalayan Publications, 2011
5. Vasant Desai, *Entrepreneurship and Management of Small and Medium Enterprises*, Himalayan Publications, 2011
6. Gupta A., *Indian Entrepreneurial Culture*, New Age International, 2011
7. Aruna Kaulgud, *Entrepreneurship Management*, Vikas Publishing House, 2003
8. Peter F. Drucker, *Innovation and Entrepreneurship*, Peter Drucker Hillier Publications.
9. Michael H. Morris, Donald F. Kuratko, and Jeffery, *Corporate Entrepreneurship & Innovation*, Cengage Learning, 2011
10. Sudipto Dutta, *Family Business in India*, Sage Publications, 2010
11. Prasana Chandra, *Project Management*, McGraw Hill, 2009
12. Rao P. C. K. *Project Management and Control*, Sultan and Chand, 2008
13. Bhavesh M. Patel, *Project Management*, Vikas Publishing House, 2000
14. K.Nagarajan, *Project Management*, New Age Publishing, 2005

### 17.3. Semester 3 : Core Courses

Course Name	Research Methodology					
Type of Course	Core					
Course Code	MBM21C18					
Course Summary & Justification	To equip the students with the basic understanding of the research methodology and to provide insight into the application of major research tools and techniques for the purpose of management decision making					
Semester	3		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	25	10	10	---	45
	Collaborative learning	5	1	1	---	7
	Independent learning	4	2	2	---	8
Pre-requisite	Basic Knowledge of Mathematics, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	ENUMERATE the key terms associated with research approach.	R	1
2	COMPARE and CONTRAST Different types of research methods and types	U	1
3	CONSTRUCT appropriate research and sampling designs for Business research work in real world business and non-business contexts	A	2
4	ILLUSTRATE the use of appropriate research methods in real world business and non-business contexts.	An	3
5	EVALUATE the various statistical methods for Research Analysis	E	5
6	COMBINE research approaches to make oral and written report	C	6,7
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Nature and Scope of Research Methodology</b>		15 Hrs	
1.1	Meaning and Applications of - Importance of research in managerial decision making	3	1,3
1.2	The Research Process	4	1,3
1.3	Types of Research Problem	2	2,3
1.4	Research Methods, Scope and Limitations	4	2,3
1.5	Defining the Research Problem -Formulation and Statement of Research Problem	2	3
<b>Unit 2 : Research Design</b>		10 Hrs	
2.1	Types of Research Design	2	2
2.2	Exploratory, Descriptive, Diagnostic/Conclusive and Experimental Designs	4	1,3

2.3	Details and applications- Operational and Administrative structure for research	7	3
2.4	Sampling and Sampling Designs.	2	3,5
2.5	Sample Size Determination	5	3,5
<b>Unit 3 : Methods &amp; Techniques of data collection</b>		15 Hrs	
3.1	Observational and other survey methods	2	3
3.2	Development and designing of tools of data collection	3	3,5
3.3	Attitude measurement scales	3	3,5
3.4	Levels of measurement and questions of Validity and reliability.	4	5
3.5	Concept and Applications.	2	3
<b>Unit 4 : Fieldwork in research and data processing</b>		10 Hrs	
4.1	Analysis and Interpretation of Data- Univariate analysis, Bivariate analysis, Correlation and Regression	2	1
4.2	Testing of Hypothesis – Applications	3	3
4.3	Parametric Tests - 't' test, One way ANOVA, two way ANOVA and Chi square statistic	4	5
4.4	Non-Parametric Tests	4	3,5
4.5	Essential ideas of Multivariate analysis of data, Factor Analysis, Discriminant Analysis – Cluster Analysis- Use of Statistical Software Package SPSS..	2	5
<b>Unit 5 : Reporting of research work, Publications in Journal and Conferences</b>		10Hrs	
5.1	Essentials of Research Reports- Objectives	2	1
5.2	Types of Reports, Substance of Reports	3	1,3
5.3	Format of Report-Presentation of Reports	6	4
5.4	Publications in Journal and Conferences	5	5
5.5	Citation, H Index, Impact Factor, Indexing, UGC Care List	4	4.5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> 1. Continuous Assessment (CA) a. Tests – One MCQ based and on extended answer type b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar c. Open Book Surprise Test 2. End Semester Examination

### Suggested Readings

1. CR Kothari, Research Methods and Techniques, New Age International, New Delhi
2. Mathew David & Carole D. Sutton, Social Research: The Basics, Sage Publications, New Delhi
3. O.R. Krishnaswami, Methodology of Research in Social Sciences, Himalaya Publishing House, Mumbai.
4. Ajai S. Gaur and Sanjaya S. Gaur: Statistical methods for practice and Research, Sage Publishers.
5. Deepak Chawla & Neena Sondhi, Research Methodology, Vikas Publishers, 2011
6. Naval Bajpai, Business Research Methods, Pearson, 2013

<b>Course Name</b>	<b>Enterprise Resource Planning and Business Analytics</b>					
Type of Course	Core					
Course Code	MBM21C19					
Course Summary & Justification	This course covering the integration of business functions and processes with a practical implementation of ERP package and trends in business analytics.					
Semester	3	Credits			3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	25	10	10	---	45
	Collaborative learning	5	1	1	---	7
	Independent learning	4	2	2	---	8
Pre-requisite	Basic Knowledge of Enterprise Resource Planning and implementations					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	<b>MEMORISE</b> and <b>REPRODUCE</b> all basic diagrams and life cycles, definition, concepts, applications and methods covered in the syllabus, use appropriate menus and functions of MS Excel to implement data modelling concepts	R	1
2	<b>UNDERSTAND</b> different ERP and related technologies, Functional Modules, Distribution Management, Data Analytics	U	1, 4
3	<b>APPLY</b> Data Modelling Concepts, Business Analytics, Data integration techniques indifferent data	A	2
4	<b>ILLUSTRATE</b> multidimensional modelling, data Integration, measures, dimensions, attributes and hierarchies	An	3
5	<b>ANALYSE</b> different ERP implementation, ERP Software, Balanced Scorecard, Master Data Management	A	2, 4
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1: Enterprise Resource Planning an Overview</b>		10 Hrs	
1.1	Evolution of ERP- MRP and MRP II	1	1
1.2	Need for system integration	1	2
1.3	Benefits of ERP	1	2
1.4	Risk Factors of ERP Implementation	2	2
1.5	ERP and related technologies: Data Warehousing, Data Mining, OLAP, SCM, CRM, GIS, ERP products and markets	5	2,3
<b>Unit 2 : ERP Functional Modules</b>		10 Hrs	
2.1	Functional Modules in ERP Package, Finance, Manufacturing	2	2
2.2	Human Resources, ABAP	1	2
2.3	Materials Management Sales and Distribution Management	2	2,3
2.4	Plant Maintenance, Quality Management	2	2,3
2.5	ERP Software: SAP ERP, PeopleSoft, Oracle Financials, Baan, and QAD – Distinguishing features of each	3	3,5
<b>Unit 3 : ERP implementation</b>		10 Hrs	
3.1	ERP Implementation Challenges, ERP Implementation Life Cycle	2	1,2
3.2	ERP Package Selection, ERP (Implementation) Transition Strategies, ERP Implementation Process, ERP Project Team	3	3,5
3.3	Consultant intervention, Contracts with Vendors, Consultants and Employees	2	3,5
3.4	Project Management and Monitoring, Managing Changes in ERP implementation	2	5
3.5	Customising and configuration, Maximising ERP System	1	3
<b>Unit 4 : Business Analytics</b>		15 Hrs	
4.1	Definition, Evolution, Architecture, Benefits, Future	2	1
4.2	Business Analytics as Solution for Business Challenges	2	1,3
4.3	Effective Predictive Analytics, Integrating Analytics in Business Processes Unstructured Data Analytics	4	4
4.4	Balanced Scorecard Dashboards, KPI based on Dashboard and Scorecard	4	2
4.5	LOFT effect, Data Quality, Master Data Management Data Profiling, Business Analytics in functional domain.	3	4
<b>Unit 5 : Data Modelling Concepts</b>		15 Hrs	
5.1	Data Modelling Types and Techniques	2	1
5.2	<b>Multidimensional modelling</b> : measures, dimensions, attributes and hierarchies, Schemas, Data Marts	3	1,3
5.3	<b>Data Integration:</b> Extraction, Transformation and Load Processes	2	4
5.4	<b>Data Warehouse:</b> Definition, Architecture, Development and Implementation issues, Introduction to OLTP and OLAP	4	5
5.5	<b>Data Mining:</b> Definition, Concepts, Applications and Methods	4	4.5



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>○ Tests – One MCQ based and on extended answer type</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. Rajagopalan and Sattanathan, BusinessMathematics
2. Praveen, R. V., Quantitative Aptitude and Reasoning, PHILearning
3. K.B.Akhilesh & S. Balasubramanyam , Mathematics and Statistics for Management ,
4. Vikas Publishing House Pvt Ltd

## SUGGETED READINGS

1. Leon, Alexis, Enterprise Resources Planning, Tata McGraw Hill, New Delhi.
2. RN Prasad and Seema Acharya, Fundaments of Business Analytics, Wiley India.
3. Ptak, Carol and Eli Schragenheim, ERP, St Lucie Press, New York, 2000.
4. Vinod Kumar Garg and Venkitakrishnan N.K, Enterprise Resource Planning-Concepts and Practice, PHI, New Delhi 2003.
5. Jean Paul Isson and Jesse S. Harroitt, Win with Advanced Business Analytics, Wiley Publication, 2013
6. Cindi Howson, Successful Business Intelligence: Secrets to Making BI a Killer App, Tata McGraw Hill Edition 2012

#### 17.4. Semester 4 : Core Courses

Course Name	Strategic Management					
Type of Course	Core					
Course Code	MBM21C20					
Course Summary & Justification	This course allows the students to learn the basics of Strategic Management. In Management career, professionals should have an in-depth knowledge of Strategic Management principle and how employees and budding Managers Perceive Strategic Management in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in organisation Strategic Management and behave accordingly.					
Semester	4		Credits		3	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	41	10	-	5	60
	Case based learning	4				
	Total	45				
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis. Book review, Seminars .discussion etc.						

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Understand the principles of strategy formulation, implementation and control in organisations by the top management	U	8
2	Demonstrate a clear understanding of the concepts, tools & techniques used by executives in developing and executing strategies and will appreciate its integrative and interdisciplinary nature.	U	4, 5
3	Devise strategic approaches to managing a business successfully in a global context	C	12
4	Devise CSR strategy appropriate to the requirements of the society	C	10
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

**COURSE CONTENT- Contact Teaching- 45 Hrs**

		Hrs	CO. No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Overview of Strategic Management –Business Policy and Strategic Management	2	1
1.2	Corporate, SBU and Divisional Strategies	2	1
1.3	Strategic Management Model – Working model	2	1,3
1.4	Business Ethics and Strategic Management	3	4
1.5	Social Responsibility of Business, CSR strategy, Social Audit	3	4
<b>Unit 2 : Need for SM</b>		12 Hrs	
2.1	Business Vision, Mission, Objectives- Strategic Intent-Characteristics of Vision, Mission	3	1,2
2.2	Business Models, Objectives, Goals – How it is formulated	3	1,2,3
2.3	Core Competency; Types of Strategies- Generic and grand Strategies	3	1,2,3
2.4	Integration Strategies-Intensive Strategies-Diversification Strategies-Michael Porter Generic Strategies	3	1,2
<b>Unit 3 : Interventions</b>		12 Hrs	
3.1	Strategic formulation; Environmental analysis; External Environment.	2	3
3.2	Organisational and Industry analysis	2	1, 3
3.3	SWOT, PESTEL, ETOP, QUEST; Strategic Analysis and Strategic Alternatives	3	3
3.4	OCP & SAP, Scenario Analysis	2	3
3.5	Balanced Score Card, SP	3	1, 3
<b>Unit 4 : Strategy Implementation</b>		05 Hrs	
4.1	Strategy Implementation-The Nature of Strategy Implementation.	2	3
4.2	Project, project appraisal, evaluation and PLC.	1	3
4.3	Behavioural, Structural, Functional and Procedural Implementations.	1	3
4.4	Strategy and Structure-Strategy and Culture, Quality circles	1	3
<b>Unit 5 : Strategy Evaluation and Control</b>		04 Hrs	
5.1	Strategy Evaluation and Control -Characteristics of Effective Evaluation Systems	1	1
5.2	Criteria for Strategy Control –Mechanism for Strategic Control- Du Pont's control model Concept of Value Chain	1	1
5.3	Strategic Surveillance, Michael Porter's approach for Globalisation.	1	1
5.4	Strategy Audit, Future of Strategic Management.	1	1, 2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments.</li> <li>○ Case analysis</li> <li>○ Book Review</li> </ul> </li> <li>○ End Semester examination</li> </ul>

## REFERENCES

R1	Strategic Management	Huge McMillan, Oxford University	Oxford University Press, 2000
R2	Competing for the future	Hamel G and Prahalad C K	Harvard Business Press Review
R3	Business Policy and Strategic Management.	P.S Rao	Himalaya publications, New Delhi
R4	Strategic management	Azhar Kazmi, French	Tata McGraw Hill
R5	Strategic management: An integrated approach.	Charles W.L. Hill and Gareth R. Jones,	Cengage Books, New Delhi
R6	Strategic management: Concepts, Skills and Practices.	Srivastava R M.	Prentice Hall of India
R7	Business Policy and Strategic Management	Jauch.L., Rajive Gupta & William.F.Glueck,8.	McGraw Hill. Himalaya(2000)
<b>Others : (Web / Journals / Course Packets / Class Notes / etc.</b>			
	Case studies for analysis would be provided from time to time in advance by the faculty.		

## SUGGESTED READINGS

1. Gregory G.Dess and Alex Miller, Strategic Management, Koontz &Weirich: *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
2. Prasad, L.M., *Organisational Behaviour*, Sultan Chand and Co , New Delhi, 2002
3. Rao,VSP and Krishna, V. Hari , *Management: Text and Cases*, Excel Books,1st edn. 2004.
4. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition
5. Rao T. V, *Readings in HRD*, Oxford & IBH

## 17.5. Syllabus of Elective Courses

### Marketing Elective Courses

Course Name	Consumer Behaviour					
Type of Course	Elective - Marketing					
Course Code	MBM21E01					
Course Summary & Justification	To understand the basics of consumer decision-making processes and to understand the information needs for helping the consumer in decision making.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Demonstrate how knowledge of consumer behaviour can be applied to marketing	A	1
2	Identify and explain factors which influence consumer behaviour inclusive of society and culture	U	1
3	Identify the dynamics of human behaviour and the basic factors that influence the consumers decision process	U	1
4	Appraise models of Consumer Behaviour and determine their relevance to particular marketing situations	A	3
5	Develop oral communication skills within marketing contexts	A	6
6	Explain the position/role of Indian business in global environment	U	13
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	12 hours	
1.1	Introduction to Consumer Behaviour; interdisciplinary approach	3	1,5
1.2	Consumer Behaviour and marketing Strategy, Consumer Behaviour and its Applications in Marketing	3	1,5
1.3	Consumer Research Process	3	1
1.4	Introduction to Industrial Buying Behaviour; Market Segmentation, VALS 2 segmentation profile.	3	1
<b>Unit 2</b>	<b>Consumer Decision making process</b>	12 hours	
2.1	Problem recognition; pre-purchase search influences; information evaluation	3	3
2.2	Purchase decision- compensatory decision rule, conjunctive decision, rule, Lexicographic rule; post-purchase evaluation	3	3
2.3	Diffusion of Innovation: Definition of innovation; product characteristics influencing diffusion; resistance to innovation; adoption process	3	3
<b>Unit 3</b>	<b>Internal Influences on Consumer Behaviour</b>	15 hours	
3.1	Consumer Needs & Motivation: Characteristics of motivation, arousal of motives; theories of needs & motivation	3	3,5
3.2	self-concept & its importance; types of involvement.	3	3
3.3	Consumer Personality- theories of personality, Theory of self-images; Role of self-consciousness.	3	3
3.4	Consumer Perception: Concept of absolute threshold limit, differential threshold limit & subliminal perception; Perceptual Process- selection, organisation & interpretation.	2	3
3.5	Learning & Consumer Involvement: learning theories- classical conditioning, instrumental conditioning, cognitive learning; involvement theory.	2	3
3.6	Consumer Attitudes: Formation of attitudes; functions performed by attitudes; models of attitudes: Tri-component model, multi-attribute model, attitude towards advertisement model; attribution theory	2	3
<b>Unit 4</b>	<b>External Influences on Consumer Behaviour</b>	15 hours	
4.1	Group Dynamics & Consumer Reference Groups: Different types of reference groups, factors affecting reference group influence, reference group influence on products & brands, application of reference groups.	3	2
4.2	Opinion Leadership Process: Characteristics & needs of opinion leaders & opinion receivers, interpersonal flow of communication.	3	2
4.3	Family & Consumer Behaviour: Consumer socialisation process, dynamics of family decision making, purchase influences and role played by children, family life cycle	3	2
4.4	Social Class Consumer Behaviour: Determinants of social class, measuring & characteristics of social class.	3	2
4.5	Culture & Consumer Behaviour: Characteristics of culture, core values held by society & their influence on Consumer Behaviour, introduction to sub-culture & cross-cultural influences.	3	2

<b>Unit 5</b>	<b>Models of Consumer Behaviour</b>	6 hours	
5.1	Consumer behaviour models: Mapping consumer's mind, deterministic and probabilistic approaches	2	4
5.2	Howard and Sheth, Nicosia and Engle and Blackwell model.	2	4
5.3	Understanding Indian market in a global context: Diversity and evolving consumer behaviour – changing Indian consumer	2	6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment             <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Assignment</li> <li>○ Presentation</li> </ul> </li> <li>• End semester Examination</li> </ul>

### SUGGESTED READINGS

1. Schiffman, Leon G., & Kanuk, Leslie Lazar; *Consumer Behaviour*, Pearson Education; New Delhi.
2. Leon G Schiffman, Leslie Lazar Kanuk, *Consumer Behaviour*, 7th Edition, Pearson
3. Blackwell, Roger, Miniard, Paul & Engel, James; *Consumer Behaviour*, Thomson Learning; New Delhi.
4. Loudon, David L. & Dellabitta, Albert; *Consumer Behaviour*, Tata McGraw Hill; New Delhi
5. Schiffman, Leon G., & Kanuk, Leslie Lazar; *Consumer Behaviour*, Pearson Education; New Delhi.
6. Solomon, Michael R., *Consumer Behaviour – Buying Having and Being*, Pearson Education; New Delhi.
7. Nair, Suja R., *Consumer Behaviour in Indian Perspective*; Himalaya Publishing House, New Delhi.
8. Henry Assael: *Consumer Behaviour and Marketing action*, Kent Publishing Co.
9. Berkman & Gilson: *Consumer Behaviour: Concepts and Strategies*, Kent Publishing Co.
10. Bennet and Kassarian: *Consumer Behaviour*, Prentice Hall of India .
11. Schiffman and Kanuck: *Consumer Behaviour*, Pearson Education Asia, 7
12. Hawkins, Best & Coney: *Consumer Behaviour*, Tata McGraw Hill

Course Name	Marketing Research					
Type of Course	Elective - Marketing					
Course Code	MBM21E02					
Course Summary & Justification	This course enables the students to: A. To develop capability to understand the fundamentals of Marketing research and make students industry ready B. To inculcate an attitude for identifying and undertaking research work both in industry as well as in academic environment with emphasis on continuous learning enabling to excel in competitive participations. C. To nurture and nourish students to conduct unbiased research on the problems of the society and develop solutions to it. D. To foster a confident and competent graduate capable to solve real life practical industrial problem in a systematic manner E. To encourage students to interpret the outcomes in a manner that would help solve business problems in the best possible manner					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Describe the marketing research process and list the characteristics of various types of research	A	1, 2, 3
2	Given a Marketing Management problem determine the related Research Problem	E	2, 3, 5
3	Formulate Research Objectives and Hypothesis from a given research problem	C	2, 3, 5, 7
4	Given the research budget select suitable Research Design for achieving the research objectives	E	5, 8,11
5	Organise the data collection process, Analyse data and draw inferences and recommend solutions to the research problem and the Marketing Problem	An	5, 6, 7, 8
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		12 Hrs	
1.1	Introduction, Definition, Need, Relevance and Scope of Marketing Research.	3	1, 2
1.2	Types of Market Research & Marketing Research process	3	1, 2
1.3	Decision making in marketing and the role of Market Researcher to provide relevant information	2	2
1.4	Different phases in the development of Marketing Research	2	2, 3
1.5	Contemporary trends in Marketing Research	2	1, 2
<b>Unit 2</b>		14 Hrs	
2.1	Difference Between a Management Problem and a Research Problem	3	3
2.2	Research Problem Identification & Translation of Marketing Problem to Statement of research problem	2	2, 3
2.3	Review of Literature, Identification of Research gap, Formulating Research Objectives	3	2, 3
2.4	Formulation of Research Hypothesis	3	3
2.5	Formulation of Theoretical framework for research and Identification of Variables	3	2, 3, 4
<b>Unit 3</b>		16 Hrs	
3.1	Research Design and its classification- Exploratory Research, Conclusive, Descriptive Research & Causal Research designs	4	4
3.2	Measurement Scales, Primary scales in research and its property (Nominal, Ordinal, Interval and Ratio Scales)	4	3, 4
3.3	Specific type of measurement instruments- attitude scales, measures of emotion, perceptual scales.	3	3, 4, 5
3.4	Reliability and Validity in Research	2	4
3.5	Design of questionnaires and Schedules, Depth interviews, Content analysis	3	4, 5
<b>Unit 4</b>		11 Hrs	
4.1	Sampling plans and methods- Probability & Non Probability	3	4, 5
4.2	Sample size determination	2	5
4.3	Field work planning and control	2	5
4.4	Data analysis- Data Editing, Coding and tabulation. Use of software. Data screening and purification.	2	4, 5
4.5	Frequency tables, Cross tabulation, measures of central tendency and variation. Tests of hypothesis- Uni and multivariate tests	2	5
<b>Unit 5</b>		7 Hrs	
5.1	Advanced methods of analysis in Marketing Research	2	5
5.2	Cluster analysis, factor analysis, multi-dimensional scaling, conjoint analysis, Multiple Discriminant analysis,	3	4, 5
5.3	Report writing- The contents and characteristics of a good report	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.		
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcom</b>
	CD1	Lecture by use of boards/LCD projectors	CO1
	CD2	Tutorials/Assignments	CO2
	CD3	Seminars	CO3
	CD4	Mini projects/Projects	CO4
	CD5	Laboratory experiments/teaching aids	CO5
	CD6	Industrial/guest lectures	
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester examination</li> </ul>		
	CD1,CD2,CD4		
	CD1,CD2,CD4		
	CD3,CD4		
	CD1,CD2,CD3,CD4		
	CD1,CD2,CD3,CD7		

## REFERENCES

1. G.C.Beri, Market Research, Pearson Education, New Delhi.
2. Naresh K. Malhotra, Marketing Research: An Applied Orientation, Pearson Education
3. Cooper & Schindler, Marketing Research, Concept & Cases. Tata McGraw Hill, India
4. Tull & Hawkins, Marketing Research: Measurement and Method, PHI.
5. Luck & Rubin: Marketing Research, Prentice Hall India.
6. Dawn Iacobucci, Gilbert A. Churchill, Marketing Research: Methodological Foundations, Cengage.

Course Name	Sales Management						
Type of Course	Elective - Marketing						
Course Code	MBM21E03						
Course Summary & Justification	This course allows the students to explain the various concepts of sales and distribution, aspects of sales force and distribution channel, steps of sales planning process. This course also enables the students to develop an understanding of the concept of recruitment, selection, training , motivation etc for sales force management.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.							

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Describe and explain sales planning process.	A	1, 2, 3
2	Should be able to forecast sales objective for any organisation.	E	2,3,5,
3	Being given a sales plan, one can design strategies for sales force management	C	2, 3, 5, 7
4	Compare and design the optimal channel for an organisation.	An	5, 8,11
5	Compare and select the best alternative for logistic design.	An	5,6,7,8
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		14Hrs	
1.1	Sales as a function of Marketing Management	2	1
1.2	Theories of Selling – Buyer Seller Dyads, AIDAS Theory, Right Set of Circumstances Theory, Buying Formula Theory, Behavioural Equation Theory, selling process.	4	1,2

1.3	Sales Management Functions & Responsibilities, Qualities of salesmen.	2	1
1.4	Concept of Personal selling and steps involved in Personal Selling.	3	1,2,3
1.5	Sales organisations and its purposes, Basic types of sales organisations	3	2,4
<b>Unit 2</b>		<b>16Hrs</b>	
2.1	Sales Planning; Forecasting; Qualitative and Quantitative Methods	2	2
2.2	Sales Territories – Concept of Sales territory	2	3,4
2.3	Procedures for setting up Sales territories – Deciding assignment of sales personnel to territories	3	3,4
2.4	Routing and Scheduling of Sales Force	3	2,3
2.5	Sales budget – Purpose, form and content of sales budgets	3	1,2,3
2.6	Sales Quota – Concept, Types of quota, Quota setting procedures, Administering the quota system	3	2,3
<b>Unit 3</b>		<b>12Hrs</b>	
3.1	Sales Force Management: Estimation of Sales Force; Workload, Breakdown and Incremental Analysis	4	1, 3
3.2	Selection and Training – Sales job analysis, Sales job description, Recruiting Sales persons. Selection – Screening, Interviewing/Testing, Induction and placement	4	3
3.3	Building Sales training programmes, Deciding Training Contents, Selecting training methods, Execution and evaluation of training programmes	4	3
<b>Unit 4</b>		<b>8 Hrs</b>	
4.1	Motivating Salesmen – Concept of motivation.	2	2,3
4.2	Need for motivating sales persons, Motivation and morale of sales persons	2	3
4.3	Application of different motivation theories in sales management	2	3
4.4	Compensating Salesmen- Requirement of a good sales compensation plan, Types of compensation plans, Steps in devising a sales compensation plan.	2	2,3
<b>Unit 5</b>		<b>10 Hrs</b>	
5.1	Performance Evaluation for Salesmen	2	3,4
5.2	Standards of performance, Relation of performance, standard to personal selling objectives, Recording actual performance, Evaluation	3	2,3
5.3	Sales Meetings - Planning and staging sales meetings, Sales contests	3	3
5.4	Sales Control – The sales audit, Sales analysis Marketing cost analysis.	2	3,4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.		
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>
	CD1	Lecture by use of boards/LCD projectors	CO1
	CD2	Tutorials/Assignments	CO2
	CD3	Seminars	CO3,
	CD4	Mini projects/Projects	CO4
	CD5	Laboratory experiments/teaching aids	CO5
	CD6	Industrial/guest lectures	
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester examination</li> </ul>		

## REFERENCES

1. William L. Cron, Thomas E. Decarlo, Sales Management: Concepts and Cases, 10<sup>th</sup> ed, Wiley.
2. Stanton, Buskirk and Spiro: Management of a Sales Force, Irwin Publishers.
3. Pradip Mallik, Sales Management, Oxford University Press.
4. Charles Futrell : ABC's of Selling, Irwin Publishers.
5. Anderson, Hair and Bush: Professional Sales Management, McGraw Hill International editions.
6. Still, R. R. & Cundiff, E. W., Govoni, N. A. P. (2007). Sales Management. Pearson Education, New Delhi.
7. Jobber, David and Lancaster, Geoffery (2006), Selling and Sales Management, Pearson
8. N K Sharma, Sales Management, ABD Publishers 2001
9. Ingren La Forze Arsla, Sales Management, 5th Edition, Thomson Southwest (2004)
10. Ruston S Danar, Sohrab R Danar, Nusli R Danar, Salesman Ship & Publicity, 16<sup>th</sup> Edition, Vikas Publishers, 1996

Course Name	Marketing Analytics					
Type of Course	Elective - Marketing					
Course Code	MBM21E04					
Course Summary & Justification	This course develops a systematic and analytical approach to marketing decision making, focusing on how to measure customer preferences and how to use those preferences to make the marketing of products and services more efficient and effective.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	DESCRIBE the use of Voice of the Customer data in making data driven marketing decisions.	R	1
2	DEMONSTRATE an understanding of utility theory to measure customer preferences and choices.	U	4
3	IDENTIFY what customers' value in a product and assess what they are willing to pay for it.	A	3
4	ILLUSTRATE the use of various tools and frameworks to solve strategic marketing problems using marketing data.	An	5
5	DETERMINE the most effective target markets.	E	2, 5
6	DESIGN a study that incorporates the key tools of Marketing Analytics.	C	11
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Concept of "Big Data" and Analytics in Marketing</b>		8Hrs	
1.1	Using Excel to Summarise Marketing Data	2	1,2
1.2	Slicing and Dicing Marketing Data with Pivot Tables	2	2
1.3	Excel Charts to Summarise Marketing Data	2	3
1.4	Excel Functions to Summarise Marketing Data.	2	3
<b>Unit 2 : Segmentation Analytics</b>		16Hrs	
2.1	Market Segmentation Variables, Market Segmentation Types	3	3
2.2	Marketing Data Landscape, Data for Segmentation	2	5
2.3	Analytics for Need Based Segmentation - Voice of the Customer, Managing "Voice of the Customer" Data, Customer Co-Creation, RFM Analysis	2	3
2.4	Life Cycle Segmentation, Cross Tabulation Segmentation,	4	5
2.5	Regression based segmentation, Clustering, Conjoint Analysis Segmentation	2	4
2.6	The Cluster Analysis + Discriminant Analysis Approach	3	5
<b>Unit 3 : Approaches to Choosing Target Segment(s)</b>		10 Hrs	
3.1	Rationale for Segment Targeting,	2	1
3.2	Analytics for Perceptual Mapping and Product Positioning	4	2
3.3	Product Positioning, Multi Dimensional Scaling (MDS) and Factor Analysis	2	3
3.4	Relevance of Mapping for Product Positioning, Preference Mapping, Incorporating Preferences in Perceptual Mapping.	2	3
<b>Unit 4 : Analytics for Product/Service Design &amp; Tracking Customer Growth</b>		16 Hrs	
4.1	The Relevance of Trade-off Approaches, Conjoint Analysis, Approaches to Conjoint Analysis, Interpreting Conjoint Results, Optimising Design using Conjoint Results.	2	2
4.2	Rationale for Customer Analytics, Customer acquisition cost, Customer Churn, Customer Attrition models, Customer lifetime value, Net promoter score	2	3
4.3	Calculating the number of new customers, Calculating average customer age & Days to convert.	2	5
4.4	Calculating customer acquisition cost & Average purchases, Calculating touch points & Lead conversion	4	5
4.5	Analysing age demographics, First contact with customer, Customer satisfaction	3	6
4.6	Understanding customer engagement, Diffusion Models - The Bass Model	3	2
<b>Unit 5 : Modelling New Marketing Initiatives</b>		10Hrs	
5.1	Introduction to modelling, Evaluating new ad channels, Modelling tips and best practices	2	3
5.2	Projecting ad revenue, Projecting organic follower revenue, Projecting expenses, Calculating net profit and breakeven	3	6
5.3	Understanding ROI, Calculating returns	2	5
5.4	Creating a single-variable sensitivity table, Creating a multi-variable sensitivity table	3	6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.			
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CD 1	Lecture by use of boards/LCD projectors	CO1	CD1,CD2,CD4, CD 6
	CD 2	Tutorials/Assignments	CO2	CD1, CD2, CD4, CD 6
	CD 3	Seminars	CO3	CD1,CD2,CD4
	CD 4	Mini projects/Projects	CO4	CD1, CD2, CD4
	CD 5	Laboratory experiments/teaching aids	CO5	CD1, CD2, CD3
	CD 6	Industrial/guest lectures	CO6	CD2, CD6, CD7
	CD 7	Industrial visits/in-plant training		
	CD 8	Self- learning such as use of NPTEL materials and internet		
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>			

## REFERENCES

1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wayne L. Winston
2. Marketing Analytics: Strategic Models and Metrics, Stephan Sorger
3. Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques, Mike Grigsby
4. Cutting-edge Marketing Analytics: Real World Cases and Data Sets for Hands on Learning, Paul Farris, Rajkumar Venkatesan, and Ronald T. Wilcox



Course Name	Services Marketing					
Type of Course	Elective - Marketing					
Course Code	MBM21E05					
Course Summary & Justification	Enable students to apply marketing concepts and principles to the unique challenges and opportunities of services marketing to create customer value.					
Semester	3/4		Credit		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60			20	80 hours
Pre-requisite	Nil. As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion, etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Explain the basic nature of services and express the growing importance of services sector.	U	1
2	Demonstrate the design and process of services and service quality measures.	A	5
3	Analyse the services marketing applications in various services industry.	An	5
4	Exemplify and analyse the services marketing strategies	U, An	4, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

	Hrs	CO. No.
<b>Unit 1 : Fundamentals of Services Marketing</b>	14 Hrs	
1.1 Service –Meaning –Nature - Important features – Marketing Implications.	2	1
1.2 Classification of Services – Process perspective– Tangibility spectrum	3	1
1.3 Growing Importance of Services-Sector	3	1
1.4 Services Marketing Management Process	3	2,3
1.5 Services Marketing Ps – Components of service product – Core service and Supplementary service.	3	1,3,4
<b>Unit 2 : Consumer Behaviour in Services</b>	15 Hrs	
2.1 Consumer Decision Making in Services – Three stage model of service consumption.	3	1,2
2.2 Customer Expectations - Perceptions - Satisfaction	3	1,4
2.3 Defining and Measuring Service Quality and Customer Satisfaction	3	1,2
2.4 Models of Measuring Service quality – GAPs Model – Servqual	3	1,2

2.5	Service Recovery – Principles of service recovery	3	2,3,4
<b>Unit 3 : Design and Development</b>		24 Hrs	
3.1	Services design and development	3	2,3
3.2	Service Blue print	3	2,3
3.3	Service Process	3	1,2
3.4	Service Positioning – Steps required for effective positioning	3	3,4
3.5	Managing the Integrated Services	3	2,3,4
3.6	Communication Mix	3	1,2
3.7	Physical Evidence and Service scape – Elements – Role.	3	1,2
3.8	Demand capacity management	3	1,2
<b>Unit 4 : Value Delivery of Services</b>		15 Hrs	
4.1	Pricing of services – Pricing Tripod – Pricing policies	3	1,2,4
4.2	Services Distribution Management	3	1,2,4
4.3	New Channel formats, Automated services.	3	2
4.4	Managing Service Personnel	3	2,4
4.5	Service Delivery – Employee role – Customer Role – Emotional Labour.	3	2,4
<b>Unit 5 : Marketing Applications in Select Service Industries</b>		12 Hrs	
5.1	Hospitality Services	2	1,2,3,4
5.2	Airlines	2	1,2,3,4
5.3	Tourism Services	2	1,2,3,4
5.4	Health Care and Wellness	2	1,2,3,4
5.5	Banking and Financial Services	2	1,2,3,4
5.6	Current Developments in service sector	2	1

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

1. Zeithaml, Valarie A. & Bitner, Mary Jo., Services Marketing – Integrating Customer Focus Across the Firm; Tata McGraw Hill; New Delhi 6th Ed.
2. Rao, K., Rama Mohana; Services marketing; Pearson Education; New Delhi, 1<sup>st</sup> ed.
3. Hoffman & Bateson; Essentials of Service Marketing; Thomson Asia PTC. Ltd., New Delhi.
4. Lovelock, Christopher, Wirtz, Jocken and Chatterjee, Jayanta; Services Marketing- People
5. Technology, Strategy; Pearson Education; New Delhi 5th Ed.
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7. Shanker Ravi; Services Marketing – The Indian Perspective; Excel Books, New Delhi.
8. Baron S and Harrisk - Services Marketing: Text and Cases, Palgrave, 2nd Ed.
9. Woodruff Helen - Service Marketing, Macmillan, 1<sup>st</sup> ed.
10. Payne Adrian - The Essence of Service Marketing, Prentice Hall of India
11. Govind Apte - Services Marketing, Oxford University Press

Course Name	Rural Marketing					
Type of Course	Elective - Marketing					
Course Code	MBM21E06					
Course Summary & Justification	The objective of the course is to provide conceptual understanding on the Rural Marketing and to understand the opportunities and challenges in rural marketing. It should develop skills required for planning and implementation of marketing of rural products.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Identify issues in rural marketing and suggest strategies to overcome them.	U	1
2	Discuss the need, importance and process of Rural Marketing Strategy.	An	4
3	Study about rural communication and distribution systems and role of Agricultural Produce Marketing Committees (APMCs)	U	3
4	Source the finance for rural products	A	5
5	Apply ICT tools in rural marketing	A	2, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Overview of Rural Marketing</b>		12 Hrs	
1.1	Introduction of Rural marketing – Evolution of Rural Marketing in Indian and Global Context	3	1, 2
1.2	Definition- Nature – Importance of Rural Marketing -Characteristics and potential of Rural Marketing	3	2
1.3	Rural marketing environment: Socio-cultural factors, population, occupation, literacy level, land distribution & use, development programmes, infrastructure, communication media, credit availability, local requirements	3	2

1.4	A comparative analysis of Rural Vs Urban Marketing. Role of Government and NGOs in Rural Marketing.	3	2
<b>Unit 2 : Rural Markets &amp; Decision</b>		10 Hrs	
2.1	Rural Marketing Research- Profile of Rural Consumer - behavior of rural consumers	2	3
2.2	Rural Market Mapping- Rural Market Index: Thompson index.	2	3
2.3	Classification of Rural Marketing – Regulated- Non-Regulated - Marketing Mix-Segmentation- Targeting- Positioning	2	5
2.4	Rural Marketing Strategies	2	3
2.5	Integrated Marketing Communication in Rural Marketing.	2	2
<b>Unit 3 : Product &amp; Distribution</b>		10 Hrs	
3.1	Product Planning- New Product Development in Rural Marketing	2	1
3.2	Brand Management in Rural Marketing	2	2
3.3	Rural Distribution in channel management	2	3
3.4	Managing Physical distribution in Rural Marketing	2	3
3.5	Sales force Management in Rural Marketing.	2	3
<b>Unit 4 : Rural Marketing Strategies &amp; Tactics</b>		16 Hrs	
4.1	Marketing Strategies & Tactics with reference to rural markets: FMCGs, Consumer Durables, Services, Agricultural Inputs, Rural Artisans Products	2	2
4.2	Rural Industry: Marketing of rural industry, cottage industry, artisan products	2	3
4.3	Cases of successful rural marketing initiatives	6	4
4.4	Source of financing and credit agencies-Co- operative rural marketing & processing societies	2	4
4.5	Micro Credit Marketing- Public Private Partnership Model in Rural Marketing	2	4
4.6	Methods in promoting rural products- Advertisement & Media role in rural marketing promotion methods.	2	3
<b>Unit 5 : Trends In Rural Marketing</b>		12 Hrs	
5.1	Advancement of Technology in Rural Marketing,	2	5
5.2	e- Rural Marketing-CRM & e-CRM in Rural Marketing	2	5
5.3	Advanced Practices in Rural Marketing- Social Marketing-Network Marketing	2	5
5.4	Green Marketing in Indian and Global Context	2	3
5.5	The Future of Rural Marketing, Concept and working of contract farming in India.	2	5
5.6	CSR and marketing ethics in rural marketing	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.			
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CD 1	Lecture by use of boards/ LCD projectors	CO1	CD1, CD2, CD4, CD 6
	CD 2	Tutorials/Assignments	CO2	CD1, CD2, CD4, CD 6
	CD 3	Seminars	CO3	CD1, CD2, CD4,
	CD 4	Mini projects/Projects	CO4	CD1, CD2, CD4
	CD 5	Laboratory experiments/teaching aids	CO5	CD1, CD2, CD3
	CD 6	Industrial/guest lectures		
	CD 7	Industrial visits/in-plant training		
	CD 8	Self- learning such as use of NPTEL materials and internet		
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>			

## REFERENCES

1. Awadhesh Kumar Singh Satyaprakash Pandey, *Rural Marketing: Indian Perspective*, New age publishers.
2. C G Krishnamacharyulu, Lalitha Ramakrishnan, *Rural Marketing*, Pearson Education.
3. Rajagopal, *Indian Rural Marketing*, Rawat Publishers
4. Pradeep Kashyap& Siddhartha Raut, *Rural Marketing*, Biztantra
5. P. Gopal Swamy, *Rural Marketing*, Vikas Publishing House, 2/e.
6. Balaram Dogra and Karminder Ghuman, *Rural Marketing*, TMH, 1/e.
7. Sanal Kumar Velayudhan, *Rural Marketing*, 2/e, Response, SAGE Publication.
8. Krishnamacharyulu and Lalitha Ramakrishnan. *Rural Marketing*, Pearson Education India.
9. C. Mathur, *Rural Marketing*, Excel Books.
10. Ruchika Ramakrishnan, *Rural Marketing*; New Century.

<b>Course Name</b>	<b>B2B Marketing</b>					
Type of Course	Elective - Marketing					
Course Code	MBM21E07					
Course Summary & Justification	This course offers marketing concepts and tools for segmentation, targeting, positioning, branding, marketing communication, and managing mix elements in a B2B context					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Video/ Case	Others	Total Learning Hours
	Lecture Discussions	60	-	-	20	80
Pre-requisite	Basic knowledge in Marketing Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	Explain dynamic nature of the business marketing environment and the basic similarities and differences between consumer-goods marketing and business marketing.	U	1
2	Evaluate organisational buying process across various types of organisations.	E	3
3	Analyse the critical success factors in marketing products or services to business customers.	An	2, 3
4	Articulate promotional and distribution activities in business-to-business Marketing	A	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT – Contact hours (60)

		Hrs	CO.No.
<b>Unit 1: Introduction to B2B Marketing</b>		13 Hrs	
1.1	Introduction to Business Marketing: Meaning and Scope	2	1
1.2	Business market customers Differences between Industrial and Consumer Goods - Demand for Industrial Goods	3	1
1.3	Business Market Segmentation, Targeting and Positioning -	2	1
1.4	Complexity of B 2 B Markets	3	1
1.5	Trends and Changes in Business Marketing, organisational markets of India	3	1
<b>Unit 2 : Organisational Buying</b>		14 Hrs	
2.1	Organisational Buying: Factors Influencing Organisational Buying -	3	2
2.2	Organisational Buying Process Stages –Organisational Buying Practices	4	2
2.3	Variability of Rational Buying Decision – Human Factors, Mutual Dependence	4	2

2.4	Customer Loyalty - Enquiries and Tenders - Supplier Evaluation	3	2
<b>Unit 3 : B2B Product/service and Pricing strategy</b>		12 Hrs	
3.1	Role of Marketing in Product Development Process - Managing Industrial Product Lines Managing across Product Life Cycle – Reducing the risk of new product failures.	3	1, 3
3.2	Managing service for business markets- Understanding the customer experience, Delivering effective customer solutions, Pre and post sales service	2	1, 3
3.3	Managing of innovation and technology	2	1, 3
3.4	Characteristics of Pricing in B to B Market- Factors influencing Pricing - Pricing Methods and Strategies	2	1, 3
3.5	Managing Pricing as Part of Marketing Strategy – Price Implementation: The case of negotiated Pricing	3	1, 3
<b>Unit 4 : Business Distribution Channels and B2B Selling</b>		12 Hrs	
4.1	Industrial Channels of Distribution: Business marketing channels and participants, Channel design and management decisions	3	4
4.2	Distribution Logistics - E-commerce for business marketing channels	3	4
4.3	Personal Selling – Nature of Sales and Sellers	3	4
4.4	Characteristics of B2B selling, Continuous Adjustment of Needs - Post Sales Service - Customer Satisfaction and Evaluation	3	4
<b>Unit 5 : B2B Promotion and Industrial Advertising</b>		9 Hrs	
5.1	Industrial Goods Promotion - Branding of Industrial Products	3	4
5.2	Promotional Methods in B-2-Bmarketing	2	4
5.3	Creating Corporate Image - Industrial Advertising - Role of Internet in Business Market	2	4
5.4	Industrial Marketing Control, Ethical issues in B2B marketing	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Seminar, Group Assignments Library work and Group discussion, Presentation
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar.</li> <li>Assignment, Group project</li> </ul> </li> <li>End Semester Examination</li> </ul>

### SUGGESTED READINGS

1. Sharad Sarin. (2013). Business Marketing: Concepts and Cases, 1<sup>st</sup> ed., McGraw Hill
2. Vitale & Giglierano, Business to Business Marketing, Thomson South-Western
3. U C Mathur, Business to Business Marketing, New Age International Publishers
4. Robert R Reeder, Edward G. et al., Industrial Marketing, Prentice Hall of India
5. Micheal D Hut, Dheeraj Sharma, and Thomas W Spech. (2014). B2B Marketing, 11<sup>th</sup> ed., Cengage Publishing.

Course Name	Product and Brand Management					
Type of Course	Elective - Marketing					
Course Code	MBM21E08					
Course Summary & Justification	This course enables the students to explore branding across goods and services and develop an understanding regarding the importance of branding.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, students will be able to;</i>	<b>Learning Domains</b>	<b>PSO No.</b>
1	Define branding and terminology related to branding and differentiate between terms such as brand equity, brand loyalty, e	U	3,4
2	Evaluate a brand and differentiate a great brand from other brands.	E	3,4,5
3	Apply the brand positioning framework to develop a brand, develop long term, sustainable brand strategies and position a product	E	2,4,6
4	Apply the brand positioning framework to reposition or revitalise a brand, develop a brand portfolio.	A	5,11
5	Develop and integrate marketing campaigns to build and maintain the Equity of a Brand	C	3,4,5,12
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			



## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Product &amp; Product Decisions</b>		14 Hrs	
1.1	Product- Meaning & Classification, levels of Product, Product Mix and Line Decisions	3	1,2
1.2	Product Life cycle, Strategies adopted at each stage of PLC	3	2
1.3	New Product Development –Process and Challenges	3	1,3
1.4	New Product Failure and Revitalisation of New Products	3	1
1.5	Consumer Adoption Process	2	1
<b>Unit 2 : Brand Management and Brand Equity</b>		16Hrs	
2.1	Definition of brand, Challenges in Branding Strategic brand management process	3	3
2.2	Brand Positioning -Establishing the Points of Parity & Points of Difference.	2	1,3,5
2.3	Brand Equity Models- Brand Asset Valuation, Aaker Model, BRANDZ, Brand Resonance	2	3
2.4	Customer based Brand equity	4	2,5
2.5	Sources of brand equity - Brand Awareness, Brand Image.	2	1
2.6	Identifying the Criteria and Choosing Brand Elements to Build Brand Equity	3	5
<b>Unit 3 : Measuring Brand Equity</b>		10 Hrs	
3.1	Need for Measuring Brand Equity	2	1
3.2	Brand Asset Valuator Model, Aaker Model, Measuring Return on Brand Investment (ROBI)	4	1,2
3.3	The Four steps of brand building, creating customer value, Identifying and establishing brand positioning, Positioning guidelines	2	3
3.4	Brand Extension-Advantages & Disadvantages of Brand Extension,	2	3
<b>Unit 4 : Growing and Sustaining Brand Equity</b>		10 Hrs	
4.1	The brand value chain, Brand audit	2	1
4.2	Designing brand tracking studies, Capturing customer mind set through quantitative and qualitative research techniques,	2	1
4.3	Brand architecture, Brand hierarchy, Designing brand strategy	2	1
4.4	Brand Identity, Brand Identity models	4	3,5
<b>Unit 5 : Branding and Marketing Communication</b>		10Hrs	
5.1	Developing Integrated Marketing Communication Programs for Brand Building	2	1,3
5.2	Managing Brands over time: Reinforcing & Revitalising Brands.	2	1,5
5.3	Integrating marketing communication to build brand equity	2	1,5
5.4	Conceptualising the leveraging process, Co- branding, Celebrity Endorsement	2	5
5.5	Role and challenges of Product and Brand Manager.	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. Aaker, David A: Managing Brand Equity, Free Press, New York.
2. Sen Gupta, Subrato: *Brand Positioning*, Tata McGraw Hill, Delhi 2004.
3. Chaturvedi, M: *New Product Development*, Wheeler Publications, New Delhi.
4. Kapferer, J.N.: *Strategic Brand Management*, Kogan Page, New Delhi, 2012.
5. Kuller, K.L.: *Strategic Brand Management*, Prentice Hall, New Delhi.
6. Moorthy, Y.L.R.: *Brand Management*, Vikas Publication House, New Delhi. 2012
7. Aaker, David A: *Building Strong Brands*, Free Press, New York 1996
8. Keller, Kevin Lane; *Strategic Brand Management*, Pearson Education; New Delhi.
9. Kapferer, Jean Noel; *Strategic Brand Management*, Kogan Page; New Delhi.
10. Kumar, S. Ramesh; *Marketing and Branding –The Indian Scenario*; Pearson Education; New Delhi.
11. Kapoor, Jagdeep; *24 Brand Mantras*; Sage Publications; New Delhi.
12. Sengupta Subroto; *Brand Positioning; Strategies for competitive advantage*; Tat McGraw Hill; New Delhi

Course Name	Retail Management					
Type of Course	Elective - Marketing					
Course Code	MBM21E09					
Course Summary & Justification	Introduce the basic concepts practices retail management and the latest developments in retailing in the Indian context.					
Semester	3/4		Credit		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60			20	80
Pre-requisite	Any Graduate					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Explain the basic functions, development theories and strategies of retail.	U	1
2	Determine the retail formats and location and measure the retail performance.	An	3
3	Outline the factors influencing retail shopper and customer decision-making process.	An	4
4	Summarise the pricing strategies, merchandise management and layout in retail store.	U	11
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

Course Content		Hrs	CO. No.
<b>Unit 1 : Introduction to Retailing</b>		15 Hrs	
1.1	Retailing and Retailing in a changing environment	3	1
1.2	Significance of retail industry and Indian retail scenario and future	3	1
1.3	Retail management functions	3	1
1.4	Theories of retail development	3	1
1.5	Retail marketing mix	3	2
<b>Unit 2 : Retail Formats and Consumers</b>		15 Hrs	
2.1	Classification of retail stores	3	3

2.2	Understanding the Retail Consumers and the factors influencing retail shopper.	3	2
2.3	Consumer decision making process	3	3
2.4	Changes in the Indian consumer	3	3
2.5	Use of marketing research tools in retail settings	3	3
<b>Unit 3 : Store Location Analysis</b>		15 Hrs	
3.1	Store location and its importance	3	3
3.2	Types of store locations	3	2
3.3	Steps in choosing location and the factors affecting location decisions	3	2
3.4	Location analysis	3	2
3.5	Measures of retail performance	3	2
<b>Unit 4 : Retail Merchandising and Pricing</b>		20 Hrs	
4.1	Merchandising and the process of merchandising buying	3	3
4.2	Procedure for selecting vendors and building partnership	3	3
4.3	Concept of private labels and manufacturers' brand	2	3
4.4	Concept of category management	3	1
4.5	Retail pricing and its elements and factors	3	4
4.6	Developing a pricing strategy and Adjustment to retail price	3	4
4.7	Store audit	3	1
<b>Unit 5 : Store Design and Visual Merchandising</b>		15 Hrs	
5.1	Store image and store design	3	4
5.2	Components of exterior and interior	3	1
5.3	Consideration for selecting layout	3	1
5.4	Visual merchandising in retail	3	1
5.5	Safety and security measures	3	1

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

### Suggested Readings

1. Chetan Bajaj, Rajnish Tuli, Nidhi Srivasthava, *Retail Management*, oxford
2. David Gilbert, *Retailing Management*, 2<sup>nd</sup> Edition, Pearson
3. K V S Madaan, *Fundamentals of Retailing*, Tata Mc Graw Hill .
4. Newman A.J. and Cullen P - *Retailing: Environment and Operations* ,Vikas, .
5. Berman B and Evans J.R - *Retail Management*, Pearson Education
6. Levy and Weitz- *Retailing Management*, 9<sup>th</sup> ed., McGraw Hill-Irwin

Course Name	Strategic Marketing						
Type of Course	Elective - Marketing						
Course Code	MBM21E10						
Course Summary & Justification	The basic objective of this course is to develop skills for analysing market competition and design appropriate competitive marketing strategies for higher market share.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	Compare and contrast the key principles of marketing strategy	R	1
2	Explain marketing and strategy concepts and ideas in their own words	U	4
3	Ability to collect, process, and analyse consumer and market data to make informed decisions.	An	3
4	Integrate marketing theory, prior practice and prior learning into the strategic marketing environment;	A	5
5	Communicate effectively in oral and written forms about marketing strategy using appropriate concepts, logic and rhetorical conventions.	E	2, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Strategic Environment</b>		14 Hrs	
1.1	Nature and scope of market oriented strategic planning	3	1, 2
1.2	Corporate and division planning- SBUS,	5	2
1.3	Business strategic planning & Tactical Planning	3	3
1.4	The marketing process- Portfolio Models.	3	3
<b>Unit 2 : Market Situation Analysis</b>		14 Hrs	
2.1	Analysis of Competitors	3	3
2.2	Strategies and Estimating their Reaction-Pattern and Competitive Position	3	5
2.3	Market Leader Strategies. Expanding the Total market	2	3
2.4	Protecting market Share, Expanding market Share	4	5
2.5	Role of Marketing Intelligence	2	4
<b>Unit 3 : Developing And Implementing Strategies</b>		14 Hrs	
3.1	Generic Strategies	2	1
3.2	Market Challenger Strategies. Choosing and Attack Strategy	4	2
3.3	Market Follower Strategies; Market Niche Strategies	2	3
3.4	Competitive Market Strategy for Emerging Industries, Declining Industries and Fragmented Industries	2	3
3.5	Balancing Customer and Competitor Orientations	2	3
3.6	Industry Segmentation and competitive Advantage.	2	3
<b>Unit 4 : Marketing Strategy Evaluation</b>		10 Hrs	
4.1	Marketing Audits and their scope	4	2
4.2	Measurement of Marketing Performance	2	4
4.3	Strategic control- Tools and Techniques of strategic evaluation and control.	4	4
<b>Unit 5 : Strategies For Sustainable Competitive Advantage</b>		8 Hrs	
5.1	Formulating strategies for sustainable competitive advantage- Cases and Discussions- Recent Developments	8	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.			
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CD 1	Lecture by use of boards/ LCD projectors	CO1	CD1, CD2, CD4, CD 6
	CD 2	Tutorials/Assignments	CO2	CD1, CD2,CD4, CD 6
	CD 3	Seminars	CO3	CD1, CD2, CD4
	CD 4	Mini projects/Projects	CO4	CD1, CD2, CD4
	CD 5	Laboratory experiments/teaching aids	CO5	CD1, CD2,CD3
	CD 6	Industrial/guest lectures	CO6	CD2, CD6, CD7
	CD 7	Industrial visits/in-plant training		
	CD 8	Self- learning such as use of NPTEL materials and internet		
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>			

## REFERENCES

1. J. Timmons, S. Spinelli, *New Venture Creation*, 7th Edition. McGraw Hill
2. Kaplan, Robert S. and David P. Norton (2004), *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*, Harvard Business School Press.
3. O.C. Ferrel, *Strategic Marketing*, Cengage Learning, 2008.
4. Porter M E, *Competitive Strategy: Techniques for Analysing Industries Competitors*, New York, Free Press
5. M.J. Xavier, *Strategic Marketing*, Response Books. A division of Sage Publications.
6. Richard M.S and Colin G. *Strategic Marketing Management- Planning, Implementation and Control*, Viva Books

Course Name	Integrated Marketing Communication					
Type of Course	Elective - Marketing					
Course Code	MBM21E11					
Course Summary & Justification	This course introduces familiarise the students with concepts and practices in marketing communication. To learn various communication tools and its effectiveness in contemporary time, and Draw a lesson from that knowledge for better integration various marketing communication tools. Bring out creative ideas for effective marketing communication					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Apply the key terms, definitions, and concepts used in integrated marketing communications.	A	1
2	Choose a marketing communication mix to achieve the communications and behavioural objectives of the IMC campaign plan.	E	3
3	Develop an integrated cross-media strategy and creative message and concept to reach the target audience and deliver the brand promise through an IMC campaign.	E	2
4	Measure and critically evaluate the communications effects and results of an IMC campaign to determine its success.	E	2
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>An Introduction to Integrated Marketing Communication (IMC)</b>	<b>12 hours</b>	
1.1	Meaning and role of IMC in the Marketing process	2	1
	Participants in IMC	2	1
1.2	IMC and Brand Communication	3	1
	Introduction to IMC tools	2	1
1.3	The role of advertising agencies and other marketing organisations providing marketing services and perspective on consumer behaviour	3	1
<b>Unit 2</b>	<b>Understanding communication process</b>	<b>20 hours</b>	
2.1	Source, Message and channel factors	3	1,2
2.2	Communication response hierarchy- AIDA model, Hierarchy of effect model	3	1,2
2.3	Innovation adoption model, information processing model	3	1,2



2.4	The standard learning Hierarchy, Attribution Hierarchy, and low 20% involvement hierarchy Consumer involvement- The Elaboration Likelihood (ELM) model, The Foote, Cone and Belding (FCB) Model	6	1,2
	Student Presentations	5	1
<b>Unit 3</b>	<b>Planning for Marketing Communication (Marcom)</b>	<b>15 hours</b>	
3.1	Establishing marcom Objectives- Setting communication objectives, Sales as marcom objective	4	1,2
3.2	DAGMAR approach for setting ad objectives. Budgeting for the Promotional Programme -Factors influencing the budget	3	1,2
3.3	Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Methods to determine marcom budget.	3	1,2
	Student Presentations	5	1
<b>Unit 4</b>	<b>Developing the Integrated Marketing Communication Programme</b>	<b>18 hours</b>	
4.1	Planning and development of creative marcom. Creative strategy – planning, development, implementation and Evaluation, Types of appeals and execution styles	4	3
4.2	Media planning and strategy - Steps involved and information needed for media planning; Media types – Broadcast media, print, digital and social media, support media	5	3
4.3	Direct marketing, Sales Promotion, Public Relations, Publicity, and Corporate Advertising	4	3
	Student Presentations	5	1
<b>Unit 5</b>	<b>Measuring Effectiveness and control of Promotional Programmes</b>	<b>15 hours</b>	
5.1	Meaning and importance of measuring communication effectiveness, The testing process	4	4
5.2	Measuring the effectiveness of all Promotional tools and IMC	3	4
5.3	The ethical, social, and legal aspects of advertising and promotion	3	4
	Student Presentations	5	1

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Assignment</li> <li>○ Presentation</li> </ul> </li> <li>• End semester Examination</li> </ul>

### Suggested Readings

1. Belch MA and Belch GE, Advertising and Promotion- An Integrated Marketing Communication Perspective, Tata McGraw Hill, 6th Ed.
2. George Belch, Michael Belch & Keyoor Purani, Advertising & Promotion- An Integrated Marketing Communications Perspective, Tata McGraw Hill
3. Clow and Baack, Integrated Advertising, Promotion and Marketing Communication. Pearson Education, 3<sup>rd</sup> Ed.
4. Semenik Richard J, Promotion & Integrated Marketing Communications, Thomson

Course Name	Digital marketing					
Type of Course	Elective - Marketing					
Course Code	MBM21E12					
Course Summary & Justification	This course attempts to help students to understand both functional and management roles required to plan and execute effective Digital Marketing campaigns.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Analyse the confluence of marketing, operations, and human resources in real-time delivery.	An	5
2	Develop a digital marketing plan that will address common marketing challenges.	A	2
3	Demonstrate advanced practical skills in common digital marketing tools such as SEO, SEM, social media and Blogs	A	2
4	Articulate the value of integrated marketing campaigns across SEO, Paid Search, Social, Mobile, Email, Display Media, Marketing Analytics.	U	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	<b>12 hours</b>	
1.1	Introduction to Digital Marketing - Concept, Components, Scope of Digital Marketing, Traditional v/s Digital Marketing.	4	1,2
1.2	Digital Marketing Platforms and Strategies, The P-O-E-M Framework, Segmenting & Customising Messages, The Digital landscape	4	1,2
1.3	Digital Marketing Trends, Channels of Digital marketing, Digital marketing plan	4	1,2
<b>Unit 2</b>	<b>Search Engine Marketing and Online Advertising</b>	<b>13 hours</b>	
2.1	Importance of SEM - Essentials of Search Engine Optimisation, Search Engine Result Pages – Positioning, Search Behaviour – On-Page Optimisation, Off-Page Optimisation	4	2,3,4

2.2	Online advertising - Online Advertising vs. Traditional Advertising, Pay-per-Click Advertising, Display Advertising and Tracking Ad Performance	4	2,3,4
	Student Presentations	5	2
<b>Unit 3</b>	<b>Social Media Marketing</b>	<b>25 hours</b>	
3.1	Understanding Social Media, Definition, Paid, Earned and Owned Social Media,	4	2,3,4
3.2	Facebook Marketing- Facebook for Business-Anatomy of an Ad campaign – Adverts - Facebook Insights	4	2,3,4
3.3	LinkedIn Marketing – LinkedIn Strategy- Sales lead generation – Content Strategy – LinkedIn Analytics – Targeting – Ad Campaign	4	2,3,4
3.4	Twitter Marketing – Getting started with Twitter – Building a content strategy – Twitter Ads – Twitter Analytics	4	2,3,4
3.5	Instagram Marketing/Pinterest – Objectives – Content Strategy – Style guidelines – Hashtags – Videos-Sponsored Ads – Apps – Generate leads	4	2,3,4
	Student Presentations	5	2
<b>Unit 4</b>	<b>Mobile Marketing, &amp; Affiliate Marketing</b>	<b>15 hours</b>	
4.1	Mobile marketing- meaning, Mobile Marketing toolkit – Mobile Marketing Features – Mobile Analytics, Mobile advertising, Marketing via Mobile Apps and Tracking Mobile Marketing Performance	5	2, 4
4.2	Affiliate marketing- The building blocks of affiliate marketing, Tools of the trade and Setting up a campaign.	5	2, 4
	Student Presentations	5	2
<b>Unit 5</b>	<b>Web Analytics</b>	<b>15 hours</b>	
5.1	Introduction to web analytics, The data landscape, the reliability of data-based decisions, tools and technology	5	4
5.2	Attribution modelling, Reporting.	5	4
	Student Presentations	5	2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment <ul style="list-style-type: none"> <li>Tests</li> <li>Assignment</li> <li>Presentation</li> </ul> </li> <li>End semester Examination</li> </ul>

### SUGGESTED READINGS

1. Seema Gupta. (2018). Digital Marketing (1st Ed). Tata McGraw Hill Master of Business Administration
2. Evans. D. & Bratton, S. (2008). Social Media Marketing: An Hour a Day (2<sup>nd</sup> ed.). Wiley
3. Ryan, D. & Jones, C. (2012). Understanding digital marketing: Marketing strategies for engaging the digital generation. Kogan Page.

<b>Course Name</b>	<b>Global Marketing</b>					
Type of Course	Elective - Marketing					
Course Code	MBM21E13					
Course Summary & Justification	This course exposes students to the global marketing theory and concepts It provides an understanding of the Global Marketing Environment and its application in an in-depth industry specific analysis for evaluating and selecting markets in other parts of the globe.					
Semester	4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/ Case	Others	Total Learning Hours
	Lecture Discussions	60	-	-	20	80
Pre-requisite	Basic knowledge in Marketing Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Understand the basics global marketing and related theories.	U	8
2	Analyse the global marketing environment and marketing players	An	2
3	Understand the features and evaluate the problems of domestic as well as global marketing.	U, E	3
4	Evaluate the export practices and global marketing strategies.	U, E	11
5	Analyse role of Indian business in global market.	An	13
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1: Introduction to Global business</b>		13 Hrs	
1.1	Reasons of corporations expand to markets in other countries.	2	5
1.2	Problems and features of global marketing vis-a-vis domestic marketing	3	3
1.3	Basis of international trade	2	1
1.4	Theories of international trade	3	1
1.5	Protectionism, Different Methods and Mechanisms used to Protect Interests of native business, Managing Protectionist threats.	3	3
<b>Unit 2 : Global Marketing Environment</b>		14 Hrs	
2.1	Economic, Political, Legal, Socio-cultural and Demographic environment.	3	2
2.2	Trade Groups, international regulations, Global trade bodies & organisations like IMF, World Bank & Conferences.	4	2

2.3	GATT, UNCTAD, their impact on global trade Euro-dollar & Petro Dollar Market.	4	1,2
2.4	Exchange rate fluctuations.	3	1,2,3
<b>Unit 3 : Global marketing research</b>		12 Hrs	
3.1	Market profiling analysis and selection.	3	1,4
3.2	International market segmentation and market coverage strategies.	3	4
3.3	Product strategies; international marketing and PLC.	3	1,4
3.4	Pricing strategies, Promotion strategies, Distribution strategies.	3	1,4
<b>Unit 4 : Global market entry and operating strategies</b>		12 Hrs	
4.1	Exporting; licensing, contract manufacturing.	3	4
4.2	Foreign assembly, foreign production, joint ventures, production in free areas, third country location.	3	4
4.3	Counter trade, strategic alliance.	3	4
4.4	Dumping and its legal implications	3	4
<b>Unit 5 : Export Planning</b>		9 Hrs	
5.1	Export finance, Letter of credit, Export licensing, Export houses	3	4
5.2	Export risk and insurance, Export promotion and Export Documentation.	3	4
5.3	Trends, problems and prospects of globalisation of Indian business.	3	4,5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar.</li> <li>Open Book Examination</li> </ul> </li> <li>End Semester Examination</li> </ul>

### SUGGESTED READINGS

1. Keegan, Warren: *Global Marketing*, Pearson Education
2. Onkvisit, Sak and Shaw *International Marketing-Analysis and strategy*, TMH
3. Philip Cateora and John Graham and Mary Gilly: *International Marketing*, TMH
4. Albaum, Duer & Strandkov. *International Marketing and Export Management*, Pearson
5. Johansson, J. K. *Global Marketing: Foreign Entry, Local Marketing, and Global Management*, McGraw-Hill, 5th Edition, 2008.
6. Rakesh Mohan Joshi, *International Marketing*, Oxford University Press.

Course Name	Retailing Analytics					
Type of Course	Elective - Marketing					
Course Code	MBM21E14					
Course Summary & Justification	The retail and service sector is the largest of all economic activities and evolving rapidly in the age of big data and artificial intelligence. This course will leverage data-driven tools and theoretical models to analyse decisions of retail firms.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	5	-	15	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	ENUMERATE the characteristics, opportunities and challenges of New Age Retailing and Digital Consumers.	R	1, 2
2	UNDERSTAND Consumer Buying Behaviour and Trends in new age retailing.	U	2
3	USE various kinds of data for performing Retailing Analytics.	A	3
4	ILLUSTRATE the use of various tools and frameworks for predictive retail analytics.	An	5
5	DERIVE a variety of metrics and quantify key outcomes in multiple areas of Retail.	E,	5
6	BUILD value for Retail and Marketing by deriving Marketing ROI metrics.	C	11
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Retailing in the Digital Era</b>		11 Hrs	
1.1	New Age Retailing, Digital Consumers Characteristics – interconnected, involved, interconnected, co-creation, collaboration	2	1, 2
1.2	Customer Data – Big Data, Business Analytics, Customer Insights	2	2
1.3	Data Characteristics - Variety, Volume, Velocity, Veracity.	2	3

1.4	Critical issues in Modern day Retail, The Digital organisation, Retail analytics for decision making, Informed and Risk-Aware Decisions	2	3
1.5	Benefits of Retail Analytics – Informed Decisions, Risk mitigation, Gaining visibility, Retail Analytics for Strategic – Tactical and Operational decisions	3	4
<b>Unit 2 : Marketing in a Consumer - Driven Era</b>		9Hrs	
2.1	Understanding Consumer Buying Behaviour and Trends	3	3
2.2	Leveraging customer data, Putting information in context	2	5
2.3	Clicking with consumer communities, Keeping content in mind, From personalisation to commerce.	2	3
2.4	Knowing what consumers are buying, who they are, how they are buying, where else they are buying?	2	5
<b>Unit 3 : Data Sources - Structured &amp; Unstructured</b>		12Hrs	
3.1	Customer, Retailer, Supplier, Market, Web, Mobile, Social, Call Centers	2	1
3.2	Looking at Unstructured Data: The unstructured data challenge, Recognising the untapped analytics opportunity	2	2
3.3	Customer-Driven Decision Making, Content Analytics in Action	2	3
3.4	Understanding Affinities between Products and Customers	2	3
3.5	Advanced affinity analysis, Market basket analysis	2	4
3.6	Understanding customer preferences, Anticipating the customer's next move, Improving Retail Promotions	2	2
<b>Unit 4 : Marketing Analytics &amp; Merchandising Analytics</b>		15 Hrs	
4.1	Marketing Mix ROI, Promotions – Promotional Maturity Curves	2	2
4.2	Pricing – Price per segment, Margin, Profitability	2	3
4.3	Marketing Return Curves, Scenario Analysis, Driving better P&L analysis, Managing Incentive Compensation	2	5
4.4	Assortment planning, Geospatial Analytics, Product placement, Space Optimisation, Product adjacency	4	5
4.5	Aligning store-level assortment with demand, Category Intelligence, Developing dynamic retail assortments	3	6
4.6	Prioritisation of Product categories.	2	2
<b>Unit 5 : Supply Chain &amp; Store Operations Analytics</b>		13Hrs	
5.1	Creating a Demand-Driven Supply Chain, Gaining Visibility across the Supply Chain, Resolving Operations Problems Preemptively	2	3
5.2	Logistics, Inventory, Supplier performance, Demand forecasting,	3	6
5.3	Vendor Intelligence, Vendor Rankings, Fulfillment Intelligence, Inventory Diagnostics, Shrinkage, Optimisation opportunities	2	5
5.4	Using Analytics to Optimise Staffing Plans, Drilling into HR analytics	2	6
5.5	Customer Traffic, Store Performance Dashboards, Local Market Analytics	2	4
5.6	Online Offline Analytics, Sales Trends, Brand Performance, Account Performance Forecasts.	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.			
	<b>CD</b>	<b>Course Delivery methods</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CD 1	Lecture by use of boards/LCD projectors	CO1	CD1,CD2,CD4, CD 6
	CD 2	Tutorials/Assignments	CO2	CD1,CD2,CD4, CD 6
	CD 3	Seminars	CO3	CD1,CD2,CD4,
	CD 4	Mini projects/Projects	CO4	CD1,CD2,CD4
	CD 5	Laboratory experiments/teaching aids	CO5	CD1,CD2,CD3
	CD 6	Industrial/guest lectures	CO6	CD2, CD6, CD7
	CD 7	Industrial visits/in-plant training		
	CD 8	Self- learning such as use of NPTEL materials and internet		
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>			

## REFERENCES

1. Retail Analytics – The Secret Weapon, Emmett Cox
2. Behaviour Analytics in Retail, Ronny Max
3. The Little Book on Big Data: Understand Retail Analytics Through Use Cases and Optimize Your Business, Mahogany Beckford
4. The New Science of Retailing: How Analytics are Transforming the Supply Chain and Improving Performance, Fisher and Raman
5. The Strategy and Tactics of Pricing: A Guide to Growing More Profitably, Nagle, Hogan and Zale, Prentice-Hall
6. Competing on Analytics, Davenport, Harris
7. The New Rules of Retail: Competing in the World's Toughest Marketplace, Lewis and Dart



### Finance Elective Courses

Course Name	Management of Banks and Financial Institutions					
Type of Course	Elective - Finance					
Course Code	MBM21E15					
Course Summary & Justification	This course includes introduction to concepts of banking, the banking system, central banking, banker-customer roles, services offered by banks, banking networks, principles and process of lending, Priority sector lending, financial inclusion, balance sheet, NPA, ALM, risks in banking and laws related to banks viz., DRT Act, SARFAEI Act and Banking Ombudsman. The course provides an understanding on the basic activities and process in the banking system.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Cassette	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C10 - Financial Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the banking activities.	U	1
2	The student will be able to explain various types of deposits and networks in banking.	U	1
3	The student will be able to explain the credit management processes in banks.	U	5
4	The student will be able to examine the performance of a bank.	A	5
5	The student will be able to explain banking laws.	U	1
6	The student will be able to explain the international fund transaction processes in banks.	U	12
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Banking system</b>		10 Hrs	
1.1	Introduction, Classification of banks, Types of banking	2	1
1.2	Banking system in India	2	1
1.3	Central bank, functions, method of credit control, RBI	3	1
1.4	Functions of NBFIs	1	1
1.5	Recent trends in Indian Banking Sector, Mergers	2	1
<b>Unit 2 : Banker and Customer</b>		12 Hrs	
2.1	Deposits, Banker and Customer relations, Know your Customer [KYC]	2	1

2.2	Types of accounts	1	2
2.3	Services rendered by Banks - Banker's lien	1	2
2.4	Right of set off - Payment and collection of Cheque	1	2
2.5	Responsibilities of customer and banker, endorsements, bouncing of cheques	2	2
2.6	Types of customers	1	2
2.7	NOSTRO and VOSTRO accounts	1	6
2.8	SWIFT, CHIPS, CHAPS, FEDWIRE, NRI Bank accounts	1	6
<b>Unit 3 : Lending</b>		14 Hrs	
3.1	Credit- Principles of lending - various credit Products/ Facilities - working capital and term loans	4	3
3.2	Credit Appraisal Techniques, credit management, Different types of documents; Documentation Procedures, Different modes of charging, Types of collaterals and their characteristics	4	3
3.3	Priority Sector Lending - sectors - recent developments	2	3
3.4	Financial Inclusion	1	3
3.5	Correspondent Banking, Lead bank	1	3
<b>Unit 4 : Financial Management of banks</b>		14 Hrs	
4.1	Financial Management of Banks- Bank Balance Sheet Structure – Components	3	4
4.2	Asset Liability Management (ALM) in Commercial banks	3	4
4.3	Gap method; Value at Risk method	2	4
4.4	NPA Management	3	4
4.5	Interest calculation	1	4
4.6	Evaluating bank performance – Profitability Analysis, Balanced Scorecard	2	4
<b>Unit 5 : Banking related laws</b>		10 Hrs	
5.1	Banking related laws	2	5
5.2	Recovery of Debts due to Banks and Financial Institutions Act, 1993(DRT Act) - Objective of the Act, Constitution of Tribunal, Procedure to be followed, Enforcement process. Securitisation	3	5
5.3	Reconstruction of Financial Assets and Enforcement of Securities Interest Act (SARFAESI)-Constitutional Validity; Definitions; Regulation & Reconstruction; Enforcement of Security Interest; Central Registry; Offences & Penalties; Miscellaneous Provisions	3	5
5.4	Banking Ombudsmen Scheme- Purpose; Extent; Definitions; Establishment; Powers; Procedure for Redressal Grievance	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Muraleedharan.D, *Modern banking: Theory and Practice*, PHI Learning, 2010.
2. Vasant Desai, *Bank Management*, Himalya P H, 2010.
3. Hempel, George H and Yawitz Jess B, *Financial Management of Financial Institutions*, New Jersey, PHI.

## SUGGESTED READINGS

1. Peter S Rose and Sylvia C Hudgins, *Bank Management and Financial Services*, Tata McGraw-Hill, 7th Ed, 2010.
2. Indian Institute of Banking and Finance, *Bank Financial management*, Taxmann Publication, ND, 2004.
3. Jha SM, *Bank Marketing*, Himalaya PH, 2011
4. Raghu Palat, *Retail Banking*, Cortlandt Rand Consultancy Private Ltd, Mumbai, 2010.
5. Bhattacharya KM and Agarwal, *Basics of Banking and Finance*. Himalaya PH, 2011.
6. Shekhar KC, and Lekshmy Shekhar, *Banking Theory and Practice*, Vikas PH, ND, 2010.
7. Vij, Madhu, *Management of Financial Institutions in India*, ND, Anmol Publication.

Course Name	Financial Analysis and Business Valuation					
Type of Course	Elective - Finance					
Course Code	MBM21E16					
Course Summary & Justification	To understand how to use financial statements & related data to derive estimates; and its inferences useful in business analysis and valuation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	10	0	10	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	DESCRIBE the basic concepts and principles in Financial Analysis and Business Valuation	U	1
2	PERFORM all the required calculations through relevant numerical problems	A	2
3	ANALYSE the situation and <ul style="list-style-type: none"> <li>Estimate financial distress</li> <li>Estimate Fund and cash flows</li> <li>Estimate the Business value/Equity value</li> <li>Evaluate Financial Performance and position</li> </ul>	An	2,5
4	EVALUATE impact of business decisions on Business and share valuation	E	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		10 Hrs	
1.1	Financial Statement Analysis: Link between financial statements and decision makers, Mechanics of FSA- Financial ratio Analysis; ratio classification and structure; Empirical basis of financial ratios; Inter-firm and intra-firm analysis; Univariate and multivariate approach; Weakness of ratio Analysis.	10	1,2,3

<b>Unit 2</b>		15 Hrs	
2.1	Fund and Cash Flow Analysis : Decomposition Analysis: Assets, liabilities and income statements; Fund Flow Analysis. Cash Flow Analysis- Analysing Investing Activities, Analysing Financial Activities, Analysing Operating Activities. Free Cash Flow: Measuring the Cash Produced by the Business - Using the Free Cash Flow to Value the Firm and Its Equity	15	1,2,3
<b>Unit 3</b>		15 Hrs	
3.1	Application of FSA: FSA as an information processing system; Assessment of corporate solvency and performance; prediction of corporate earnings and growth; credit valuation. Corporate Distress Analysis- Corporate Distress Prediction Models: Edward Altmans Model, NCAER Models Financial analysis and planning: Financial models, Forecasting Financial Statements, Cross sectional analysis of financial statement information, Control, governance and financial architecture	15	1,2,3
<b>Unit 4</b>		10 Hrs	
4.1	Meaning of Value- Valuation and Business Valuation- Principles of Valuation- Types of Values- Role of Business Valuation in Corporate Finance and Business Acquisitions-. Valuation Models- Non-Discounted Cash Flow Method (DCF) – Accounting based, Earnings based, Cash flow based. -Discounted Cash Flow Method- Other methods of valuation- Value Drivers.	10	1,2,3,4,
<b>Unit 5</b>		10 Hrs	
5.1	Approaches to Value Based Management – Marakon Approach, Alcar Approach, Mc Kinsey Approach, EVA Approach, BCG HOLT Approach. Metrics for Measurement of Performance – EPS, ROI, EBIT, EBITDA, RONA, ROCE, TSR, TBR, MVA, CVA, CFROI	10	1,2,3,4,

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester examination</li> </ul>

## REFERENCES

1. Bhattacharyya and John Dearden, *Accounting for Management-Text and Cases*, Vikas PH, 2009.
2. Global Data Services of India Ltd, *Accounting and Analysis-The Indian Experience*, Taxmann Publications Pvt Ltd, ND, 2007.
3. Subramanyam, KR and John J. Wild, *Financial Statement Analysis*, Tata McGraw Hill Publishing Ltd, ND.
4. Debarshi and Bhattacharyya, *Financial Statement Analysis*: Pearson Education, 2011.
5. George Foster, *Financial Statement Analysis*, Pearson Education.
6. Simon Benninga, *Financial Modelling*, MIT Press (2008) (SB).
7. Alaister L. Day, *Mastering Financial Modelling in Excel: a Practitioner's Guide to Applied Corporate Finance*. Financial times/ Prentice Hall, 2007.

<b>Course Name</b>	<b>Financial Derivatives and Risk Management</b>					
Type of Course	Elective - Finance					
Course Code	MBM21E17					
Course Summary & Justification	This course includes introduction to concepts of derivatives viz., forwards, futures, options and swaps. It discusses derivative markets, mechanism, pricing of forwards and futures, option pricing models, various risks and perceptions on risk and risk management strategies.					
Semester	3/4			Credits	4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Vi deo/Case	Others	Total Learning Hours
	Collaborative learning	60	10	8	2	80
Pre-requisite	MBM21C10 - Financial Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the risk management using derivatives.	U	2
2	The student will be able to explain various types of derivatives and its processes.	U	1
3	The student will be able to explain various option pricing models.	U	1
4	The student will be able to examine the risk management processes and tools firms use.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1 : Introduction to Financial Derivatives</b>		12 Hrs	
1.1	Introduction to Financial Derivatives - An overview of derivative contracts: Forward, Futures, swaps and options	5	2
1.2	Importance of derivatives in risk management	3	1
1.3	Derivative markets in India: exchange-traded and over the counter; Trading mechanism of derivatives in India, NSE	4	2
<b>Unit 2 : Forwards and Futures</b>		12 Hrs	
2.1	Forwards and Futures - Quantitative foundations for derivative analysis; Mechanics of futures and forward contract, Role of Clearing House	4	2
2.2	Hedging strategies using futures and forward	4	1
2.3	Pricing forward and futures contract, Carry Pricing model	4	2
<b>Unit 3 : Options and Swaps</b>		14 Hrs	
3.1	Interest and Index Futures and Options - Interest rate futures and pricing	3	2
3.2	Stock index futures and pricing	4	2

3.3	Swaps: mechanics use and valuation	1	2
3.4	Options: The basics, Credit derivatives; Exotic options	3	2
<b>Unit 4 : Option Pricing Models</b>		10 Hrs	
4.1	Option Pricing Models - Binomial options pricing model; The Black and Scholes Model	4	3
4.2	Options hedging strategies	2	3
<b>Unit 5 : Risk Management</b>		12 Hrs	
5.1	Business Risk -Source and types of business risk, implications of business risk	5	4
5.2	Risk perceptions of individuals and institutions	2	4
5.3	Generic alternatives for managing financial risk, diversification, Reinsurance, Contingent contracts.	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b>  <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b>  Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Madhumathi. R and Ranganathan M, *Derivatives and Risk Management*, Pearson Education, Chennai 2012.
2. Gupta SL, *Financial Derivatives (Theory, Concepts and Problems)*, Tata MC Graw Hills, ND, 2005.

## SUGGESTED READINGS

1. Kumar, S.S.S, *Financial Derivatives*, Prentice Hall of India, ND, 2010.
2. Rene , M., Stulz, *Risk Management and derivatives*, Thomson –South Western, 2003.
3. John C Hull, *Options, Futures and other derivatives*, Sixth edit, Pearson Education, 2010.
4. John C Hull, *Student Solutions Manual for Options, Futures and Other Derivatives*, Middle East, Asia, Africa, Eastern Europe Edition, 7/e, Pearson Education, 2008.
5. Vijaya Bhaskar, P and Mahapatra, B, *Derivatives Simplified*, Sage publication, 2002

Course Name	Personal Financial Planning					
Type of Course	Elective - Finance					
Course Code	MBM21E18					
Course Summary & Justification	To provide the competencies required to act as an Independent Financial Advisor and design appropriate finance planning strategies suitable to individual clients to meet the client’s wealth creation and wealth protection needs.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	10	0	10	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	UNDERSTAND the need and aspects of personal financial planning	U	1
2	Describe the investment options available to an individual	U	2
3	IDENTIFY types of risk and means of managing it	A	2
4	DETERMINE the ways of personal tax planning	An	2
5	EXPLAIN retirement and estate planning for an individual and design a financial plan.	E	3
6	CREATE a financial plan for a variety of individuals	C	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1</b>		10 Hrs	
1.1	Need for Financial Planning, Assessing personal and financial goals, needs and priorities, attitudes and expectations and risk tolerance level, Personal Financial Planning Process, Preparation of Personal Budget, Personal Financial Statements, Responsibilities of a Financial Planner, Time Value of Money, KYC, PAN & AADHAR	10	1
<b>Unit 2</b>		15 Hrs	
2.1	Introduction to Investment Planning, Investment Criteria- liquidity, safety and Profitability, Investment vehicles (Gold, Bonds, Equity, FD, Insurance, MFs, ETFs, Post Office Savings, Real Estate etc.), Risk and Return associated with these investments, Return comparison over a period of time from different asset classes, Investment strategies, Mutual Funds as Investment Vehicle-Special	15	1,2



	focus on SIP, STP, and SWP, NFOs, Trading in Commodities, Derivatives and F&Os, Crypto currency, Creating an Investment Portfolio, Awareness of mis-selling in investment products.		
<b>Unit 3</b>		<b>10 Hrs</b>	
3.1	Risk analysis, Concept of long-term risk, Insurance decisions in personal financial planning, Types of insurance cover- mortality, health, disability, property and liability, ULIPs and Term Plans, Credit Card Financing, Types of Consumer and Home Loans- cost and risk, Credit Score	10	3,4
<b>Unit 4</b>		<b>15 Hrs</b>	
4.1	What is Tax Deduction? Tax Deductions under the Section and respective Subsections of : 80C, 80D, 80E, 80G, 80 I, Sections 80 JJA, 80QQB, 80RRB, 80TTA, 80U and other relevant sections, Direct Tax Code (DTC), Taxation impact on different investment options, Personal tax planning, Filing IT Returns.	15	3,4,5
<b>Unit 5</b>		<b>10 Hrs</b>	
5.1	Wealth creation, retirement planning for an individual, Pension Plans, Provident Fund, Gratuity, Life Insurance Plans., General Insurance Plans, Reverse Mortgage Plans, Senior Citizen Schemes, What is Estate? Who needs Estate Planning? Transferring assets during life time, Power of Attorney, Transferring assets post death – e.g., Nominations, Will, and Creating Trusts	10	4,5,6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester examination</li> </ul>

## REFERENCES

1. Basics of Personal Financial Planning Insurance Education Series by NIA, K C Mishra, Steward Doss, Cengage Delmar Learning India Pvt. Ltd.
2. Introduction to Financial Planning, Indian Institute of Banking & Finance
3. Personal Financial Planning Theory and Practice, Kaplan Schweser
4. Personal Finance, E. Thomas Gorman and Raymond E. Forgue, Southwest-Western Cengage Learning.
5. Fundamentals of Financial Planning, Michael Dalton, Joesph Gillice, James Dalton and Thomas Langdon, Money Education
6. Personal Financial Planning, Benedict Koh Wai Mun Fong, Pearson
7. Personal Financial Planning, Lawrence J. Gitman , Michael D.Joehnk, Cengage

Course Name	Security Analysis and Portfolio Management					
Type of Course	Elective - Finance					
Course Code	MBM21E19					
Course Summary & Justification	The objective of this course is to give the students an in-depth knowledge of the Securities market and to familiarise students with portfolio management techniques.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	10		10	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	REMEMBER various concepts in Investment management	R	1
2	EXPLAIN various theories of Investment Analysis and Portfolio Management.	U	2
3	CALCULATE risk and return on investment using various concepts covered in the syllabus.	A	2
4	ANALYSE and DISCOVER intrinsic value of a security.	An	3
5	DESIGN/ CREATE optimal portfolio.	C	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		10 Hrs	
1.1	Meaning, nature & objectives, Investments Vs. Speculation & Gambling, Investment Process, Investment Environment, Investment avenues: Marketable & Non marketable financial assets.	5	1
1.2	Portfolio Management: Meaning, attributes, significance and process of Portfolio Management, Portfolio manager and his role	5	2
<b>Unit 2</b>		15 Hrs	
2.1	Meaning and Elements of Risk & Return, Measurements of Risk & Return, Relationship between risk and return. Fundamental Analysis: Economy analysis, industry analysis and company analysis, weaknesses of fundamental analysis.	8	3,4
2.2	Technical Analysis: Meaning, Tools of technical analysis, Technical	7	3.4

	Analysis vs. Fundamental Analysis. Efficient Market Theory: Meaning. Forms of Market Efficiency, Efficient Market Hypothesis vs. Fundamental & Technical Analysis		
<b>Unit 3</b>		10 Hrs	
3.1	Meaning, Types, Bond Prices, Bond Return, Risks in Bonds. Equity Valuation: Meaning, Concept of Present Value, Share Valuation Models, Multiplier Approach to Share Valuation	10	3,4
<b>Unit 4</b>		15 Hrs	
4.1	Meaning, Types of Portfolio Risks, Diversification of Risks, Selection of Optimal Portfolio. Markowitz Portfolio Selection Model: Efficient set of portfolios, Optimal Portfolio selection, Limitations of the Model. Capital Asset Pricing Model (CAPM): Meaning, Assumptions & Limitations of CAPM. Sharpe-The Single Index Model: Measuring security risk & return, Measuring Portfolio Risk & Return. Factor Models and Arbitrage Pricing Theory: Arbitrage Pricing Theory and its principles, Comparison of Arbitrage Pricing Theory with the Capital Asset Pricing Model	15	3,4,5
<b>Unit 5</b>		10 Hrs	
5.1	Meaning and need of Portfolio Revision, Constraints in Portfolio Revision, Revision Strategies, Portfolio Evaluation: Meaning and need of Portfolio Evaluation, Evaluation Perspectives, Measuring Portfolio Returns & Risk Adjusted Returns	10	4,5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester examination</li> </ul>

## REFERENCES

- Investment Analysis and Portfolio Management, Chandra, Prasanna (Tata McGraw Hill Publishing Co. Ltd.)
- Securities Analysis & Portfolio Mgmt., V A Avadhani, Himalaya Publications
- Security Analysis and Portfolio Management, S. Kevin, PHI Learning Pvt. Ltd.
- Investment Analysis & Portfolio Management, Ranganathan & Madhumathi, Pearson Education Pvt. Ltd.
- Security Analysis and Portfolio Management, Fischer DE & Jordan R J, Prentice Hall.
- Portfolio Management, Barua, S. K., Raghunathan V; Varma, J R, Tata McGraw Hill Publishing Co. Ltd.
- Investment Analysis and Portfolio Management, Frank K. Reilly and Keith C. Brown, Thomson Learning
- Modern Investments and Security Analysis, Fuller R J; Farrel JL, McGraw Hill
- Investment Management, V.K. Bhalla, S. Chand & Co.

Course Name	Behavioural Finance					
Type of Course	Elective - Finance					
Course Code	MBM21E20					
Course Summary & Justification	To help students appreciate the limitations of 'rational' models of investment decision making and identify persistent or systematic behavioural factors that influence investment behaviour.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Apply analytical skills for financial decision making.	A	2
2	Understand and critically discuss the cognitive biases and errors of judgment that affect financial decisions	U	2
3	Critically evaluate behavioural influences involving individual's investment decisions	E	2
4	Understand and critically discuss the differences between a behavioural finance perspective and a traditional finance perspective	An	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	<b>13 hours</b>	
1.1	Introduction to Behavioural Finance – Evolution and History of Behavioural Finance, Main contributors.	3	1, 4
1.2	Standard Finance – Modern Portfolio Theory	3	4
1.3	MM Theory, Capital Asset Pricing Model (CAPM), Random walk hypothesis, Expected Utility Theory	4	4
1.4	Efficient Market Hypothesis –Investor rationality and market efficiency	3	4
<b>Unit 2</b>	<b>Behaviour and its formation</b>	<b>18 hours</b>	
2.1	Behaviour and its formation, models – Cognition, Cognitive dissonance	3	2
2.2	Cognitive bias – Emotions – Perception, Errors of perception –	3	2
2.3	Decision making, Herbert Simon and bounded rationality Heuristics and its relevance – Basis and the various Theories of Decision Making	4	2

2.4	Personality traits and risk attitudes	3	3
	Student presentations	5	2
<b>Unit 3</b>	<b>Building blocks of Behavioural Finance</b>	<b>15 hours</b>	
3.1	Building blocks of Behavioural Finance – The psychology of investor behaviour	3	3,4
3.2	Theories of Behavioural Finance – Noise-trader; Professional arbitrage – Biases, Outcomes of biases, Various Biases – Cognitive, Affective and Conative biases – Dealing with biases –	3	3,4
3.3	De-biasing strategies – Market anomalies – Herd behaviour – Bubbles, formation and effects, Behavioural explanation of Bubbles –Prospect theory – Models of investor behaviour.	4	3,4
	Student presentations	5	2
<b>Unit 4</b>	<b>Behavioural Corporate Finance</b>	<b>17 hours</b>	
4.1	Behavioural Corporate Finance – Approaches – Mergers and Acquisitions	4	3
4.2	CEO overconfidence and Biases, Approaches and dealing with biases	4	3
4.3	De-biasing strategies – Value investing – Behavioural investing – Uses and Approaches of Behavioural Finance in corporate decision-making.	4	3
	Student presentations	5	2
<b>Unit 5</b>	<b>Neuro-finance</b>	<b>17 hours</b>	
5.1	Neuro-finance – Neural process and decision making – Contribution of Neuro- finance in Behavioural finance	4	3
5.2	Frauds and the Psychology behind it – Theories of fraud – Prevention of fraud – Institutions that deal with frauds	4	3
5.3	Forensic accounting, need and its importance in the present situation.	4	3
	Student presentations	5	2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment <ul style="list-style-type: none"> <li>Tests</li> <li>Assignment</li> <li>Presentation</li> </ul> </li> <li>End semester Examination</li> </ul>

## SUGGESTED READINGS

1. Ackert L and R Daves, *Behavioural finance: Psychology decision making and Markets*, South western, Centage learning, Mason, Ohio.
2. Bisen, Pandey: *Learning Behavioural Finance*, Excel Books.
3. Montier, James: *Behavioural Finance*, John Wiley & Sons, New York.
4. Sheiter A, *Inefficient Markets: An Introduction to behavioural finance*, Oxford University press, Oxford.

<b>Course Name</b>	<b>International Financial Management</b>					
Type of Course	Elective - Finance					
Course Code	MBM21E21					
Course Summary & Justification	This course includes introduction to concepts of international finance viz., features, international monetary system, balance of payments, international markets, foreign exchange and related theories, currency derivatives, foreign exchange exposures and managing them, FDI, international WCM, international capital budgeting, and international taxation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C10 - Financial Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the conceptual framework of how financial decisions are undertaken in a multinational company	U	12
2	The student will be able to explain various types of risks in foreign exchange transactions and remedies for these.	U	2
3	The student will be able to explain unique economic factors that challenge a financial manager in the international context.	U	12
4	The student will be able to explain the tax system in international firm.	U	12
5	The student will be able to explain how the international business different compared to domestic systems.	U	13
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: International Financial Environment</b>		12 Hrs	
1.1	International Financial Environment	2	5
1.2	The Finance Function in Global Context, Distinguishing Features of International Finance	2	5
1.3	International Monetary System, International Financial Flows	3	5
1.4	Balance of Payments Framework	3	5
1.5	International Financial System - Markets and Institutions	2	5
<b>Unit 2 : Exchange rate mechanism</b>		12 Hrs	
2.1	Foreign Exchange Markets - Introduction, Structure of Foreign Exchange Market, Mechanics of Currency Trading, Participants	3	5
2.2	Types of Transactions and Settlement Dates, Exchange Rate Quotations and Arbitrage, Exchange Rate Determination and Forecasting	3	5
2.3	Purchasing power parity theory; Interest rate parity theory	3	1

2.4	Introduction to Currency Futures, Currency Options, Forwards and Swaps	3	2
<b>Unit 3 : Forex Risk Management</b>		12 Hrs	
3.1	Forex Risk Management - Management of Foreign Exchange Risk – Translation Exposure, Transaction Exposure and Economic Exposure	4	2
3.2	Hedging - Managing operating exposure	4	2
3.3	Forex Risk Management - Management of Foreign Exchange Risk – Translation Exposure, Transaction Exposure and Economic Exposure	4	2
<b>Unit 4 : Financial Management of MNCs</b>		16 Hrs	
4.1	Financial Management of Multinational Corporations: Foreign Direct Investment	4	3
4.2	Cost of Capital and Capital Structure of Multinational Firms	4	3
4.3	The international Financing Decision, Funding Avenues in Global Capital Markets	4	3
4.4	Multinational Capital Budgeting, Multinational Working Capital Management	4	3
<b>Unit 5 : International Taxation</b>		8 Hrs	
5.1	International Taxation: Tax Principles, Double Taxation relief, bilateral relief, unilateral relief, Special provisions relating to avoidance of tax, Unified Tax Law, Various tax systems	4	4
5.2	Tax haven subsidiaries & International offshore financial centers, dumping, import substitution	4	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

- Sharan, Vyuptakesh, *International Financial Management*, Prentice Hall of India, 2010.
- Apte, P.G., *International Financial Management*, Tata McGraw Hill Publishing Limited.2009.

## SUGGESTED READINGS

- Eitman, David K., Stonehill, Arthur, Moffet, Michael H., *Multinational Business Finance*, Pearson Education, 2007.
- Clarle, Ephrain, *International Financial Management*, Cengage learning, Australia, 2011.
- Madura, Jeff, *International Corporate Finance*, Cengage (Thomson) Learning, 2007.
- Madhu Vij, *International Financial management*, Excel Books, 2010.
- David K Eiteman; Arthur I. Stonehill; Michael H Moffett, *Multinational Business Finance*, 10 ed, Pearson education, 2009.

Course Name	Modern Banking and Financial Services					
Type of Course	Elective - Finance					
Course Code	MBM21E22					
Course Summary & Justification	The course is intended to provide a sound foundation in the modern banking products and financial services					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60			20	80
Pre-requisite	Any Graduate					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Identify the digital banking product in Indian context.	R	1
2	Understand the financial services and Digital banking process and operations.	U	3
3	Demonstrate the applicability of financial services in business.	A	5
4	Evaluate the financial services products as an option for business finance.	E	4
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

	Hrs	CO. No.
<b>Unit 1 : Digital Banking Products</b>	16 Hrs	
1.1 Digital Banking, its products for financial inclusion and its need	2	1
1.2 Branchless Banking and its objectives	2	1
1.3 ATMs and CDMs, its products features	2	2
1.4 Mobile Banking and its product features and diversity	2	2
1.5 Internet Banking and its product features and types	2	2
1.6 Instant Money Transfer Systems and Instant Money Payment System	3	3
1.7 Back End Operations and Technology of ATM, CDM, Mobile Banking and Internet Banking	3	3
<b>Unit 2 : Cards</b>	13 Hrs	
2.1 Cards, types, products, Approval Processes, profitability and recovery.	3	2
2.3 POS Terminals and its Product Features	2	2
2.4 Approval process, profitability of POS business and Backend operations and technology	3	2
2.5 Payment Systems and Overview of global and domestic Payment systems.	2	3



2.6	RuPay and RuPay Secure, IMPS, NUUP, NACH, AEPS, CTS, NFS, E-KYC, RTGS, NEFT.	3	3
<b>Unit 3 : Financial Services</b>		15 hrs	
3.1	Financial Services, its scope and Growth of Financial Services in India	3	1
3.2	Merchant Banking, Responsibilities and its types	3	1
3.3	Role of Merchant Bankers in Issue Management and Regulation of Merchant	3	2
3.4	Venture Capital, financial pattern and its Growth in India	3	2
3.5	Legal Aspects and Guidelines for Venture Capital	2	2
3.6	Housing finance and Consumer Finance	1	2
<b>Unit 4 : Leasing</b>		15 hrs	
4.1	Leasing, its development and advantages	2	2
4.2	Leasing Vs Hire purchase	2	1
4.3	Types of Leasing	3	2
4.4	Lease evaluation, Legal & Tax aspects of leasing	2	2
4.5	Factoring, Forfeiting and Bill Discounting	3	4
4.6	Types of Factoring Arrangements and Factoring in the Indian Context	3	3
<b>Unit 5 : Mutual Funds</b>		21 Hrs	
5.1	Mutual Fund, objectives, functions and its types.	3	2
5.2	Organisation and Management, Working of Public and Private Mutual Funds in India, SEBI regulation	3	2
5.3	Evaluating mutual fund performance	3	4
5.4	EBT Securitisation and its application	3	3
5.5	De-mat Services, need, operations, and the Role of NSDL and CSDL	3	2
5.6	Credit rating and its procedural aspects	3	3
5.7	Various credit rating agencies in India and International	3	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

### Suggested Readings

1. Uppal RK, *Banking with Technology*, New Century Publications, New Delhi
2. Kaptan SS, *Indian Banking in Electronic Era*, New Century Publications, New Delhi
3. Khan M.Y., *Indian Financial System*, Tata McGraw Hill, New Delhi
4. Bhole & Mahakud, *Financial Institutions and Market*, TMH, New Delhi
5. V. A. Avadhani, *Marketing of Financial Services*, Himalayas Publishers, Mumbai
6. DK Murthy, and Venugopal, *Indian Financial System*, IK Int Pub House
7. Anthony Saunders and MM Cornett, *Financial Markets & Institutions*, TMH, New Delhi
8. Punithavathy Pandian, *Financial Markets and Services*, Vikas, New Delhi
9. Vasanth Desai, *Financial Markets & Financial Services*, Himalaya, Mumbai
10. Meir Khan, *Financial Institutions and Markets*, Oxford Press.
11. Madura, *Financial Markets & Institutions*, Cengage, New Delhi

Course Name	Management Control System						
Type of Course	Elective - Finance						
Course Code	MBM21E23						
Course Summary & Justification	The main objective of the course is to appraise the students the about the concept of management control system as well as its role in efficient management of organisations.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	10	0	10	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Illustrate the Process in developing MCS	U	1
2	Examine the applications and implications of marginal cost statement analysis in the context of product mix, pricing, make or buy decisions.	A	2
3	Evaluate the applicability of budgetary control in managerial decision making by using functional, fixed and flexible budgets	E	3
4	Compare and contrast the implications of contemporary cost concepts and pricing decisions	An	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1</b>		10 Hrs	
1.1	Management Control System: Basic concepts, nature and scope of MCS, Control environment – Concept of goals and strategies. Management control process, Behavioural considerations. Responsibility Centers: Revenue and expense centers, Profit centers, Investment centers. Costing-Control in service organisations, Control in multinational corporations.	10	1
<b>Unit 2</b>		12 Hrs	
2.1	Basic Concepts – Types of costing, methods and techniques of costing, nature of variable, semi variable, fixed costs, sunk costs, opportunity cost, differential costs and revenues. Marginal costing (practical application technique), key or limiting factors analysis, profit planning, optimising	12	1,2,3

	product mix, make or buy decision, price fixation, discontinuance of product, diversification of product line, accept or reject new order, close down of operations. Relevant Cost Analysis, incremental costing, short term decision making. Uses of CVP analysis, simple, elaborate, cash, control, profit volume charts. Profitability Analysis – Product wise / Segment Wise / Customer wise-Transfer Pricing: Objectives and methods.		
<b>Unit 3</b>		<b>12 Hrs</b>	
3.1	Budgeting and Variance Analysis: Budget preparation, Types of budgets, Behavioural aspects of budgets, budgetary control, Variance analysis and reporting. Variance Analysis - Investigation of Variances, Planning and Operating Variances, Controllable / Non-controllable Variances Relevant Cost Approach to Variance Analysis; Variance analysis under marginal costing and absorption costing; Activity Ratios; Application of budgetary control and Standard Costing in Profit planning, Standard Costing Vs Budgetary Control, Reconciliation of Actual Profit with Standard Profit and /or Budgeted Profit.	12	1,2,3
<b>Unit 4</b>		<b>12 Hrs</b>	
4.1	Control Methods: Cost Control and Cost Reduction – Basics, Process, Methods and Techniques of Cost Reduction programme. Activity Based Cost Management - Concept , purpose, benefits, stages, relevance in decision-making and its application in Budgeting Responsibility accounting, Traditional Vs. ABC System – comparative analysis- JIT – introduction, Benefits, Use of JIT in measuring the Performance-) ERP and its applications in strategic cost management- Bench Marking-Life cycle costing, Target costing, Kaizen Costing- Value Analysis and Value Engineering- Throughput Costing-Business Process Re-engineering-Back-flush Accounting- Lean Accounting- Socio Economic Costing	12	1,2,3
<b>Unit 5</b>		<b>14 Hrs</b>	
5.1	Performance Analysis and Measurement :Performance Management- concept, components -Performance analysis and measurement-quantitative and qualitative, divisional performance- Performance, Productivity and Efficiency- Financial performance analysis- Performance Evaluation & Improvement Tools- Balanced Score Card- Du-Pont Analysis- Bench marking & Bench trending- Six Sigma- Statistical Quality Control (SQL)- Plan- Do- Check- Action (PDCA)- Management Information System-Online Analytical processing tools- Tools to Improve Productivity and Profitability – MRP I, MRP II and ERP-) Total Productivity Management- Total Quality Management	14	1,2,3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b>  Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>▪ Tests – One MCQ based and on extended answer type</li> <li>▪ Seminar Presentation</li> <li>▪ Mini Project/Assignment/Case analysis</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

1. Robert N. Anthony & Vijay Govindrajana, *Management Control Systems*, TMH.
2. Kenneth A. Merchant, *Modern Management Control systems: Text & Cases*, Pearson Education
3. Drury, Colin, *Management Accounting and Control*, Thomson Learning.
4. Kaplan, Atkinson and Young, *Management Accounting*, Pearson Education
5. Horngren, Foster & Datar: *Cost Accounting – A Managerial Emphasis*, Prentice Hall
6. Saxena V. K. & C. D. Vashist, *Advanced Cost & Management Accounting – Problems & Solutions*, Sultan Chand.

Course Name	Financial Modelling					
Type of Course	Elective - Finance					
Course Code	MBM21E24					
Course Summary & Justification	The main purpose is to make students aware of the important concepts and issues in the field of financial modelling. The basics of data handling tools and techniques, quantitative modelling in the area of market microstructure, and asset pricing are incorporated. In addition, the students are expected to gain real experience to work on a modelling tool using real data.					
Semester	3/4			Credits		4
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Collaborative learning Case based learning	60	10		10	80
Pre-requisite	NIL As per the requirement of the course					
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	Explain the basic and advanced features of excel in the context of financial modelling applications	(U)	1
2	Apply Advanced Excel functions to present behaviour of sensitivities to the projected financial metrics of a firm	(A)	2
3	Evaluate project viability and forecast the financial statements by using excel	(E)	3
4	Construct models in different areas of finance including investments, corporate finance, Project finance and derivatives in Identifying the Revenue Drivers and Cost Drivers	(C)	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		12 Hrs	
1.1	Introduction to - Understanding the Basic Features of Excel Introduction to Excel, Understanding Advanced Features of Excel - Modelling Database Functions in Excel - Creating Understanding Finance Functions - Using Forms and Control Toolbox - Charts Creating Dynamic Models - present in Excel	12	1,2,3

<b>Unit 2</b>		<b>12 Hrs</b>	
2.1	Sensitivity Analysis using Excel Other Sensitivity Analysis-Scenario Manager Different Statistical Distributions used in-Features, Simulation using Excel Generating Random Numbers that follow a particular distribution-Simulation Building Models in Finance using Simulation.	12	1,2,3
<b>Unit 3</b>		<b>12 Hrs</b>	
3.1	Preparing common size statements-Excel in Accounting directly from Trial Balance Forecasting Analysing Financial Statements by using-Financial Statements using Excel Spreadsheet Model. Determining Project Viability-Excel in Project Appraisal Simulation in Project Appraisal-Risk Analysis in Project Appraisal	12	1,2,3
<b>Unit 4</b>		<b>12 Hrs</b>	
4.1	Determination of Value Drivers-Excel in Valuation Risk Analysis in Valuation, Excel-DCF Valuation Creating Dynamic-Determining Efficient Portfolio -in Portfolio Theory Portfolios Fixed-Portfolio Insurance Black and-Income Portfolio Management using Excel, Excel in Derivatives Real Options Valuation , Building a-Greeks in Excel -Scholes Model in Excel Mega Model.	12	1,2,3,4,
<b>Unit 5</b>		<b>12 Hrs</b>	
5.1	Understanding Subroutines and Functions and building simple financial models using subroutines and functions Subroutines and- Recording and Editing Macros Functions Message Box-Decision Rules, and Input Box Debugging. Designing Advanced Financial Models using VBA Actual - Features - User Forms Model Building	12	1,2,3,4,

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>▪ Tests – One MCQ based and on extended answer type</li> <li>▪ Seminar Presentation</li> <li>▪ Mini Project/Assignment/Case analysis</li> </ul> </li> <li>○ End Semester examination</li> </ul>

## REFERENCES

1. Jordan Goldneior. Advanced Excel Essentials.
2. John Walkenbach. Excel 2013 Bible.
3. Winston L. Wayne (2014), 'Microsoft Excel 2013: Data Analysis and Business Modelling', Microsoft Press, U.S.A.
4. Financial Analysis and Modelling Using Excel and VBA, Chandan Sengupta, Wiley
5. Taxmann's Financial Management using Excel Spreadsheet, Ruzbeh J. Bodhanwala
6. Gupta Vijay (2002), Statistical Analysis with Excel, VJ Books Inc., Canada

Course Name	Corporate Restructuring Strategies					
Type of Course	Elective - Finance					
Course Code	MBM21E25					
Course Summary & Justification	The objective of this course is to provide an in-depth understanding of financial, accounting, regulatory and valuation aspects relating to corporate restructuring. This course also provides an understanding of the linkages between corporate restructuring and financial markets					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes Upon completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Critically understand the principal theories, concepts and principles of Mergers, Acquisitions, and Corporate Restructuring.	U	4
2	Critically discuss the valuation principles and practices of Mergers, Acquisitions, and Corporate Restructuring, and rationalise success potential.	A	2
3	Demonstrate detailed knowledge on target valuation, as well as on the estimation of the synergies arising from Mergers, Acquisitions, and Corporate Restructuring.	A	2
4	Enable the student to acquire analytical skills in analysing real-world cases in the need for corporate restructuring in a respective venture.	An	6
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	14 hours	
1.1	Overview of corporate restructuring – meaning, need and scope Emerging Trends - global and national scenario.	3	1, 4
1.2	Forms of corporate restructuring – expansion, contraction, changes in corporate control, changes in ownership structures,	4	1
1.3	Reverse merger and demerger Financial and operational restructuring	4	1
1.4	Motives behind M&A, role of industry life cycle	3	1
<b>Unit 2</b>	<b>M&amp;As process and theories</b>	17 hours	
2.1	Mergers and acquisitions - Concept and implications; Motives and rewards, M&As process	4	1, 4
2.2	Types of mergers; horizontal, vertical and conglomerate mergers; Mergers and value creation	4	1

2.3	Theories of M&A - efficiency, undervaluation, agency problems, tax considerations, market power, operating synergy, financial synergy	4	1
	Student presentations	5	4
<b>Unit 3</b>	<b>Buyouts</b>	17 hours	
3.1	Leveraged Buy Outs (LBO) concept and process Motives and implications of LBOs; Regulatory framework of LBOs	4	1, 4
3.2	Employee buy outs, Concept and process; Bankruptcy Takeover defence strategies	4	1,4
3.3	Financial Restructuring: Buy-back of shares – concept and necessity	4	1,4
	Student presentations	5	4
<b>Unit 4</b>	<b>Valuation</b>	17 hours	
4.1	Valuation of M&A, basic principles of valuation Meaning and Purpose of valuation, Role of Valuation	5	2, 3
4.2	Income approach to valuation - discounted cash flow – FCFF, FCFE and adjusted present value method; Market approach – Comparable company approach, stock and debt approach; Asset approach; Synergy valuation	7	2,3
	Student presentations	5	4
<b>Unit 5</b>	<b>Legal and Regulatory framework of M&amp;A</b>	15 hours	
5.1	Legal and Regulatory framework of M&A: Companies Act 2013, Taxation Aspects of Corporate Restructuring - Income Tax Act 1961,	5	1, 4
5.2	SEBI Act, SEBI takeover Code etc. Accounting Aspects of Corporate Restructuring, Case analysis	5	1,4
	Student presentations	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment a. Tests b. Assignment c. Presentation End semester Examination

## SUGGESTED READINGS

1. De Pamphilis, D.M. (2008). Mergers, Acquisitions, and Other Restructuring Activities. (4th ed.). Academic Press, Elsevier Inc.
2. Reed, S.F. Alexander, L. & Nesvold, H.P. (2007). The Art of M&A: A Merger Acquisition Buyout. (4th ed.). McGraw-Hill
3. Damodaran, A. (2012). Damodaran on Valuation: Security Analysis for Investment and Corporate Finance. (2nd ed.). John Wiley and Sons, Inc.
4. Brealey, Myers & Allen. (2018) Principles of Corporate Finance. (12th ed.). McGraw Hill.
5. Robert F Bruner, Applied Mergers and Acquisitions, John Wiley and Sons, 2004.
6. Gaughan, P.A. Mergers, Acquisitions and corporate Restructuring, John Wiley&Sons, 2007
7. Robert F Bruner, Applied Mergers and Acquisitions, John Wiley and Sons, 2004.
6. When to Ally When to Acquire, HBR, July-Aug 2004



Course Name	Strategic Financial Management					
Type of Course	Elective - Finance					
Course Code	MBM21E26					
Course Summary & Justification	The focus of the course is on the core functions of strategic financial management, and to acquire knowledge of the legal, procedural and practical aspects of strategic finance					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
	Upon completion of this course, learners will be able to:		
1	Evaluate the role of financial management in achieving the strategic objectives of a firm	E	1
2	Evaluate capital investment projects by estimating cost of capital and risk adjusted net cash flows using appropriate capital budgeting principles and tools.	E	3
3	Identify and evaluate sources of long term finance and the best source of finance	U	2
4	Analyse the reasons for corporate restructuring	An	2
5	Understand the importance of risk management in strategic decision making	U	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	12 hours	
1.1	Introduction to Strategic Financial Management: Overview of Strategic Financial Management	4	1
1.2	Corporate Strategy and Financial Policy - Financial Policy and Strategic Planning –Strategic Planning Process – Objective and Goals – Major Kinds of Strategies and Policies	4	1
1.3	Corporate Planning – Types of Financial Plan - Process of Financial Planning	4	1
<b>Unit 2</b>	<b>Investments Decisions under Risk and Uncertainty</b>	18 hours	
2.1	Investments Decisions under Risk and Uncertainty – Techniques of Investment Decision	3	2
2.2	Risk analysis in capital budgeting - Risk Adjusted Discount Rate, Certainty Equivalent Factor, Statistical Method, Sensitivity Analysis, Simulation Method, Scenario analysis	4	2
2.3	Real options and analysis, Inflation and project evaluation	3	2

2.4	Corporate Strategy and High Technology Investments.	3	2
	Student presentations	5	4
<b>Unit 3</b>	<b>Strategic Financing Decisions</b>	16 hours	
3.1	Capital Structure and Value in a Perfect World; Cost of Financial Distress; Agency Costs; Signalling Theory.	3	3
3.2	Financial Strategy – Innovative Sources of Finance – Asset Backed Securities – Hybrid Securities - Convertible and Non-Convertible Debentures, Deep Discount Bonds, Secured Premium Notes, Convertible Preference Shares.	5	3
3.3	Firms in Financial Distress, Tools for predicting financial distress	3	3
	Student presentations	5	4
<b>Unit 4</b>	<b>Corporate Restructuring</b>	17 hours	
4.1	Corporate Restructuring: Reasons for Corporate Restructuring	4	4
4.2	Major Forms and Techniques of Corporate Restructuring; Expansion Techniques: Strategic Alliances; Joint Ventures; Foreign Franchises	4	4
4.3	Disinvestment Techniques: Sell-off; De-Merger (Spin-off); Divestiture; Equity- Carve-outs Management Buyout; Leveraged Buyout (LBO); Going Private, Valuation issues in M&A	4	4
	Student presentations	5	4
<b>Unit 5</b>	<b>Corporate Risk Management</b>	17 hours	
5.1	Concept of ERM/CRM, Principal terms in Enterprise Risk Management (ERM)/Corporate Risk Management (CRM),	4	5
5.2	Measurement of risk, Framework for risk management and control within a company, Risk frameworks in regulatory environments,	4	5
5.3	Role of regulators in ERM, Role of credit agencies in the evaluation of risk management functions	4	5
	Student presentations	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment a. Tests b. Assignment c. Presentation End semester Examination

### SUGGESTED READINGS

1. Prasanna Chandra. *Strategic Financial Management*. New Delhi: McGraw Education(India) Private Limited.
2. Prasanna Chandra. *Corporate Valuation and Value Creation*. New Delhi: Tata McGraw Hill Education Private Limited.
3. Aswath Damodaran. *Investment Valuation: Tools and Techniques*. New Delhi: Wiley India Pvt. Ltd.
4. Frank J. Fabozzi. *Bond Markets, Analysis and Strategies*. New Delhi: Pearson Education India.
5. Jakhotiya, G.P., *Strategic Financial Management*, 2nd Revised Ed, Vikas Publishing House Private Limited, 2008.
6. Pandey I. M.: *Financial Management*, Vikas Publishing House Pvt. Ltd., New Delhi.

Course Name	Direct Taxation						
Type of Course	Elective : Finance						
Course Code	MBM21E27						
Course Summary & Justification	To acquaint the students with the Direct taxation laws in the country, and gain enough knowledge to manage tax obligations of Individual assessees.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	10	0	10	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	UNDERSTAND various basic concepts/ terminologies related Direct Taxation	R	1
2	EXPLAIN how tax planning can be done.	U	1
3	ILLUSTRATE how online filling of various forms and returns can be done	U	2
4	CALCULATE Gross Total Income and Income Tax Liability of an individual assessee.	An	2
5	DESIGN/ DEVELOP / CREATE tax saving plan.	C	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		15 Hrs	
1.1	Introduction of Income Tax Act, 1961, Basic definitions and concepts – Direct Tax, Indirect Tax, Person, Assessee, Deemed Assessee, Assessment Year, Previous Year, Residential Status of an individual assessee and company, Income exempt from Tax– Gratuity, Leave Travel Concession, Encashment of Unutilised Earned Leave on Retirement, Pension, Voluntary Retirement Receipts, Retrenchment Compensation, Receipts from Life Insurance Corporation, HRA, Payment from NPS Trust to an assessee on closure of his account/ Opting out of the pension scheme and Payment from NPS Trust to an employee on partial withdrawal, Agriculture Income	15	1,2,3

<b>Unit 2</b>		10 Hrs	
2.1	Meaning of salary, Basis of charge of salary income, different forms of salary, different forms of allowance es, perquisites, permissible deductions from salary income, tax treatment of provident fund, Basis of charge, property income not charged to tax, computation of income from let out house property and self-occupied property	10	1,2,3
<b>Unit 3</b>		10 Hrs	
3.1	Computation of profit or gain from business and profession (expenses expressly allowed as deduction; general deductions; expenses specifically disallowed) basis of charge; chargeable incomes; specific deductions; amount not deductible	10	1,2,3
<b>Unit 4</b>		15 Hrs	
4.1	Meaning- Capital Gain, Basis of charge, important definitions like Capital Asset, Short Term Capital Asset, Long Term Capital Asset, Transfer of Capital Asset, Short Term Capital Gain and Long-term Capital Gain and their computation. "Other Sources" - Incomes Chargeable Under the head "Other Sources" (Section 56), Deductions Allowable (Sec. 57), Deductions Not Allowable (Sec 58), Bond Washing Transactions and Dividend Stripping (Sec 94).	15	1,2,3,4,
<b>Unit 5</b>		10 Hrs	
5.1	Computation of net total income based on 5 heads, carry forward and set-off of losses and deductions under Sec. 80, Computation of Income Tax Liability, Advanced Payment of Tax, TDS, Tax Planning & Tax Evasion, Income Tax Returns, E-filing of ITR	10	1,2,3,4,

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation</li> <li>Mini Project/Assignment/Case analysis</li> </ul> </li> <li>End Semester Examination</li> </ul>

## REFERENCES

1. Vinod K. Singhania, *Direct Taxes: Law and Practice*, Taxmann Publications, New Delhi.
2. Bhagwati Prasad, *Direct Taxes Law and Practice*, Wishwa Prakash, New Delhi.
3. Students Guide to Income Tax, Dr. Vinod Singhania (Taxmann)
4. Income Tax Law and Practices, V.P. Gaur, D.B. Narang, Puja Ghai& Rajiv Puri (Kalyani Publication)
5. S. Sundaram, *Commentaries on the Law of Income-Tax in India*, Law Publishers, Allahabad.
6. A.C. Sampath Iyengar, *Law of Income Tax*, Bharat Publishing House, Allahabad.

Course Name	Corporate Tax Planning						
Type of Course	Elective - Finance						
Course Code	MBM21E28						
Course Summary & Justification	To acquaint the students with the corporate taxation laws in the country, and gain enough knowledge to manage corporate taxes.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	10		10	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	UNDERSTAND various basic concepts/ terminologies related with corporate Taxation	R	1
2	EXPLAIN how corporate tax planning can be done.	U	1
3	ILLUSTRATE how online filling of various forms and returns can be done	U	2
4	CALCULATE Gross Total Income and Income Tax Liability of Corporate assessee.	An	2
5	DESIGN/ DEVELOP / CREATE tax saving plan.	E, C	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		15 Hrs	
1.1	Meaning of Assessee, Corporate Assessee, Computation of taxable income of companies, Computation of the amount of corporate tax liability; Carry forward and set off of losses in the case of certain companies under Sec. 79 of Income -tax Act, 1961; Minimum Alternate Tax; Tax evasion and tax avoidance; Nature and scope of tax planning and management in the corporate sector; Justification of corporate tax planning and management. Tax on distributed profits of domestic companies; Tax on income distributed to unit holders.	15	1,2,3

<b>Unit 2</b>		<b>12 Hrs</b>	
2.1	Implications of Tax concessions and incentives for corporate decisions in respect of setting up a new business, location of business and nature of business. Special Economic Zones (SEZ) – sections 80IAB, 80IB, 80IC, 35AD, 10AA. Deduction for R&D expenditure under section 35	12	1,2,3
<b>Unit 3</b>		<b>12 Hrs</b>	
3.1	Taxation of non-residents, double tax treaties, royalty, fees for technical services, transfer pricing analysis – sections 90 to 94A. Inbound investment – tax planning, capital gains tax exemption under tax treaties between India and Mauritius, Singapore, Netherlands, Cyprus (including the Limitation of benefits clause, if any). Outbound investment – tax planning, restrictions under FEMA	12	1,2,3
<b>Unit 4</b>		<b>11 Hrs</b>	
4.1	Tax planning with reference to managerial decisions- Owning or leasing of an asset; purchasing of assets by instalment system or Hire System; Purchasing of an asset out of own funds or out of borrowed capital; manufacturing or buying; Repairing, replacing, renewing or renovating an asset; Sale of assets used for scientific research; Shutting down or continuing operations.	11	1,2,3,4,
<b>Unit 5</b>		<b>10 Hrs</b>	
5.1	<b>Restriction on carry forward of losses</b> – Section 79; Tax Planning in respect of amalgamation or de-merger of companies or Slump sale or conversion of a firm into a company. General Anti-Avoidance Rules	10	1,2,3,4,

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>▪ Tests – One MCQ based and on extended answer type</li> <li>▪ Seminar Presentation</li> <li>▪ Mini Project/Assignment/Case analysis</li> </ul> </li> <li>○ End Semester examination</li> </ul>

## REFERENCES

1. Vinod K. Singhania, *Direct Taxes: Law and Practice*, Taxmann Publications, New Delhi.
2. Mehrotra, HC and Goyal, SP, *Corporate Tax Planning and Management*, Edition for the relevant A. Y, Sahitya Bhawan Publication, Agra.
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5. Sreenivas, E.A.: *Handbook of Corporate Tax Planning*, Relevant A.Y, Tata McGraw Hill, New Delhi.
6. Lakhotia, R. N., and S. Lakhotia, *Corporate Tax Planning Handbook*, Vision Books, New Delhi.
7. Palkivala, N.A., and Palkivala B. A., Kanga, J.B. *The Law and Practice of Income Tax*, N.M. Tripathi.
8. Bhagwati Prasad, *Direct Taxes Law and Practice*, Wishwa Prakashan, New Delhi.

Course Name	Goods and Services Tax						
Type of Course	Elective - Finance						
Course Code	MBM21E29						
Course Summary & Justification	To acquaint the students with the GST laws in the country, and gain enough knowledge to manage GST in different sectors.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning Collaborative learning Case based learning	60	10		10	80	
Pre-requisite	NIL As per the requirement of the course						
Others- Library, Computer lab, seminar and assignment preparations, test, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	Explain the structure and functions of Dual Model under GST Act.	U	1
2	Illustrate the procedure and levy under GST for a Casual Non-Resident taxable provision.	U	2
3	Compute Tax Liability of an Assessee under GST and file returns for the same.	An	2
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1</b>		10 Hrs	
1.1	Objectives and basic scheme of GST, Meaning – Salient features of GST – Subsuming of taxes – Benefits of implementing GST – Constitutional amendments - Structure of GST (Dual Model) – Central GST – State / Union Territory GST – Integrated GST - GST Council: Structure, Powers and Functions. Provisions for amendments.	10	1,2
<b>Unit 2</b>		15 Hrs	
2.1	Salient features of CGST Act, SGST Act, IGST Act - Meaning and Definition: Aggregate turnover, Adjudicating authority, Agent, Business, Capital goods, Casual taxable person, Composite supply, Mixed supply, Exempt supply, Outward supply, Principal supply, Place of supply, Supplier, Goods, Input service distributor, Job work, Manufacture, Input tax, Input tax credit, Person, Place of business, Reverse charge, Works contract, Casual taxable person, Non-resident person. Export of goods / services, Import of goods /	15	1,2

	services, Intermediary, Location of supplier of service, Location of recipient of service.		
<b>Unit 3</b>		<b>15 Hrs</b>	
3.1	Registration under GST: Persons liable for registration, Persons not liable for registration, Compulsory registration, Deemed registration, Special provisions for Casual taxable persons and Non-resident taxable persons. Exempted goods and services - Rates of GST. Procedure relating to Levy: (CGST & SGST): Scope of supply, Tax liability on Mixed and Composite supply, Composition Levy, Time of supply of goods and services, Value of taxable supply. Computation of taxable value and tax liability. Procedure relating to Levy: (IGST): Inter-state supply, intra-state supply, Zero rates supply, Value of taxable supply – Computation of taxable value and tax liability. Input tax Credit: Eligibility, Apportionment, – Transfer of Input tax credit - Simple Problems on utilisation of input tax credit. Tax Invoice, E-Way bill, Provisions relating to E-Commerce.	15	1,2,3
<b>Unit 4</b>		<b>10 Hrs</b>	
4.1	Furnishing details of outward supplies and inward supplies, First return, Claim of input tax credit, Matching reversal and reclaim of input tax credit, Annual return and Final return. Problems on Assessment of tax and tax liability.	10	1,2,3
<b>Unit 5</b>		<b>10 Hrs</b>	
5.1	GST Network: Structure, Vision and Mission, Powers and Functions. Goods and Service Tax Suvidha Providers (GSP): Concept, Framework and Guidelines and architecture to integrate with GST system. GSP Eco system. (Theory only).	10	1,2,3,4,

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>▪ Tests – One MCQ based and on extended answer type</li> <li>▪ Seminar Presentation</li> <li>▪ Mini Project/Assignment/Case analysis</li> </ul> </li> <li>○ End Semester examination</li> </ul>

## REFERENCES

1. Deloitte: GST Era Beckons, Wolters Kluwer.
2. Madhukar N Hiregange: Goods and Services Tax, Wolters Kluwer.
3. All About GST: V.S Datey - Taxman's.
4. Guide to GST: CA. Rajat Mohan,
5. Goods & Services Tax – Indian Journey: N.K. Gupta & Sunnania Batia, Barat's Publication
6. Goods & Services Tax – CA. Rajat Mohan,
7. Goods & Services Tax: Dr. Sanjiv Agrawal & CA. Sanjeev Malhotra.
8. GST - Law & Practice: Dr. B.G. Bhaskara, Manjunath. N & Naveen Kumar IM,
9. Understanding GST : Kamal Garg, Barat's Publication.



### Human Resource Management Elective Courses

Course Name	Human Resource Planning					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E30					
Course Summary & Justification	This course is intended to provide basic understanding about how planning of human resource is done in an organisation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of human resource planning can be applied in an organisation	A	1
2	Identify and explain the factors which form the basis for employee hiring	U	1
3	Identify the dynamics of employee hiring process	U	1
4	Demonstrate the methods for employee integration and retention in an organisation	A	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

	Hrs	CO.No.
<b>Unit 1 : Introduction</b>	12 Hrs	
1.1 Human Resource Planning: Concept and Objectives	3	1,2
1.2 Human Resource Planning Process; Demand forecasting and Supply forecasting techniques	3	2
1.3 Labour wastage: Absenteeism- causes and effects	3	2
1.4 Labour turnover, Attrition, Employee retention, Employee Commitment	3	2, 4
<b>Unit 2 : Job Analysis and Job Specification</b>	12 Hrs	
2.1 Job Analysis: Process, sources of job analysis data	2	3
2.2 Methods of data collection, Uses of job analysis	2	3
2.3 Job Descriptions, Job Specification - Human Resource Inventory	2	5
2.4 Career Management; Career Planning, Career Development	3	3
2.5 Job design and redesign, Job ownership	3	2
<b>Unit 3 : Recruitment and Selection</b>	12 Hrs	
3.1 Recruitment and Selection: Sources of Recruitment,	2	1

	Social recruiting		
3.2	Selection: Concept and Process of Selection; Application blank, Weighted Application Blank	2	2
3.3	Resume, Resume Scanning	2	2, 3
3.4	Different Types of Tests – Psychological Tests – definition, Purpose	3	2, 3
3.5	Characteristics of psychological tests, Developing Psychological Tests, Background check, Acqui-hiring	3	2, 3
<b>Unit 4 : Interviewing</b>		12 Hrs	
4.1	Interviewing: Purpose; Types of Interviews; Interview Techniques	2	2, 3
4.2	Interviewing skills; Advantages and Limitations of Interviews	2	2, 3
4.3	Dos and don'ts of selection interviewing, Medical Check-ups	2	2, 3
4.4	Reference and background check, Choice of selection methods	2	2, 3
4.5	Assessment Centers	2	2, 3
4.6	Reliability and validity of selection tools.	2	2, 3
<b>Unit 5 : Employment offers</b>		12 Hrs	
5.1	Employment offers: Service conditions, contract of employment	1	1, 2, 3
5.2	Psychological contract - Induction: Importance	2	1, 2, 3, 4
5.3	Socialising the new employee, Placement, Probation and Confirmation	2	1, 2, 3
5.4	Promotion and Transfer; Policies and Procedures	2	1, 2, 3
5.5	Retraining HR outsourcing	2	1, 2, 3
5.6	Managing Employee Separations, Downsizing	1	1, 2, 3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

#### Books for study

1. Gary Dessler, Biju Varkkey, *Fundamentals of Human Resource Management*, Pearson Education, 2010.
2. K. Ashwathappa, *Human Resource Management - Text & Cases*, Tata McGraw Hill, 2010.
3. John Bramham, *Human Resource Planning*, Universities Press, 2000

#### Reference

1. M.Sudhir Reddy, *Human Resource Planning*, Discovery Publishing House, 2005.
2. Robert. L. Mathis, John.H. Jackson, *Human Resource Management*, Thomson South-Western, 2003.
3. Angelo. S. DeNisi, Ricki.W. Griffin, *Human Resource Management*, Biztantra, 2009
4. Mizra S. Saiyadain, *Human Resources Management*, Tata McGraw Hill, 2009

Course Name	Participative Management					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E31					
Course Summary & Justification	This course is intended to provide basic understanding about how employee participation in decision making is done in an organisation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of participative management can be applied in an organisation	A	2
2	Identify and explain the relevance of employee participation	U	1
3	Identify the methods and dynamics of employee participation	U	1
4	Demonstrate the methods for employee participation in Indian vs global companies	A	13
**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Participative Management Concept and Need	3	1,2
1.2	Different Schools of Thought, Economical, Psychological, Social, political	3	2
1.3	origin and growth of Participative Management; Need for Participative Management, the objectives of Participative Management	3	2
1.4	Participative Management styles	3	2
<b>Unit 2 : Types of Participative Management</b>		12 Hrs	
2.1	Types of Participation Management: Informative Participation, consultative Participation, Associative Participation	3	3
2.2	Administrative Participation and Decisive Participation	3	3
2.3	Bipartite forums in PSUs and Private sectors to promote WPM, WCS,JMC, Shop Councils, joint Councils	3	3

2.4	Workers representatives on the Board of Directors and other forums like QCS, TQM, Employee Stock option	3	3
<b>Unit 3 : Structural arrangements for Participative Management</b>		6 Hrs	
3.1	National level, corporate level, plant, zonal and shop level	2	1, 3
3.2	Role of external and internal factors in influencing the levels of WPM	2	1, 3
3.3	Employee voice – importance, benefits	2	1, 3
<b>Unit 4 : WPM in India and abroad</b>		16 Hrs	
4.1	WPM in India and abroad: Experiences of PSUS and private sectors	4	4
4.2	The participation of workers in management bill 1990, suggestions for improving the WPM in Indian Companies,	4	4
4.3	WPM in abroad, Evaluation of WPM in abroad, Comparison of WPM in India and abroad	4	4
4.4	Employee alienation – causes, effects and methods to overcome	4	4
<b>Unit 5 : Issues and future of Participative Management</b>		14 Hrs	
5.1	Issues of Participative Management	3	1
5.2	Training and Development methods for Participative Management	3	1
5.3	Current trends in Management	4	4
5.4	Future of participative Management	4	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

### Reference

1. Stephen. P. Robbins, *Organisational Behaviour*, Pearson, 2017.
2. John Newstrom, Keith Davis, *Organizational Behavior: Human Behavior at Work*, McGraw Hill, 2015
3. VSP Rao, *Organizational Behaviour*, Excel Books, 2012
4. Neil Anderson, Deniz S Ones, Handan Kepir Sinangil, Chockalingam Viswesvaran, *Handbook of Industrial, Work & Organizational Psychology*, Volumes 1 & 2, SAGE Publications Ltd, 2001
5. A.K. Kedia, *Workers Ownership and Participative Management*, Deep and Deep Publications, 1992.
6. P Venkata Ramana, *Workers Participation in Management*, APH Publishing Corporation, 2015

Course Name	Training and Development						
Type of Course	Elective - Human Resource Management						
Course Code	MBM21E32						
Course Summary & Justification	This course allows the students to learn the basics of Training and Development. In Management career, professionals should have an in-depth knowledge of Training and Development principle and how employees Perceive Training and Development in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in organisations and behave accordingly.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning	56	10	-	10	80	
	Case based learning	4					
	Total	60					
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis. Book review. Seminars .discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Training and Development	A	1
2	Outline the structure of Training and Development	U	1
3	Examine the different types of Training and Development in organisations	E	1
4	Categorise various models associated with Training and Development	An	3
5	Evaluate the need aspects of Training and Development	E	1, 2
6	Explain and evaluate the various aspects of Training and Development	U	3,4
7	Evaluate the various methods in Training and Development	E	5
8	Explain various theories, concepts related to Training and Development	U	1,3,4, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT - Contact Teaching- 60 Hrs

		Hrs	CO. No.
<b>Unit 1: Introduction</b>		12 Hrs	
1.1	Introduction to training: need for Training and Development importance of Training and development in organisation. -	3	1
1.2	A Systematic Approach to Training & Development, Training and development models	2	2
1.3	Assessment phase, Training and Development phase, Evaluation Phase.	2	1,3
1.4	Training administrations, effective usage of instructions in training,	2	1
1.5	Personality and theories in Personality	3	1
<b>Unit 2 : Need T&amp;D</b>		12 Hrs	
2.1	Needs Assessment and Analysis: Organisational Support for need assessment, operational analysis / Organisational analysis, requirement analysis, individual analysis. Motivational aspects of	3	1,2
2.2	Development cycle; Reinforcement for behaviour modification- Learning theories.	3	1,2,3
2.3	Stages of learning, learning principles, challenges to become learning organisation, trainee readiness, trainee motivation to learn,	3	1,2,3
2.4	HRD:, <b>Motivation</b> - Theories of Motivation; Application of Motivation at work place	3	1, 2
<b>Unit 3 : Instructions</b>		12 Hrs	
3.1	Instructional Approaches: An Overview, Traditional Instructional Approaches, modern Instructional Approaches, Role of Trainers, Qualities of a Good Trainers, Internal Trainer Vs External Training	3	1
3.2	Internal Training Vs External Training. Training Methods- On the job- Apprenticeship., working, mentoring.	2	1,2
3.3	Off the job- Case studies, lectures, vestibule, sensitivity, in-basket, role plays, audio-visual & other contemporary methods	2	3,6
3.4	Role of Trainers, Qualities of a Good Trainers	2	3,6
3.5	Internal Trainer Vs External Training, theories and principles of Learning	3	1,5
<b>Unit 4 : Training Evaluation and Measurement</b>		12 Hrs	
4.1	Training Evaluation and Measurement: Introduction to evaluation process, Introduction to criteria development, choosing criteria measures,	3	4
4.2	The Evaluation of Criteria, Evaluation, Experimental Designs, quasi experimental design, Team Building, Structure of Groups; Forward market.	3	3,4
4.3	Other methods of evaluation External Training Validity, Models of Evaluation., ROI on Training.	3	4
4.4	Models of Training and Development evaluation	3	4
<b>Unit 5 : Human Resource Development</b>		12 Hrs	
5.1	Human resource development concept - HRD at micro and macro levels - Sub - systems of HRD - career problems and solutions - guidelines for Career management.	3	1,5
5.2	role of HRD function - concept of career – career Stages - career planning and development - need - steps in career Planning - methods of career planning and development - career development Actions and programs	3	1,5
5.3	Concept of management development - need and importance of Management development - management development process-.	3	1,5
5.4	Leader cantered techniques of management development.	3	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> 1. Continuous Assessment (CA) <ul style="list-style-type: none"> <li>a. Tests</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Assignments.</li> <li>d. Case analysis and Book Review</li> </ul> 2. End Semester examination

## REFERENCES

R1	<i>Training in Organizations - Needs Assessment, Development &amp; Evaluation</i>	Goldstein Irwin L	Wordsworth Publications.
R2	<i>Training for Development,</i>	Lynton & Parekh	Sage publications
R3	Emotional Intelligence at work	Singh Dalip	Sage Publications, Delhi
R4	Management and Organisational Behaviour	Mullins I. J.	Prentice Hall of India (2008).
R5	Organisational theory	Jones G. R.	Addison Wesley(1995)
R6	Principles of Personnel Management	Edwin P. Flippo	McGraw Hill(2008)
R7	Personnel Management	Mamoria	Himalaya(2000)
<b>Others : (Web / Journals / Course Packets / Class Notes / etc.</b>			
	Case studies for analysis would be provided from time to time in advance by the faculty.		

## SUGGESTED READINGS

1. Dugan laird- *Approaches to Training and Development*, Peruses Publishing 2003.
2. Koontz & Weirich: *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
3. Prasad, L.M.: *Organisational Behaviour*, Sultan Chand and Co , New Delhi, 2002
4. Rao, VSP and Krishna, V. Hari , *Management: Text and Cases*, Excel Books, 1st edn. 2004.
5. Robert L. Craig, *ASTD Training and Development*, McGraw Hill Publication
6. Robbins, S. P: *Fundamentals of Management*, Pearson, 2003.
7. Robbins, Stephen R : *Organizational Behaviour*, Prentice Hall of India, New Delhi, 1990.
8. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition
9. Rao T. V, *Readings in HRD*, Oxford & IBH

Course Name	Organisational Change and Transformation						
Type of Course	Elective - Human Resource Management						
Course Code	MBM21E33						
Course Summary & Justification	This course allows the students to learn the basics of Organisational Change and Transformation. In Management career, professionals should have an in-depth knowledge of Organisational Change and Transformation principle and how employees Perceive Organisational Change and Transformation in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in organisations Organisational Change and Transformation and behave accordingly.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning	56	10	-	10	80	
	Case based learning	4					
	Total	60					
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis, Book review. Seminars, discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Organisational Change and Transformation	A	1
2	Outline the models of Organisational Change and Transformation	U	1
3	Examine the different types of Organisational Change and Transformation raining and Development in organisations	E	1
4	Categorise various structures associated with Organisational Change and Transformation	An	3
5	Evaluate the need aspects of Organisational Change and Transformation	E	1, 2
6	Explain and evaluate the various aspects of Organisational Change and Transformation	U	3,4
7	Evaluate the various methods in organisational Development	E	5
8	Explain various theories, concepts, methods related to organisational and Development	U	1,3,4, 5
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			



## COURSE CONTENT - Contact Teaching- 60 Hrs

		Hrs	CO. No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Organisational Change: Meaning- Necessity for Change- Classification of change.	3	1
1.2	Kurt Lewin Three Stage Model and Force Field Analysis- Systems theory, 7 Stage models, Burke-Litwin model, Porras and Robbortson	2	2
1.3	Change Agent-Role and Skills of a change Agent.HR Role as change agent, Resistance to Change and minimising the resistance:	2	1,3
1.4	Factors affecting change-Model of Organisational change	2	1
1.5	Impact of change on Human Resources Planning; quality consciousness as an emerging catalyst for change factors affecting change	3	1
<b>Unit 2 : Need for OD</b>		12 Hrs	
2.1	Organisational development –Concept and evolution-nature and characteristics- First order and second order Change - Positive Model- Org. Diagnosis Needs Assessment and Analysis, Organisational Support for need assessment, operational analysis / Organisational analysis, requirement analysis, individual analysis. Motivational aspects of OD	3	1, 2
2.2	Foundations of Organisational Development, Conceptual frame work of OD –Action Research Model.	3	1, 2, 3
2.3	John Kotter's eight-stage process Model, Parallel learning structures- Process of organisational development	3	1, 2, 3
2.4	Organisational Diagnosis and Models	3	1, 2
<b>Unit 3 : Interventions</b>		12 Hrs	
3.1	Human Process Interventions-T-group, organisational confrontation. HRM Interventions	3	1
3.2	Process consultation, third party interventions, team building; Grid training	3	1,2
3.3	Off the job- Case studies, lectures, vestibule, sensitivity, in-basket, role plays, audio-visual & other contemporary methods	2	3, 6
3.4	Meeting, coaching and mentoring, and Likert's Model role focused interventions	2	3, 6
3.5	Performance Management & HRD.	2	1, 5
<b>Unit 4 : Structural interventions</b>		12 Hrs	
4.1	Structural Interventions -Restructuring organisation, BPR Vs TQM, employee involvement, work design.	3	4
4.2	Strategic Interventions – Organisation and environment relationships, competitive and collaborative strategies, organisation transformational strategies.	3	3, 4
4.3	Other methods of evaluation External Training Validity, Models of Evaluation, ROI on Training.	3	4
4.4	Quality circles, poke - yoke and Toyota Protocol	3	4
<b>Unit 5 : Contemporary issues in Organisational Change and Development</b>		12 Hrs	
5.1	Contemporary issues and applications – Organisational development in global context, organisational development in service sector.	3	1,5

5.2	OD Practitioners – role, competencies requirement, professional ethics and value and experiences	3	1,5
5.3	Trends in OD Human resource development concept - HRD at micro and macro levels -Concept of management development - need and importance of Management development - management development process- Leader centered techniques of management development	3	1,5
5.4	Systems of HRD - career problems and solutions - guidelines for Career management.	3	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments.</li> <li>○ Case analysis and Book Review</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

## REFERENCES

R1.	Organisation Development and Change	Cummings, Thomas G. and Christopher G. Worley	Thomson Learning
R2.	Organizational Change: Theory and Practice	W Warner Bruke	Sage publications
R3.	Organisational Change and Development	Kavita Singh	Sage Publications, Delhi
R4.	Organisation Development	French, Wendell L. and Lecil H. Bell.	PHI, New Delhi
R5.	Organisation Development Interventions and Strategies, response Singh Organisational theory	Ramnarayan S., T.V. Rao and Kuldeep Singh	Books, New Delhi
R6	Principles of Personnel Management	Edwin P. Flippo	McGraw Hill(2008)
R7	Personnel Management	Mamoria	Himalaya(2000)
<i>Others : (Web / Journals / Course Packets / Class Notes / etc.</i>			
Case studies for analysis would be provided from time to time in advance by the faculty.			

## SUGGESTED READINGS

1. Koontz & Weirich: *Essentials of Management*, Tata McGraw Hill, New Delhi.
2. Prasad, L.M.: *Organisational Behaviour*, Sultan Chand and Co, New Delhi, 2002
3. Rao,VSP and Krishna, V. Hari , *Management: Text and Cases*, Excel Books,1st edn. 2004.
4. Robbins S. R: *Fundamentals of Management*, Pearson, 2003.
5. Robbins, Stephen R :*Organizational Behaviour*, Prentice Hall of India, New Delhi,1990.
6. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition
7. Rao T. V, *Readings in HRD*, Oxford & IBH

Course Name	Talent Management					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E34					
Course Summary & Justification	The purpose of the course is to provide an understanding of how to build a talent pipeline to meet an organization’s human capital needs and understand the critical issues facing organizations in creating a diverse talent pool.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of talent management can be applied in an organisation	A	1
2	Identify and explain concepts underlying talent management	U	1
3	Identify and explain the concept of talent planning	U	1
4	Demonstrate the use of talent acquisition and retention	A	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

	Hrs	CO. No.
<b>Unit 1 : Introduction</b>	12 Hrs	
1.1 Talent Management – Overview, History	3	1,2
1.2 Scope of Talent Management, Need of Talent Management	3	1,2
1.3 Key Processes of Talent Management, Talent vs knowledge people	3	1,2
1.4 Source of Talent Management, Tools for Managing Talent	3	1,2
<b>Unit 2 : Talent Management</b>	6 Hrs	
2.1 Talent Management- Definition of talent and talent management	2	1,2
2.2 Types of talent, Skills, Knowledge	2	1,2
2.3 Employee Retention	2	1,2
<b>Unit 3 : Guidelines and challenges of Talent management</b>	12 Hrs	
3.1 Understanding Talent Management: Key phases for implementing a talent management program	3	1,2
3.2 Guidelines for managing talent, The importance of talent management,	3	1,2

3.3	Benefits of talent management, Replacement planning	3	1,2
3.4	Challenges in managing talent, Key elements in talent strategy.	3	1,2
<b>Unit 4 : Talent Planning</b>		12 Hrs	
4.1	Talent Planning: Talent Planning, Objectives of Talent Planning	3	3
4.2	Steps in Strategic Talent Planning, Succession Planning Programme	3	3
4.3	Innovative talent planning, Industry Practices for Strategic Talent Planning	3	3
4.4	Leadership	3	3
<b>Unit 5 : Talent Acquisition</b>		12 Hrs	
5.1	Talent Acquisition: Recruiting Process, Strategic Trends in Talent Acquisition	3	4
5.2	Concept of Talent Engagement, Retention	3	4
5.3	Best Practices for Talent Engagement, Improving Employee Retention	2	4
5.4	Talent Management and Corporate Restructuring	2	4
5.5	Contemporary Talent Management Issues, Challenges, Best Practices	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

### Reference

1. Lance A. Berger and Dorothy Berger, The Talent Management Handbook, McGraw Hill Professional, 2003
2. Marc Effron, Miriam Ort, One Page Talent Management: Eliminating Complexity, Adding Value, Harvard Business Review Press, 2010
3. Masood Hasan, Anil Kumar Singh, Somesh Dhamija, Talent Management in India: Challenges and Opportunities, Atlantic; Edition, 2009
4. Ravinder Shukla, Talent Management: Process of Developing and Integrating Skilled Workers, Global India Publications, 2009

Course Name	Performance Management					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E35					
Course Summary & Justification	The purpose of the course is to provide an understanding of the performance management process as well as the ability to manage performance in real world business scenario.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of performance management can be applied in an organisation	A	1
2	Identify and explain Performance Management and Development Issues	U	1
3	Identify the concepts underlying planning and implementation of performance management	U	1
4	Demonstrate the use of performance management tools	A	3
5	Identify strategies to address ethical and legal issues in Performance management	A	11
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Foundations of Performance Management: Definition concerns and scope	3	1, 2
1.2	Significance, Objectives, Pre-Requisites, and Characteristics of Effective Performance Management	3	1, 2
1.3	Performance Management Process-Conceptual Model	3	1, 2
1.4	Performance Management Cycle, Performance-Potential Matrix	3	1, 2
<b>Unit 2 : Planning and Implementation of Performance Management</b>		12 Hrs	
2.1	Planning and Implementation of Performance Management: Overview of Performance Planning	3	3
2.2	Defining Performance and Selecting a Measurement Approach	3	3
2.3	Developing Job Descriptions, Defining Performance Standards,	3	3
2.4	Key Result Areas, Competencies and Skills.	3	3

<b>Unit 3 : Performance Appraisal and Monitoring</b>		12 Hrs	
3.1	Performance Appraisal and Monitoring: Characteristics of effective Appraisals	2	1, 3
3.2	Methods of Performance Appraisal; Designing Appraisal Forms	2	1, 3
3.3	Implementing Performance Appraisal Process	2	3
3.4	Performance Review Discussions; Improving Quality of Performance Ratings	3	3
3.5	Performance Monitoring	3	3
<b>Unit 4 : Performance Management Tools</b>		12 Hrs	
4.1	Performance Management Tools: Competency Mapping and Management	3	4
4.2	Core Competencies, Work place competencies	3	4
4.3	Competency framework, People Competency Maturity Model (PCMM)	2	4
4.4	Talent management	2	4
4.5	Balanced Scorecard	2	4
<b>Unit 5 : Performance Management and Development Issues</b>		12 Hrs	
5.1	Other Performance Management and Development Issues: Coaching, performance management training	2	2
5.2	Counselling and Mentoring; Potential Appraisal	2	2
5.3	Performance Related Pay	2	2
5.4	Implementing Performance Management System- Strategies and Challenges	2	5
5.5	Role of HR Professionals in Performance Management	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

### Reference

1. Suri G. K. C., Venkataraman S., Gupta N. K., *Performance Measurement and Management*, Excel Books Pvt Ltd, 2009.
2. Sahu R .K, *Performance Management System*, Excel Books Pvt Ltd, 2009.
3. Udai Pereekh and Rao T. V., *Designing and managing Human Resource Systems*, Oxford Publications, 2007.
4. Rao T. V., *HRD Scorecard*, Sage Publications, 2009.
5. Herman Aguinis, *Performance measurement*, Pearson education, 2013

Course Name	Industrial Relations					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E36					
Course Summary & Justification	The purpose of this course is to sensitise the students to the tasks of industrial relations and to familiarise them with the current IR practices.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of Industrial relations can be applied in an organisation	A	1
2	Identify and explain the role of trade unions in maintain industrial relations	U	1
3	Identify the dynamics of employee discipline	U	1
4	Demonstrate the methods for resolving industrial disputes	A	3
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Evolution of Industrial Relations: Introduction-definition-nature, Features of Industrial Work, Industrial Peace	3	1
1.2	Evolution of industrial relations-Actors and their roles in IR	3	1
1.3	Approaches to IR-HR Relations approach-Gandhian approach	3	1
1.4	Marxian approach and Dunlop's Systems approach	3	1
<b>Unit 2 : Trade Unions</b>		12 Hrs	
2.1	Trade Unions; concept and objectives- functions	2	2
2.2	Union leadership, Indian Trade Unions Act 1926, Multiplicity of Trade unions	2	2
2.3	Industrial democracy, Participative management	2	2
2.4	Forms and levels of participation, Employers' organisations	3	2
2.5	Process of negotiation, Employee empowerment	3	2

<b>Unit 3 : Collective Bargaining</b>		12 Hrs	
3.1	Collective Bargaining: Concept and development ; Pre- requisites for effective collective bargaining	3	1
3.2	Process of collective bargaining, Collective Bargaining Approaches	3	1
3.3	Techniques of Collective Bargaining	3	1
3.4	Trends and practice of Collective Bargaining in India, Workforce redundancy	3	1
<b>Unit 4 : Discipline</b>		12 Hrs	
4.1	Discipline: Nature and concept	2	3
4.2	Approaches to Discipline	2	3
4.3	Statutory and non-statutory measures for discipline, Service Rules, Code of discipline	2	3
4.4	Grievance - concept, significance, methods of redressal, Employee counselling	2	3
<b>Unit 5 : Industrial Disputes</b>		12 Hrs	
5.1	Industrial Disputes : Causes and effects , Industrial Harmony	2	4
5.2	Trends in Industrial Disputes in India	2	4
5.3	Instruments of Economic coercion : Strike, Lockout, Lay-off; Retrenchment and closure	2	4
5.4	Unfair Labour practices, Dispute settlement machinery : Industrial Disputes Act, 1947	2	4
5.5	Collective Bargaining, conciliation , Voluntary Arbitration, Adjudication	2	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## Reference

1. C B Marmoria, *Dynamics of Industrial Relations in India*, Himalaya Publishing House, 2010
2. B. D. Singh, *Industrial Relations and Labour Laws*, Excel Books, 2010
3. P.R.N.Sinha, *Industrial Relations Trade Unions and Labour Legislation*, Pearson, 2011
4. P.L.Rao, PRK Raju, *Industrial Relations in India*, Excel Books, 2010
5. Paul. R. Sparrow, Larry L. Cooper, *The Employment Relationship – Key challenges for HR*, Elsevier, 2008.
6. K. Ashwatappa, *Human Resource Management - Text & Cases*, Tata McGraw Hill, 2010.
7. V.S.P. Rao, *Human Resource Management - Text & Cases*, Excel Books, 2010



Course Name	Managing of Interpersonal and Group Process					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E37					
Course Summary & Justification	This course aims at providing an understanding on the importance of group process in an organisational set up.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Demonstrate how knowledge of intrapersonal processes can be applied in an organisation	A	1
2	Identify and explain the role of group and team in an organisation	U	1
3	Identify the dynamics of organisational processes	U	1
4	Demonstrate the intervention techniques for improving individual and group processes	A	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

	Hrs	CO.No.
<b>Unit 1 : Introduction</b>	12 Hrs	
1.1 Intrapersonal process - Interpersonal relationships	2	1
1.2 Understanding human behaviour: Self-concept, Perception	3	1
1.3 Attention, Distraction, Attitude	2	1
1.4 Occupational stress, Emotional Intelligence	2	1
1.5 Emotional labour, Impression management, Fundamental Interpersonal Relations Orientation-Behaviour	3	1
<b>Unit 2 : Nature of Groups at work</b>	12 Hrs	
2.1 Nature of Groups at work: Definition	3	2
2.2 Types of groups, Dynamics of group formation	3	2
2.3 Structure and dynamics of work groups, Group communication	3	2
2.4 Group cohesiveness	3	2
<b>Unit 3 : Group Vs Teams</b>	12 Hrs	
3.1 Group Vs Teams: Concept of Teams	3	2
3.2 Distinguishing Team from groups	3	2
3.3 Types of teams – Dysfunctions of groups and Teams	3	2
3.4 Group decision making, Intergroup relationships	3	2

<b>Unit 4 : Organisational process</b>		12 Hrs	
4.1	Organisational processes - power, politics, authority	2	3
4.2	Integration and control	2	3
4.3	Organisational climate and culture	2	3
4.4	Organisational effectiveness.	2	3
<b>Unit 5 : Intervention Techniques</b>		12 Hrs	
5.1	Intervention Techniques: Counselling Techniques	3	4
5.2	Transactional Analysis, Johari window	3	4
5.3	Conflict, collaboration and competition, Organisational confrontation	3	4
5.4	Sensitivity Training, Process Consultancy, Group therapy	3	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>• End Semester Examination</li> </ul>

#### Reference

1. R. K. Sahu, *Group Dynamics & Team Building*, Excel Books, 2010.
2. Stephen. P. Robbins, *Organisational Behaviour*, Pearson, 2010.
3. VSP Rao, *Management and Organizational Behaviour*, Excel Books, 2010
4. P. Subba Rao, *Management and Organizational Behaviour*, Himalaya Publishing House, 2011.
5. Clifford T Morgan, Richard A King, John R Weiz, John Schopler, *Introduction to Psychology*, Tata MC Graw Hill, 2010.
6. K. Aswathappa, *Organizational Behaviour*, Himalaya Publishing House, 2016

Course Name	Managerial Counselling						
Type of Course	Elective - Human Resource Management						
Course Code	MBM21E38						
Course Summary & Justification	This course allows the students to learn the basics of Managerial Counselling. In Management career, professionals should have an in-depth knowledge of Managerial Counselling principle and how employees and budding Managers Perceive Managerial Counselling in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in Managerial Counselling and behave accordingly.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning	56	10	-	10	80	
	Case based learning	4					
	Total	60					
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis. Book review, Seminars .discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Managerial Counselling	A	1
2	Outline the models and definitions of Managerial Counselling	U	1
3	Examine the different types, standardised and non-standardised Managerial Counselling in organisations	E	1
4	Categorise various structures/history associated with Managerial Counselling	An	3
5	Evaluate the need/ process aspects of Managerial Counselling	E	1, 2
6	Explain and evaluate the various aspects of decisions in Managerial Counselling	U	3,4
7	Evaluate the various methods of mentoring, coaching and Managerial Counselling	E	5
8	Explain various theories, concepts, methods related to ethics and control in Managerial Counselling	U	1,3,4, 5
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT - Contact Teaching- 45 Hrs

	Hrs	CO.No.
<b>Unit 1: Introduction</b>	12 Hrs	
1.1 Introduction: Meaning, Functions and Types of Counselling.	3	1
1.2 Goals of Counselling, Emergence and Growth of Counselling Services.	2	2
1.3 Approaches to counselling; Counselling Skills	2	1,3

1.4	Verbal & Non- Verbal communication.	2	1
1.5	Listening Barriers, Counsellors Qualities.	3	1
<b>Unit 2 : Counselling Process</b>		12	Hrs
2.1	Counselling Process: Beginning, Developing and terminating a counselling relationship and follow up.	3	1,2
2.2	Counselling Procedures, The Counselling Environment.	3	1,2,3
2.3	Referral procedures; Guidelines for effective counselling.	3	1,2,3
2.4	Barriers in Counselling, 5 D in counselling	3	1.2
<b>Unit 3 : Interventions</b>		12	Hrs
3.1	Counsellor's Attitude and Skills: Counsellors Skills; social, learning, communication, Understanding Client's Behaviour, Assessing Clients problems.	3	1
3.2	Empathy, probing exploration, problem Client Relationship.	3	1,2
3.3	Understanding Client's Behaviour, Assessing Clients problems.	2	3,6
3.4	Counselling Therapies; Insight Oriented Therapy, Behaviour Therapy.	3	3,6
3.5	Girard Egan and Lawrence Brammer model of Counselling Process.	1	1,5
<b>Unit 4 : Implementation</b>		12	Hrs
4.1	Selecting Counselling Strategies and Interventions.	3	4
4.2	Adaptive Strategies; Changing Behaviour through Counselling;.	3	3,4
4.3	Cognitive, affective, behavioural methods	3	4
4.4	BLC. Standardised and Non- standardised	3	4
<b>Unit 5 : Counselling Applications</b>		5	Hrs
5.1	Counselling Applications: Special problems in counselling;; Special Areas in Counselling.	1	1,5
5.2	Application of Counselling Performance, career, stress, Counselling for Narcotics and Alcohol abusers.	1	1,5
5.3	Handling Situations of Strikes, Disputes alleviation through counselling	2	1,5
5.4	Ws in counselling and mentoring, coaching.	1	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>a. Tests</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Assignments. Case analysis and Book Review</li> </ul> </li> <li>○ End Semester examination</li> </ul>

## REFERENCES

R1.	Counselling skill for managers	Kavita Singh	Pears Education, 2007
R2.	Understanding Psychology	Robert S Feldman.	McGraw Hill, 2007
R3.	Counselling & Guidance.	Narayan Rao S.	Tata McGraw Hill, 1997
R4.	Abnormal psychology	Robert Carson C.	Tata McGraw Hill
R5.	Counselling theories and practices	Jeffrey Kotter A.	Cenage Books, New Delhi, 2011
<b>Others : (Web / Journals / Course Packets / Class Notes / etc.</b>			
	Case studies for analysis would be provided from time to time in advance by the faculty.		

Course Name	Mentoring, Coaching and Management Consulting					
Type of Course	Elective - Human Resource Management					
Course Code	MBM21E39					
Course Summary & Justification	This course allows the students to learn the basics of Mentoring, Coaching and Management Consulting. In Management career, professionals should have an in-depth knowledge of Mentoring, Coaching and Management Consulting principle and how employees Perceive Mentoring, Coaching and Management Consulting in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in organisation's Mentoring, Coaching and Management Consulting and to behave accordingly.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning Case based learning Total	56 04 60	10	-	10	80
Pre-requisite	NIL - As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis, Book review. Seminars .discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Mentoring, Coaching and Management Consulting	A	1
2	Outline the models of Mentoring, Coaching and Management Consulting	U	1
3	Examine the different types of Mentoring, Coaching and Management Consulting	E	1
4	Categorise various structures associated with Mentoring, Coaching and Management Consulting	An	3
5	Evaluate the need aspects of Mentoring, Coaching and Management Consulting	E	1, 2
6	Explain and evaluate the various aspects of Mentoring, Coaching and Management Consulting	U	3,4
7	Evaluate the various methods of Mentoring, Coaching and Management Consulting in organisational Development	E	5
8	Explain various theories, concepts, methods related to Mentoring, Coaching and Management Consulting in organisational and Development	U	1,3,4, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

**COURSE CONTENT- Contact Teaching- 60 Hrs**

		Hrs	CO. No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Mentoring-Definition of Mentoring; Formal mentoring; Informal Mentoring; Historical perspective of Mentoring; Mentor; Protégé	3	1, 1
1.2	Characteristics of mentor; Characteristics of Mentee; History of mentoring	2	2, 2
1.3	Functions of Mentoring- Career function ,Psychosocial function and Role modelling function	2	1,3
1.4	Functions of Mentoring- Psycho-social function	2	1
1.5	Role modelling function and reverse mentoring	3	1
<b>Unit 2 : Types of Mentoring</b>		12 Hrs	
2.1	Types of Mentoring - One-to-one mentoring, Mentoring hubs, On-site Mentoring , Off-site mentoring, Group mentoring	3	1, 2
2.2	Peer mentoring , Tele-mentoring , Network mentoring	3	1, 2, 3
2.3	Phases of Mentoring : Initiation, Cultivation,	3	1, 2, 3
2.4	Phases of Mentoring : Separation, Redefinition	3	1, 2
<b>Unit 3 : Potential benefits of Mentoring</b>		12 Hrs	
3.1	Potential benefits of Mentoring – for mentors, mentees and Organisations	3	1
3.2	Mentoring models - Cyclical mentoring model; Double Matrix mentoring model	3	1, 2
3.3	Potential problems in a mentoring relationship;- Case studies	2	3, 6
3.4	The Flow Model; Jenny Rogers's model	2	3, 6
3.5	Egan's Skilled Helper model; Hay's Mentoring model	2	1, 5
<b>Unit 4 : Consultancy</b>		12 Hrs	
4.1	Consultancy - What is management consulting? Consulting Industry	3	4
4.2	Overview and changes ahead, Tools and Frameworks, Consulting Process	3	3, 4
4.3	Contracting, Data gathering/analysis and Synthesis/presentations	3	4
4.4	Life in consulting, Ethical issues	3	4
<b>Unit 5 : Coaching</b>		12 Hrs	
5.1	Coaching - External Coaching, Internal Coaching ; Benefits of Coaching	3	1, 5
5.2	Coaching Models- The Grow Model, ERR Model, The Johari Window	3	1, 5
5.3	T Coaching Tools-SDOC Tool, Employing Psychometric tools ; Co - Coaching and Team Coaching	3	1, 5
5.4	Difference between mentoring and coaching; Case studies.	3	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments.</li> <li>○ Case analysis and Book Review</li> </ul> End Semester examination
Case studies for analysis would be provided from time to time in advance by the faculty.	

### SUGGESTED READINGS

1. Shirley Peddy, The Art of Mentoring: Lead, Follow and Get out of the Way, Bullion Books.
2. Belle Rose Ragins, David Clutterbuck, Lisa Matthewman, Mentoring and Diversity, Taylor & Francis Group, 2016
3. David Megginson, David Clutterbuck., Further Techniques for Coaching and Mentoring, Routledge, 2010
4. Nadine Klasen, David Clutterbuck, Implementing Mentoring Schemes, Routledge, 2016
5. Tatiana Bachkirova, Peter Jackson, David Clutterbuck, Coaching and Mentoring Supervision: Theory and Practice, Open University Press, 2011
6. Belle Rose Ragins, Kathy E. Kram, The Handbook of Mentoring at Work: Theory, Research, and Practice, SAGE Publications, 2007
7. Peter Block, Pfeiffer, Flawless Consulting: A Guide to Getting Your Expertise Used (3rd Edition, ISBN # 978-0-470-62074-8) Koontz & Weirich: *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
8. Prasad, L.M.: *Organisational Behaviour*, Sultan Chand and Co, New Delhi, 2002
9. Rao,VSP and Krishna, V. Hari , *Management: Text and Cases*, Excel Books,1st ed., 2004.
10. Robbins S. R: *Fundamentals of Management*, Pearson, 2003.
11. Robbins, Stephen R : *Organizational Behaviour*, Prentice Hall of India, New Delhi,1990.
12. Stoner, Freeman & Gilbert: *Management*, PHI, 6<sup>th</sup> ed.
13. Rao T. V, *Readings in HRD*, Oxford & IBH

Course Name	Organisational Effectiveness and Development						
Type of Course	Elective – Human Resource Management						
Course Code	MBM21E40						
Course Summary & Justification	This course allows the students to learn the basics of Organisational Effectiveness and Development. In Management career, professionals should have an in-depth knowledge of Organisational Effectiveness and Development principle and how employees Perceive Organisational Effectiveness and Development in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in Organisational Effectiveness and Development and to behave accordingly.						
Semester	3/4			Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours	
	Authentic learning	56	10	-	10	80	
	Case based learning	04					
	Total	60					
Pre-requisite	NIL As per the requirement of the course						
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis. Book review. Seminars .discussion etc.							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Categorise the factors affecting Organisational Effectiveness and Development	A	1
2	Outline the models of Organisational Effectiveness and Development	U	1
3	Examine the different types of Organisational Effectiveness and Development	E	1
4	Categorise various structures associated with Organisational Effectiveness and Development	An	3
5	Evaluate the need aspects of Organisational Effectiveness and Development	E	1, 2
6	Explain and evaluate the various aspects of Organisational Effectiveness and Development	U	3,4
7	Evaluate The Various Methods of Organisational Effectiveness and Development in organisational Development	E	5
8	Explain various theories, concepts, methods related to Mentoring, Coaching and Management Consulting in organisational and Development	U	1,3,4, 5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



**COURSE CONTENT- Contact Teaching- 60 Hrs**

		Hrs	CO. No.
<b>Unit 1: Introduction</b>		12 Hrs	
1.1	Organisation Development- Concept and Process; Assumptions and Values underlying Organisation Development;	3	1
1.2	Major Organisation Development Interventions & strategies and their expected outcome of mentor; Characteristics of Mentee; History of mentoring	2	2
1.3	OD Models	2	1, 3
1.4	Trends in OD Characteristics	2	1
1.5	Foundations of Organisation Development, case studies	3	1
<b>Unit 2 : Issues of organisational effectiveness</b>		12 Hrs	
2.1	Critical issues of organisational effectiveness; Various approaches to measuring effectiveness; Organisational Diagnosis–Concept; Techniques.	3	1,2
2.2	Organisational Diagnosis- Questionnaires, interviews, workshops, task-forces and other methods	3	1,2,3
2.3	Collecting and analysing Diagnostic Information; Feeding Back Diagnostic Information	3	1,2,3
2.4	Models of diagnosis, case studies	3	1, 2
<b>Unit 3 : Organisational Culture</b>		12 Hrs	
3.1	Organisational Culture – Concept and Definition; Meaning and Characteristics of Organisational Culture	3	1
3.2	Creating Organisational Culture; Culture Versus Climate; Cross-cultural Dynamics	3	1,2
3.3	Organisational Values; Types of Values Potential problems in a mentoring relationship - Case studies	2	3,6
3.4	Factors Affecting Organisational Value Creation.	2	3,6
3.5	Case studies and organisational climate	2	1,5
<b>Unit 4 : Organisational Commitment</b>		12 Hrs	
4.1	Organisational Commitment – Meaning and Definition; Antecedents of Organisational Commitment; Evolution and History of Organisational Commitment; Various Dimensions of Organisational Commitment; Meaning and Significance in today's workplace	3	4
4.2	Three Component Model of Organisational Commitment by Allen & Meyer	3	3,4
4.3	Human Resource Practices and Developing Organisational Commitment; Organisational Citizenship Behaviour – Overview and changes ahead, Tools and Frameworks	3	4
4.4	Consulting Process Contracting, case analysis	3	4
<b>Unit 5 : Organisational Politics</b>		12 Hrs	
5.1	Organisational Politics – Concept and Meaning	3	1,5
5.2	Types of Power in Organisations; Issues of power at the individual, interpersonal, team, intergroup, and organisational levels within an Organisation; Power Motives; Designing Organisations for Innovation	3	1,5
5.3	Power Motives; Designing Organisations for Innovation	3	1,5
5.4	Innovation index, innovation and creativity, Case studies.	3	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> 1. Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments.</li> <li>○ Case analysis and Book Review</li> </ul> 2. End Semester Examination
Case studies for analysis would be provided from time to time in advance by the faculty.	

### **SUGGESTED READINGS**

1. Cummings and Worley Theory of Organization Development and Change, Cengage Learning, New Delhi, 2009
2. French, W.L. and Bell, C.H., Organisation development, Prentice-Hall, New Delhi.
3. Hackman, J.R. and Wageman, J.L., Improving life at work: Behavioural science approach to organizational change, Goodyear, California.2004.
4. Harvey, D.F. and Brown, D.R., An experimental approach to organization development, Prentice-Hall, Englewood Cliffs, N.J
5. Hersey P., and Blanchard, H.B., Management of organisational behaviour: Utilising Human Resources, Prentice Hall, New Delhi.
6. Rao T. V, *Readings in HRD*, Oxford & IBH

Course Name	Strategic Human Resource Management					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E41					
Course Summary & Justification	The objective of the course is to develop the perspective of strategic human resource management and to distinguish the strategic approach to human resources from the traditional functional approach. This will help the future managers to understand the relationship of HR strategy with overall corporate strategy, understand the strategic role of specific HR systems, and appreciate SHRM in the context of changing forms of organisation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	--	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Critically evaluate and explain the necessity for alignment between an organisation's corporate strategy and its human resource strategy	E	2
2	Critically examine the advantages and disadvantages of the major alternative models for strategic human resource management	A	1
3	Design human resource strategies that may be related to the current and expected requirements of organisations confronting a range of contingencies	C	3, 8
4	Critically evaluate strategies for training, learning and development, employee relations and strategies for rewards which bring benefits to the organisation in excess of their costs	E	3, 8
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction</b>		12 Hrs	
1.1	Conceptual Framework & Context of strategic HRM; Human Resource Environment: Impact of Globalization on HRM, Workforce Diversity, Demographic Changes, Temporary and Contract Labour, Global Environment, International Labour Standards, Changed Role of HR in Organizations	3	1,2
1.2	Development of SHRM, Models of Strategic HRM	3	1,2
1.3	Development & delivery of HR strategies, Challenges in Strategic Human Resource Management	3	1,2
1.4	Impact of Strategic HRM, SHRM for Competitive Advantage. Case Studies	3	1,2

<b>Unit 2 : Implementation of Strategic HRM</b>		<b>6 Hrs</b>	
2.1	Recruitment & Retention Strategies: Online Recruitment, Outsourcing Recruitment, Head Hunting	2	1,2, 4
2.2	Performance Management Strategies: Impact of SHRM on Performance	2	1, 2, 4
2.3	Defining Key Result Areas, Measuring SHRM Outcomes, Seniority Vs. Merit-based Promotions, Pay for Performance, 360° Feedback, Executive Performance	2	1, 2, 4
<b>Unit 3 : Compensation &amp; Reward Strategies</b>		<b>12 Hrs</b>	
3.1	Compensation & Reward Strategies: Skill Based Pay, Broad banding, Variable Pay, Incentives and Benefits, Profit Sharing, ESOP	3	1,2, 4
3.2	Executive Compensation	3	1,2, 4
3.3	Training & Development Strategies: Cross-cultural Training, Multi-Skilling, Succession Planning	3	1,2, 4
3.4	Learning Organizations and Organizational Learning	3	1,2, 4
<b>Unit 4 : Retirement &amp; Retrenchment Strategies</b>		<b>12 Hrs</b>	
4.1	Retirement & Retrenchment Strategies: Redundancy, Downsizing	4	3, 4
4.2	HR Outsourcing, Employee Leasing	4	3, 4
4.3	Separation Benefits e.g. VRS/CRS	4	3, 4
<b>Unit 5 : Human Aspects of Strategies Implementation</b>		<b>12 Hrs</b>	
5.1	Human Aspects of Strategies Implementation, Human Side of Mergers & acquisition	3	3, 4
5.2	Leadership, Managing Conflict, Stress Management	3	3, 4
5.3	Work-life Balance, Reengineering HR	3	3, 4
5.4	Human Resource Development: Accounting and Audit, Scorecard and Report	3	3, 4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Assignments</li> </ul> </li> <li>End Semester Examination</li> </ul>

## Reference

1. Charles R Geer : Strategic Human Resource Management – A General Managerial Perspective, Pearson Education India
2. Armstrong, Michael & Baron Angela. (2005). Handbook of Strategic HRM, Jaico Publishing House
3. Mello, Jeffrey A. (2007). Strategic Human Resource Management, Thomson South Western.
4. Regis, Richard. (2008). Strategic Human Resource Management & Development, Excel Books.
5. Catherine Truss, David Mankin, Clare Kelliher: Strategic Human Resource Management, Oxford University Press.
6. Dhar, Rajib Lochan. (2008). Strategic Human Resource Management, Excel Books.
7. Gary Rees & Paul E Smith : Strategic Human Resource Management, Sage Publication
8. Tanuja Agarwala, Strategic Human Resource Management, Oxford University Press
9. Shaun Tyson. Strategic Prospects for HRM, Jaico Publishing House

Course Name	International Human Resource Management					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E42					
Course Summary & Justification	This course is designed to make the student manage the issues with respect to expatriate employees in MNCs and other organisations employing professionals from different countries. This course prepares the student to frame strategies of international human resource management and to enhance their skill to effectively manage human resource in international perspective.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	Nil					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, learners will be able to:</i>	Learning Domains	PSO No.
1	Evaluate HRM issues in international contexts and to become aware about the international culture and diversity	An	2
2	Take decisions regarding recruiting methods, selection procedures and staffing decisions for expatriate employees.	E	3
3	Design a training program using an effective framework for evaluating training needs and evaluating training results.	C	1
4	Properly interpret salary survey data, design a pay structure and monitor the implementation of performance-based pay system and design employee benefit schemes.	A	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : International Context of HRM</b>		12 Hrs	
1.1	International Context of HRM : Understanding International Business Operations– Stages of Internationalisation and Global Business	3	1
1.2	Introduction to IHRM; Human Resource management in the international firm- the framework; Cross national differences in personnel and organizations- cultural factor in human resource policies	3	1
1.3	Complexities and issues in managing human resource across countries; International HRM department and functions	3	1
1.4	Models of international HRM	3	1
<b>Unit 2 : International Recruitment, Selection and Compensation</b>		6 Hrs	
2.1	International Recruitment, Selection and Compensation: Executive nationality staffing policies– Global pressures on domestic recruitment	2	1, 2
2.2	Issues in staff selection–Expatriate Selection–Selection Criteria–Use of selection Tests–Selecting Third Country Nationals and Home Country Nationals	2	1, 2
2.3	Objectives of International Compensation–Key Components of a Potential Compensation program–Approaches to International Compensation.	2	1, 4
<b>Unit 3 : Performance Management and Employee Development</b>		12 Hrs	
3.1	Performance Management and Employee Development in IHRM– Criterion used for performance appraisal of International employees	4	1,2, 4
3.2	Appraisal of Home Country Nationals	4	1,2
3.3	The International HRM perspectives in Training and Development- expatriate training: Important Issues and Concerns	4	1, 3
<b>Unit 4 : Global Employment Relations and Employment Laws</b>		12 Hrs	
4.1	Global Employment Relations and Employment Laws– Cross-border Communications and Employment Relations	4	1, 2
4.2	Comparative patterns of employee relations structures–Best practice in employee relations in cross-country perspective	4	1, 2
4.3	Labour Union and International Employment Relations—Response of labour unions to multinationals.	4	1, 2
<b>Unit 5 : Issues and Challenges in IHRM</b>		12 Hrs	
5.1	Issues and Challenges in IHRM: Multinational as a global citizen– International Accord and Corporate Codes of Conduct	3	1, 2
5.2	Implication for the HR function of the multinational firm– Contemporary issues in managing people in an international context– flexibility	3	1, 2
5.3	IHRM issues in different strategic options of organizations	3	1, 2
5.4	Case studies on International Human Resource Management	3	1, 2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA) <ul style="list-style-type: none"> <li>○ Tests</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Assignments</li> </ul> </li> <li>• End Semester Examination</li> </ul>

### Suggested Readings

1. Reiche, B. S., Harzing, A. W., & Tenzer, H. (Eds.). (2018). International human resource management. Sage Publications Limited.
2. Reiche, B. S., Stahl, G. K., Mendenhall, M. E., & Oddou, G. R. (Eds.). (2016). Readings and cases in international human resource management. Taylor & Francis
3. Dowling, Peter, J and Welch Denise, International Human Resource Management, Thomson Learning, Bangalore.
4. Hodgetts, Rich M., and Luthan, Fred, International Human Resource Management, McGraw Hill Companies Inc., New York.
5. Mead, Flichard, International Management, Blackwell Business, USA.
6. ILO, Multinational Enterprises and Social Policy, ILO, Geneva.
7. Briscoe, Dennis R., International HRM, Prentice Hall, NJ.
8. Torrington, D., International HRM: Think Globally and Act Locally, Hemel Hempstead, Prentice Hall.
9. Evans, P. et al., (ed.), HRM in International Firms: Change, Globalization and Innovation; Macmillan, London.
10. Storey, John, Managing Human Resources: Preparing for the 21st Century, Beacon Booms, New Delhi.
11. S.C. Gupta, Text Book of International Human Resource Management, New Delhi.
12. Monir, H. Tayeb, IHRM: A Multinational perspective, Oxford University Press, New Delhi, 2005.
13. Charles M. Vance, Managing a Global Workforce: Challenges and Opportunities in IHRM, Prentice Hall, New Delhi

Course Name	Leadership for Managerial Performance					
Type of Course	Elective – Human Resource Management					
Course Code	MBM21E43					
Course Summary & Justification	This course allows the students to learn the basics of Leadership for Managerial Performance. In Management career, professionals should have an in-depth knowledge of Leadership for Managerial Performance principle and how employees Perceive Leadership for Managerial Performance in organisations. Based on several theories and practical exposures, students are able to analyse the concepts in organisations and behave accordingly.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	56	10	-	10	80
	Collaborative learning	---				
	Case based learning	4				
	Total	60				
Pre-requisite	NIL As per the requirement of the course					
Others- Library, field work, seminar and assignment preparations, test, journal, case analysis, Book review. Seminars .discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	Discuss the issues related to leadership in the context of management profession	A	8, 10
2	Examine and analyse various approaches and theories of leadership and its role in managerial performance	U	8
3	Summarise the perspectives on Ethical Leadership	An	10, 11
4	Comprehend the issues related to leadership and the status of Women leadership	E	8, 9
5	Develop leadership skills and work in teams	U	9
<i>*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

### COURSE CONTENT- CONTACT TEACHING 60 HRS

		Hrs	CO. No.
<b>Unit 1: Introduction</b>		12 Hrs	
1.1	Definition of Leadership - Different views of Leadership –ways of conceptualising Leadership	3	1
1.2	Trait versus Process Leadership- Assigned versus Emergent Leadership-Leadership and Management	2	2
1.3	Leadership and Power- Leadership and Coercion	2	1,3



1.4	Leadership and Management A Systematic Approach	2	1
1.5	Leadership Models and Cases	3	1
<b>Unit 2 : Approaches</b>		12	Hrs
2.1	Trait approach – Five Factor Personality Model and Leadership- Emotional Intelligence - Skills approach- Opportunism – Situational approach –Psycho Dynamic approach	H	1,2
2.2	Style approach- The Ohio State Studies-The University of Michigan Studies-Blake and Mouton's Managerial (Leadership) Grid Paternalism/Materialism	3	1,2,3
2.3	Situational approach –Psycho Dynamic approach.	3	1,2,3
2.4	Models and cases	3	5
<b>Unit 3 : Theories</b>		12	Hrs
3.1	Contingency Theory– Path Goal Theory--Authentic	3	1
3.2	Leader Member Exchange Theory- Leadership Styles – Transactional leadership	2	1,2
3.3	Transformational leadership -Servant leadership	2	3
3.4	Transactional leadership and theories	2	3
3.5	Case methods	3	1,5
<b>Unit 4 : Gender and Leadership</b>		12	Hrs
4.1	Gender, Leadership Styles	3	4
4.2	Leadership Styles and Leadership Effectiveness	3	3,4
4.3	The Glass Ceiling Effect; empowerment	3	4
4.4	Women Leaders, Government Policies and Cases	3	4
<b>Unit 5 : Culture and Leadership</b>		12	Hrs
5.1	Culture and Leadership – Leadership Behaviour and Dimensions of Ethics	3	1
5.2	Culture-Universally Desirable and Undesirable Leadership Attributes- Leadership role of HRD function	3	1
5.3	Principles of Ethical Leadership, Case studies	3	3
5.4	Heifetz's perspective on Ethical Leadership - Leader centered techniques of management development.	3	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Authentic learning, case-based learning, collaborative learning, seminar, group activities.
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA) <ul style="list-style-type: none"> <li>▪ Tests</li> <li>▪ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>▪ Assignments.</li> <li>▪ Case analysis and Book Review</li> </ul> </li> <li>○ Semester End examination</li> </ul>
<b>(Web / Journals / Course Packets / Class Notes / etc.</b>	
Case studies for analysis would be provided from time to time in advance by the faculty.	

### **SUGGESTED READINGS**

1. Peter .G. Northouse, Leadership: Theory and Practice , SAGE Publications India Pvt. Ltd., 2016
2. J.C. Rost, Leadership for the Twenty First Century, Praeger Publishers, New York 1991.
3. J.P. Kotter, A Force for Change: How Leadership Differs from Management, Free Press, New York,1990
4. Burns J.M, Harper & Row, Leadership, New York., 2012
5. Dugan Laird- *Approaches to Training and Development*, Peruses Publishing 2003.
6. Koontz & Weirich., *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
7. Prasad, L.M.: *Organisational Behaviour*, Sultan Chand and Co, New Delhi, 2002
8. Rao, VSP and Krishna, V. Hari, *Management: Text and Cases*, Excel Books,1st edn., 2004.
9. Stoner, Freeman & Gilbert: *Management*, PHI, 6th Edition
10. Rao T. V, *Readings in HRD*, Oxford & IBH

### Operations Management Elective Courses

Course Name	Supply Chain Management					
Type of Course	Elective – Operations Management					
Course Code	MBM21E44					
Course Summary & Justification	This course includes introduction to concepts of supply chain and logistics viz., network decisions, strategies, coordination, drivers including inventory, transportation, facilities, information, warehousing, materials handling, packaging and utilising.					
Semester	3/4			Credits	4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Vid eo/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the importance of supply chain management for a firm.	U	1
2	The student will be able to explain concepts and practices of logistics management for a firm.	U	1
3	The student will be able to explain various drivers of supply chain performance.	U	1
4	The student will be able to develop skills and competence to examine logistics facilities design.	A	5
5	The student will be able to explain differences in international logistics compared to domestic logistics.	U	13
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Introduction to Supply chain Management</b>		10 Hrs	
1.1	Supply chain Management and Logistics, Introduction, objectives of a supply chain, Importance of supply chain decision, strategic, tactical and operational decisions in supply chain	4	1
1.2	Competitive and supply chain strategies, achieving strategic fit	4	1
1.3	Drivers of supply chain performance	2	1
<b>Unit 2 : Supply Chain Coordination</b>		14 Hrs	
2.1	Supply Chain Coordination and integration: bullwhip effect and its impact on supply chain performance	4	4
2.2	Basic inventory concepts, safety inventory in a supply chain, product availability, Postponement	4	4
2.3	Materials handling, Lean Supply Chain Management	3	4
2.4	Supply chain Operations Reference (SCOR)	3	4
<b>Unit 3 : Distribution</b>		12 Hrs	
3.1	Distribution networks in supply chain, network design, locations	3	3
3.2	Transportation, role, modes of transportation	2	3

3.3	Collaborative Planning Forecasting Replenishment (CPFR)	3	4
3.4	Advanced Planning and Scheduling (APS)	3	4
3.5	Vendor selection	1	3
<b>Unit 4 : Role of IT</b>		12 Hrs	
4.1	The Role of IT in a Supply Chain, Supply Chain IT framework	4	3
4.2	Customer Relationship Management, Supplier Relationship Management, Internal Supply Chain Management	4	4
4.3	Supply Chain Technologies: Bar Code, RFID, ERP	4	3
<b>Unit 5 : Logistics</b>		12 Hrs	
5.1	Definition of logistics, objectives of logistics, functions of logistics	2	2
5.2	Warehousing	3	3
5.3	Packaging, unitisation, containerisation	2	4
5.4	Global logistics	2	4
5.5	3PL, 4PL	1	4
5.6	Reverse Logistics	1	4
5.7	International logistics v/s Domestic logistics	1	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Sunil Chopra and Peter Meindl, *Supply Chain Management*, Pearson Edn, New Delhi, 2005.
2. Ballou, Ronald H: *Business Logistics / Supply Chain Management*, Pearson Education, New Delhi 2004.
3. Shapiro, R: *Logistics Strategy: Cases and Concepts*, West, St. Paul, 1995.

## SUGGESTED READINGS

1. Martin Christopher, *Logistics and Supply Chain Management*, Pearson, New Delhi, 1998
2. Vinod V Sople, *Logistics Management*, Pearson, New Delhi, 2012
3. Bowersox, D.J. and Closs, D.J., *Logistics Management: A System Integration of Physical Distribution*, Tata McGraw Hill, New Delhi 1996.
4. Beal K., *A Management Guide to Logistics Engineering*, Institute of Production Engineering, USA 1990.
5. Mentzer, John T., et al: Ed., *Supply Chain Management*, Response Books, New Delhi 2001.
6. Reji Ismail, *Logistics Management*, Excel Books, New Delhi, 2008
7. John T. Ment Z FR, *Supply chain management*, Response Books, a division of Sage Publications, www.sagepublications.com
8. Rahul V. Altekhar, *Supply chain management*, PHI learning PVT Ltd.
9. John J. Coyle and others, *Supply chain management*, India Edition. Cengage learning.
10. Mandyam Srinivasan and Narayan Rangaraj, *Supply chain management*, TMH.
11. Burt – Dobler, *World class Supply Chain Management*, India Edition, By – Starling Tata McGraw Hill Co.

Course Name	Technology Management					
Type of Course	Elective - Operations Management					
Course Code	MBM21E45					
Course Summary & Justification	Technology management course prepare students to understand the procurement, adoption, issues and management of technology and to have insights in to the technology related factors for better decision making in organisations					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Lecture Discussions	60	--	-	20	80
Pre-requisite	MBM21C12 – Operations Management					
Others- Library, field work, seminar and assignment preparations, test, journal, discussion etc.						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes On completion of this course, learners will be able to:	Learning Domains	PSO No.
1	Identify and critically analyse technology and innovation management issues	An	1
2	Apply tools and techniques to real business situations	A	2
3	Evaluate technologies and innovations and select appropriate strategies to manage them	E	3
4	Explain to others the key areas of understanding and practices that are required of contemporary managers of technology through oral presentations	A	6
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Unit	Topic	Hours	CO
<b>Unit 1</b>	<b>Introduction</b>	<b>8 hours</b>	
1.1	Technology – definition and characteristics, levels of development, technology as socially constructed.	3	1
1.2	Management of Technology	2	1
1.3	Technological environment – Actors in technological environment, changes and major current developments in Technological environment	3	1
<b>Unit 2</b>	<b>Technology Evolution and Technology Forecasting</b>	<b>17 hours</b>	
2.1	Technology Evolution – S curve of technology evolution	3	1,2
2.2	technology progression, Levels of Technology development	3	
2.3	Evolutionary characteristics of Technological Change	3	
2.4	Technology forecasting – Need for technology forecasting, quantitative and qualitative forecasting methods	3	1,2
	Student presentations	5	4

<b>Unit 3</b>	<b>Technological changes and Technology Strategy</b>	<b>23 hours</b>	
3.1	Process of technology change : innovation Dynamics of technological change	3	1, 3, 4
3.2	Innovation – definition, components of innovation, drivers and process of innovation	3	1,3,4
3.3	Process of Technology change – diffusion of technology, dynamics of diffusion	3	1,3,4
3.4	Competitive consequences of technological change	3	3
3.5	Technology Strategy- Definition, Technology Strategy types,	3	2
3.6	Framework for formulating technology strategy	3	2
	Student presentations	5	4
<b>Unit 4</b>	<b>Technology transfer and Technology Evaluation</b>	<b>17 hours</b>	
4.1	Technology Transfer, Technology Transfer Process	3	1
4.2	Technology Transfer Modes, Dimensions of Technology Transfer	3	1
4.3	Routes of Technology Transfer	3	1
4.4	Technology Evaluation, Parameters used in Technology Evaluation, Technology information- sources	3	1
	Student presentations	5	4
<b>Unit 5</b>	<b>Technology absorption</b>	<b>15 hours</b>	
5.1	Technology Absorption, Benefits of Technology Absorption	2	
5.2	Technology import in India. Technology Assessment,	2	1, 3
5.3	Management of Technology Absorption	2	1,3
5.4	Constraints in Technology Absorption,	2	1, 3
5.5	Technology support systems in India.	2	1
	Student presentations	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning interactive Instruction: Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentations
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment <ul style="list-style-type: none"> <li>Tests</li> <li>Assignment</li> <li>Presentation</li> </ul> </li> <li>End semester Examination</li> </ul>

### SUGGESTED READINGS

1. V. K. Narayanan, *Managing Technology and Innovation for Competitive Advantage*, Pearson Education, New Delhi
2. U Ravi Kiran, *A Textbook of Technology Management*, USP, <http://www.usp.org/>
3. V. K. Narayanan, Gina Colarelli O'Connor, *Encyclopedia of Technology and Innovation Management*, Wiley, New Jersey

<b>Course Name</b>	<b>Production Planning and Control</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E46					
Course Summary & Justification	This course includes introduction to concepts of production planning and control viz., various tools for production planning, aggregate planning, CPM/PERT, MRP, SPC, maintenance and job evaluation.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain tools for production planning in organisations.	U	1
2	The student will be able to explain the latest concepts and tools in manufacturing.	U	2
3	The student will be able to examine various production planning systems in organisations.	A	5
4	The student will be able to develop skills and competence to examine and improve productivity.	A	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Production planning</b>		12 Hrs	
1.1	Applications of production planning techniques, operations research applied to production planning	4	1
1.2	Computer aided facilities layout, optimised production technology, group technology, computer aided process planning, enterprise resource planning, simulation technique	8	2
<b>Unit 2 : New developments</b>		12 Hrs	
2.1	FMS and industrial robotics, computer integrated manufacturing	8	2
2.2	Human aspects in production, PPC in supply chain management, forecasting	4	2
<b>Unit 3 : PPC</b>		12 Hrs	
3.1	Aggregate planning, scheduling: Gantt charts and sequencing, project management with PERT/CPM, Resource Levelling, Resource smoothing	5	3
3.2	Advanced inventory models	4	3

3.3	Material Requirements Planning (MRP), Manufacturing Resources Planning (MRP II), Enterprise Resource Planning (ERP)	3	3
<b>Unit 4 : Quality management</b>		12 Hrs	
4.1	Total Quality Management, ISO 9000 and ISO 14000 quality systems	6	4
4.2	Statistical Process Control (SPC), Process Capability	6	4
<b>Unit 5 : Maintenance job evaluation</b>		12 Hrs	
5.1	Maintenance management, Advanced planning in Job, Batch, Mass Production systems	6	4
5.2	Packages for PPC	6	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. S. K. Mukhopadhyay, *Production Planning and Control – Text and Cases*, Prentice Hall India Pvt. Ltd., New Delhi
2. William Bolton, *Production Planning and Control*, Longman Scientific & Technical, New York

## SUGGESTED READINGS

- Stephen N. Chapman, *The Fundamentals of Production Planning and Control*, Big Hearted Books, New York



<b>Course Name</b>	<b>Materials and Purchase Management</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E47					
Course Summary & Justification	This course includes introduction to concepts of management of materials and purchase viz., forecasting, materials planning, vendor rating, negotiation, sources, legal aspects, stores management, materials handling and Kanban system.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain process of right purchase in organisations.	U	4
2	The student will be able to explain the latest concepts and tools of materials management in organisations.	U	2
3	The student will be able to examine the stores management in organisations.	A	2
4	The student will be able to develop skills and competence to examine and improve materials management by using the modern tools.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Materials management</b>		12 Hrs	
1.1	Importance of materials management, Materials management at micro-macro levels, Integrated Materials Management, Profit Centre Concept	8	2
1.2	Forecasting methods, factors affecting forecasts, Materials planning	4	2
<b>Unit 2 : Purchasing</b>		12 Hrs	
2.1	Purchasing, Purchasing organisation, duties of purchasing department, centralised and localised purchasing, purchasing policies, methods of purchasing, make or buy decision	8	2
2.2	Vendor Rating, Models, Vendor-Vendee relations, Vendor development	4	2
<b>Unit 3 : Sourcing</b>		12 Hrs	
3.1	Source location, Negotiations in Purchasing	3	1
3.2	5 Rs of Purchasing and Related issues, Technical, Legal Aspects	6	1

3.3	Domestic v/s International Purchase, 3PL	3	1
<b>Unit 4 : Stores organisation</b>		12 Hrs	
4.1	Stores and Stores organisation, layout of stores, functions of stores keeping; stores records and procedure; salvage and surplus disposal & scarp disposal	8	3
4.2	Standardisation and variety reduction, Merits and demerits of codification, P and Q system, Spare Parts Management	4	3
<b>Unit 5 : Materials handling and value</b>		12 Hrs	
5.1	Materials handling systems, basic principles, Types, equipment, movement and storage cost	4	4
5.2	Evaluation of value, value analysis and engineering, Organisation for value analysis,	4	4
5.3	Materials Information System, Kanban system, JIT, VMI	4	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

- A.K. Datta, *Materials Management procedures Text and cases*, By, PHI Learning India, www.phindia.com
- H. Kaushal, *Materials Management case study and solutions*, Macmillan India Ltd.
- NK Nair, *Purchasing and materials management*, Vikas Publishing House PVT Ltd.
- Pawan Arora, *Material Management An Integrated approach*, Global India Publications Pvt Ltd., New Delhi.

## SUGGESTED READINGS

- Monczka, *Purchasing*, Trent and Hand field – By Cengage learning, India Edition
- J.R. Tony Arnold, Stephen Chapman, *Introduction to Materials Management*, Pearson Education
- Baily, *Procurement-Principles and Management*, 10th Edition, Pearson
- Gopalakrishnan, *Purchasing and Materials Management*, McGraw-Hill
- Anand Kumar Mishra, *Purchasing and Materials Management*, D K Publishers and Distributors
- Bedi, *Productions and Operations Management*, Kanishka Oxford Higher Education

<b>Course Name</b>	<b>Advanced Operations Research</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E48					
Course Summary & Justification	This course includes in-depth study of more complex operations research models viz., matrix model, interior point model and bounded model of solving LPP, nonlinear programming of various types, Markov chains, empirical queuing models, binary integer programming, dynamic programming of various types, network models and replacement models.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Vid eo/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management MBM21C15 - Management Science					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain various advanced tools of operations research useful in specific situations.	U	2
2	The student will be able to examine the problems in organisations through a formal quantitative approach to problem solving.	A	5
3	The student will be able to provide solutions to specific problems.	C	2
4	The student will be able to develop skills and competence to examine and improve performance of organisations.	A	4
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Basics of Operations Research</b>		12 Hrs	
1.1	Review of Basic Operations Research techniques	1	1
1.2	Simplex Directions and Matrix method of solving Linear Programming Problems (LPP), Bounded Variables Techniques in Solving LPP, Revised Simplex Method, Interior Point Methods of solving LPP (Karmarkar's Method), Chance Constrained Linear Programming	3	2
1.3	Non-linear programming problems of general nature	1	1
1.4	One variable unconstrained optimisation Multi variable unconstrained optimisation	1	2
1.5	Karush Kuhn Tucker (KKT) conditions for constrained optimisation and its Applications in Management	2	4
1.6	Separable programming and its Applications in Management	1	4
1.7	Quadratic Programming, convex programming, geometric programming, Fractional programming and its Application in Management, Applications of Transshipment model	3	4

<b>Unit 2 : Markov chains and Queuing models</b>		10 Hrs	
2.1	Markov chains, Formulation, Kolmogorov Equation, steady state conditions, Markov chain modelling through Graphs	5	1
2.2	Transient State Queuing models	3	3
2.3	Empirical Queuing models	2	3
<b>Unit 3 : Integer Programming</b>		10 Hrs	
3.1	Integer Programming, Branch and Bound Technique and its applications to Binary Integer Programming and Mixed Integer Programming, Branch and Cut Approach to solve Binary Integer Programming (BIP)	6	3
3.2	Applications of BIP in the Areas of Investment Analysis, site selection, Designing a production and Distribution network	4	3
<b>Unit 4 : Dynamic Programming</b>		14 Hrs	
4.1	Dynamic Programming (DP), Applications in capital budgeting, Reliability Improvements, stage-coach, cargo loading, single machine scheduling, solving LPP using Dynamic programming Technique	7	3
4.2	Stochastic Processes, Introduction, Markov Processes, Martingales, Random Walk, Brownian Motion	4	3
4.3	Queuing Processes, Business applications of Dynamic Programming	3	3
<b>Unit 5 : Network Models</b>		14 Hrs	
5.1	Network Models, Terminologies, shortest path model, minimum spanning tree problem, Maximal flow problem, Minimum cost flow problem	5	4
5.2	Replacement and maintenance Analysis, Types of Replacement problem and decisions – Determination and problems of Economic life of an Asset	4	4
5.3	Fuzzy Logic and Systems, Fuzzy Multi Criteria Decision Making, Multi-objective Fuzzy Linear Programming	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Frederick S. Hillier and Gerald J. Lieberman, *Introduction to Operations Research (Concepts and case- Eighth Edition)* Tata Mc-Graw Hill Education Private Limited (Special Indian Edition).
2. R. Paneerselvam, *Operation Research* (Second edition), PHI Learning Private Ltd., New Delhi.

## SUGGESTED READINGS

- Rathindra P. Sen, *Operations Research (Algorithms and Applications)*, PHI Learning Private Ltd., New Delhi.

<b>Course Name</b>	<b>Maintenance Management</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E49					
Course Summary & Justification	<i>This course includes introduction to concepts of maintenance management viz., tero-technology, maintenance planning and scheduling, costing and budgeting, reliability, availability, maintainability, failure statistics, replacement, condition-based maintenance, reliability centered maintenance, TPM and maintenance audit.</i>					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Ca se	Others	Total LearningH ours
	<i>Collaborative learning</i>	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the importance of maintenance planning in a firm	U	4
2	The student will be able to explain the management of maintenance activities.	U	4
3	The student will be able to examine the failure statistics and replacement planning in an organisation.	A	5
4	The student will be able to develop skills and competence to examine and improve maintenance processes by using the modern tools.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

	Hrs.	CO No.
<b>Unit 1: Maintenance Management</b>	10 Hrs	
1.1 Maintenance Management and Tero-technology: An Overview, Maintenance Objectives and Strategies	4	2
1.2 Preparation of Maintenance Planning and Scheduling, Planned Maintenance Management System and Control	6	2
<b>Unit 2 : Maintenance Organisation</b>	10 Hrs	
2.1 Maintenance Organisation	3	1
2.2 Maintenance Costing and Budgeting	2	2
2.3 Spare Parts Inventory Management	3	2
2.4 IT enabled Maintenance Management	2	2
<b>Unit 3 : Maintenance Concepts</b>	14 Hrs	
3.1 Reliability, Availability and Maintainability Concepts	4	3
3.2 Environmental Aspects in Maintenance Management, Industrial safety and Tools	3	3
3.3 Human Resource Development in Maintenance Management	3	3

3.4	TQM and Maintenance Management	4	2
<b>Unit 4 : Qualitative Analysis</b>		14 Hrs	
4.1	Failure Statistics, Data Analysis and Methods of Qualitative Analysis, MTBF, MTTR, MTTD	5	4
4.2	Economics of Repair and Replacement of Equipment	5	3
4.3	Planning and Scheduling of Plant and Overhauling Shutdown	4	3
<b>Unit 5 : Modern Maintenance</b>		12 Hrs	
5.1	Condition Based Maintenance (CBM)	3	4
5.2	Reliability Centered Maintenance (RCM)	3	4
5.3	Total Productive Maintenance (TPM)	3	4
5.4	Maintenance Audit	3	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Kelly, A, *Maintenance System and Documentation*, Butterworth-Heinemann Imprint, Elsevier, <http://store.elsevier.com/>
2. S. Dhillon, *Engineering Maintenance – A Modern Approach*, C R C Press, New York

## SUGGESTED READINGS

- John Moubray, *The Aladon Network, Reliability Centered Maintenance*, Elsevier, <http://store.elsevier.com/>

<b>Course Name</b>	<b>Service Operations Management</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E50					
Course Summary & Justification	This course includes in-depth study of concepts of service operations viz., nature of services, 7 Ps of services, customer and supplier relationships, Service delivery, managing capacity and demand, performance management, strategic change and service positioning.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Vid eo/ Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain various differences and challenges with service operations compared to products.	U	1
2	The student will be able to examine the approaches in services with customers.	A	2
3	The student will be able to provide solutions to specific problems related to service delivery.	C	5
4	The student will be able to examine and improve performance of service organisations.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Introduction to service operations</b>		12 Hrs	
1.1	Introduction to service operations: nature of services and differences with goods, service concept, challenges	5	1
1.2	7 P's of services	3	1
1.3	Types of services	4	1
<b>Unit 2 : Customer and supplier</b>		12 Hrs	
2.1	Customer and supplier relationships: Segmentation, retention, customer expectations,	6	1
2.2	Service supply chains, supply relationships	6	1
<b>Unit 3 : Service delivery</b>		12 Hrs	
3.1	Service delivery: Nature of service process, process design, process planning, control, service people, resource utilisation, bottlenecks, service blueprint	4	2
3.2	Use of technology and information	4	2
3.3	Location, layout, managing capacity and demand	4	2
<b>Unit 4 : Performance management</b>		12 Hrs	
4.1	Performance management: Performance measurement, targets, benchmarking	6	4

4.2	Linking operations with business performance, improvement of performance, recovery, Maintenance in services	6	4
<b>Unit 5 : Strategic change</b>		12 Hrs	
5.1	Strategic change: Service strategy, formulation and development	4	3
5.2	Service culture, operational complexity, Service Quality	4	3
5.3	Service positioning	4	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Robert Johnson and Graham Clark (2005), *Service Operations management - Improving Service Delivery*, Pearson Education Ltd., Noida, 2<sup>nd</sup> Ed.
2. Metter, King Metters, Pullman, Walton, *Service Operations Management*, Cengage Learning India Pvt. Ltd., New Delhi.

## SUGGESTED READINGS

1. Bassett, Glenn; (1992): *Operations Management for Service Industries*, Quorum Books, Westport, Conetica.
2. Colley, John L. Jr.; (1996): *Case Studies in Service Operations*, Wadsworth Publishing Company, California.
3. Hope, Christine Ann; Muhlemann, Alan P.; (1997): *Service Operations Management: Strategy, Design and Delivery*, Prentice Hall, Englewood Cliffs, New Jersey.
4. Lovelock, Christopher H.; (1992): *Managing Services: Marketing, Operations and Human Resources*, Prentice Hall, Englewood Cliffs, New Jersey.
5. Schmenner, Roger W.; (1995): *Service Operations Management*, Prentice Hall, Englewood Cliffs, New Jersey.
6. Voss, Christopher A.; Armistead, Colin G.; Johnston, Robert; Morris, Barbara; (1985): *Operations Management in Service Industries and the Public Sector*, John Wiley & Sons, Chichester.



<b>Course Name</b>	<b>Work Study and Ergonomics</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E51					
Course Summary & Justification	This course includes introduction to concepts of Industrial Engineering viz., evolution, productivity, work study, work measurement, work sampling, ergonomics, psychological aspects of design and production.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the need and concept of industrial engineering in organisations.	U	1
2	The student will be able to explain the application of work study in organisations.	U	1
3	The student will be able to analyse the standard time and performance rating in organisations.	A	5
4	The student will be able to develop skills and competence to examine the psychological aspects of production in an organisation.	A	8
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Industrial engineering</b>		10 Hrs	
1.1	Introduction to industrial engineering, evolution of industrial engineering, scope, objectives	6	1
1.2	Productivity, measurement of productivity	4	1
<b>Unit 2 : Work-study</b>		12 Hrs	
2.1	Introduction to work-study, procedure of work study	3	1
2.2	Establishing the standard time	3	3
2.3	Method study, procedure for method study, principles of motion economy, filming techniques and micro motion analysis, recording technique, construction of process chart, Gantt chart, SIMO chart, string chart, travel chart, multiple activity chart, sampling process, critical examination analysis, steps involved in evaluation of alternatives	6	2
<b>Unit 3 : Work measurement</b>		14 Hrs	
3.1	Introduction to work measurement, objectives of work measurement, techniques of work measurement, Sampling process	6	3

3.2	Basic procedure in time study. Advantages and limitations of time study, time recording techniques in time study, performance rating standard allowances, personal allowance, fatigue allowance, production delay allowance, factors affecting the rating	8	3
<b>Unit 4 : Work sampling</b>		12 Hrs	
4.1	Work sampling, process of work sampling, predetermined motion time systems, standard data system	4	4
4.2	Job evaluation and merit rating, work factor method, method time measurement system, basic, motion time study system	4	4
4.3	Wages and incentive plans, relationship between wages productivity and cost	4	4
<b>Unit 5 : Ergonomics</b>		12 Hrs	
5.1	Introduction to ergonomics concept and scope of ergonomics, contribution of ergonomics in system design and management, anthropometric principles in work space and equipment design, work space design for standing and seated workers	6	4
5.2	Assessment of human capabilities and limitations, human physiological work capacity, control and displays psycho physiological aspects of design, Ergonomics with customers	6	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>• Field visit report: Each student shall individually or in group visit an institution with demonstrated experience of alternative thoughts and prepare a report</li> </ul> End Semester Examination

## REFERENCES

1. R. M. Barynes, *Motion and Time study*
2. E. S. Buffa, *Modern production management*, Tata McGraw Hill, New Delhi
3. Dr. A. K. Singh, *Time and motion study*, Jaico publishing house, New Delhi

## SUGGESTED READINGS

1. ILO International labor organization, *Introduction to work study*, Tata McGraw Hill
2. M. E. Mundel, *Motion and Time study*
3. R. M. Barynes, *Motion and Time study*
4. E. S. Buffa, *Modern production management*, Tata McGraw Hill, New Delhi
5. Dr. A. K. Singh, *Time and motion study*, Jaico publishing house, New Delhi
6. Dalela, *Work study & Ergonomics*, TATA McGraw Hill, New Delhi
7. Mc. Wick, *Human factors in Engineering*

<b>Course Name</b>	<b>Business Forecasting</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E52					
Course Summary & Justification	This course includes introduction to concepts of business forecasting viz., demand analysis, marketing research, time series, forecasting techniques, smoothing techniques, forecast accuracy and software packages for forecasting.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain qualitative and quantitative forecasting techniques for business.	U	2
2	The student will be able to explain the latest concepts and tools of forecasting in organisations.	U	1
3	The student will be able to examine factors affecting demand in organisations.	U	2
4	The student will be able to develop skills and competence to examine various data types and interpret results of forecasting.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Demand analysis</b>		12 Hrs	
1.1	Demand analysis: an overview, significance of demand analysis and forecasting, determinants of demand, elasticity of demand	7	1
1.2	Revenue and profit of a firm	5	1
<b>Unit 2 : Estimation of demand</b>		14 Hrs	
2.1	Estimation of demand, marketing research techniques, consumer surveys, consumer clinics and focus groups, market experiments in test stores	4	3
2.2	Statistical estimation, variable identification	3	2
2.3	Time series and cross sectional data collection, specification of the model, estimation of the parameters	4	2
2.4	Interpretation of regression statistics, Multiple regression	3	2
<b>Unit 3 : Forecasting demand</b>		14 Hrs	
3.1	Forecasting demand, selecting a forecasting technique, purpose of forecast, patterns in the data series, lead time, minimum data requirement, desired accuracy, cost of forecasting, qualitative forecasting techniques, survey and opinion polling techniques	8	3

3.2	Time series analysis, trend analysis, cyclical variations, seasonal effects, random fluctuations	6	4
<b>Unit 4 : Smoothing and Barometric techniques</b>		14 Hrs	
4.1	Smoothing techniques, moving averages, exponential smoothing and other advanced techniques, applications	8	4
4.2	Barometric techniques, leading, lagging and coincident economic indicators, diffusion and composite indexes	6	4
<b>Unit 5 : Accuracy of forecast</b>		10 Hrs	
5.1	Accuracy of forecast, short run forecast, long term forecast, error	4	4
5.2	Use of software packages for forecasting	6	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. John E. Hanke and Dean Wichern, *Business Forecasting*, Pearson Education Ltd., New Delhi
2. Keith Ord and Robert Fildes, *Principles of Business Forecasting*, South-Western College Publications, London

## SUGGESTED READINGS

1. John Silvia, Azhar Iqbal, Kaylyn Swankoski, Sarah Watt, Sam Bullard, *Economic and Business Forecasting: Analysing and Interpreting Econometric Results*, Wiley, <http://as.wiley.com>
2. George E. P. Box, Gwilym M. Jenkins, Gregory C. Reinsel, Greta M. Ljung, *Time Series Analysis: Forecasting and Control*, Wiley, <http://as.wiley.com>

<b>Course Name</b>	<b>Total Quality Management</b>					
Type of Course	Elective – Operations Management					
Course Code	MBM21E53					
Course Summary & Justification	This course includes introduction to concepts of Total Quality Management viz., evolution, contributions of quality gurus, strategic quality planning, quality management systems, implementing TQM, quality standards, ISO, 7 tools of QC, 5-S, Kaizen, Six sigma, benchmarking and SQC.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/ Video/ Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain philosophy of total quality in organisations.	U	1
2	The student will be able to explain the latest concepts and tools of quality management in organisations.	U	1
3	The student will be able to examine various quality systems in organisations.	U	5
4	The student will be able to develop skills and competence to examine and improve quality by using the modern tools.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Total Quality Management</b>		12 Hrs	
1.1	Total Quality Management, Definition, Quality Management in retrospect	2	1
1.2	Evolution of quality approaches, TQC	2	1
1.3	Quality Planning, Cost of Quality	2	1
1.4	Quality Philosophy of Deming, Joseph Juran, Philip Crosby, Genich Taguchi and others	4	1
1.5	Building Blocks of TQM	2	1
<b>Unit 2 : Strategic quality planning</b>		12 Hrs	
2.1	Strategic quality planning, quality objectives and quality policy	6	3
2.2	Organising for TQM, Training for TQM, implementing TQM	4	3
2.3	TQM in service organisations	2	3
<b>Unit 3 : Quality Standards and awards</b>		12 Hrs	
3.1	Quality Standards: BIS, AGMARK, ISO 9000; ISO 9000, ISO 14000, ISO Certification process	6	3

3.2	Quality awards, Malcom Baldrige Award, Deming's Prize, Other awards	6	3
<b>Unit 4 : Tools of TQM</b>		12 Hrs	
4.1	Seven Tools of Q.C., Quality circles, 5-S Program, Poka-Yoke, Kaizen, Benchmarking	8	4
4.2	Quality Function Deployment	4	4
<b>Unit 5 : Statistical Quality Control</b>		12 Hrs	
5.1	Statistical Quality Control, basic concepts, product control; process control	8	4
5.2	Six sigma, DMAIC and DFSS	6	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Janakiraman and RK. Gopal, *Total Quality Management, Text and cases*, PHI learning PVT Ltd.
2. Sunil James. R. Evans, *Total Quality Management*, India Edition, Cengage learning.
3. Kanishka Bedi, *Quality Management*, Oxford University Press, New Delhi, 2006

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1. PN. Mukherjee, *Total Quality Management*, PHI learning PVT Ltd.
2. SK. Mandal, *Total Quality Management*, Vikas Publish House PVT Ltd.
3. JM Juran & Frank K. Gryana, *Quality Planning and Analysis*, Tata McGraw Hill, Mumbai, 1970.
4. Dennis Lock et al. Ed., *Handbook of Quality Management*, Jaico Publishing House, Mumbai, 1993.
5. Subburaj Ramaswamy, *Total Quality Management*, Tata McGraw Hill, New Delhi, 2005.
6. Amitava Mithra, *Quality Control and Improvement*, Pearson Education, New Delhi, 2005
7. Joel E Ross, *Total Quality Management*, Vanity Books International, New Delhi, 1996.
8. L. Suganthi and Anand, A.Samvel, *Total Quality Management*, PHI learning
9. Dale H. Besterfield, et al, *Total Quality Management*, Pearson Education Asia, 1999.
10. James R. Evans & William M. Lidsay, *The Management and Control of Quality*, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).

<b>Course Name</b>	<b>Innovation Management and R&amp;D</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E54					
Course Summary & Justification	This course includes introduction to concepts of innovation and R&D viz., nature of innovation, creativity, R&D resources, HR in innovation, R&D projects, incentives, commercialisation and IPR.					
Semester	3/4		<b>Credits</b>		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Vid eo/ Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the importance of innovation and R&D for firms.	U	1
2	The student will be able to explain the process of R&D in organisations.	U	4
3	The student will be able to examine the R&D infrastructure in the country.	U	5
4	The student will be able to apply for IPR in respective category.	C	3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Technological innovation</b>		10 Hrs	
1.1	Nature, process and importance of technological innovation, economic development	5	1
1.2	Product design, marketing and consumer, innovation and creativity	5	1
<b>Unit 2 : R&amp;D</b>		14 Hrs	
2.1	R&D in organisations	5	1
2.2	R&D resources	4	2
2.3	Partnerships in innovation, Examples and applications	5	2
<b>Unit 3 : Organisation design for R&amp;D</b>		14 Hrs	
3.1	HRM issues in innovation and R&D, leadership and R&D management, organisation design and structure for R&D	7	2
3.2	R&D project management, measurement, evaluation and assessment of R&D	7	2
<b>Unit 4 : R&amp;D infrastructure</b>		10 Hrs	
4.1	National R&D infrastructure and institutional framework, fiscal and other incentives and promotional/support measures	5	3
4.2	Industry, institutions and government cooperation	5	3

Unit 5 : Commercialisation of R&D		12 Hrs	
5.1	Commercialisation of R&D	4	4
5.2	Management of intellectual property rights, Types of IPR	5	4
5.3	Financing of R&D projects, role of consultants in R&D	3	3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Ravi Jain, Harry C. Triandis, Cynthia W. Weick, *Managing Research, Development and Innovation: Managing the Unmanageable*, 3rd Edition, Wiley, <http://as.wiley.com>
2. Al Endres, *Improving R&D Performance: The Juran Way*, Wiley, <http://as.wiley.com>

## SUGGESTED READINGS

- Carayannis, Elias G., *Innovation, Technology, and Knowledge Management*, Springer, <http://www.springer.com>



<b>Course Name</b>	<b>World Class Manufacturing</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E55					
Course Summary & Justification	This course includes introduction to concepts of world class manufacturing viz., choice of technology, capacity planning, aggregate planning, MP, MRP, scheduling, TQM, Inventory concepts, maintenance, concurrent engineering, agility, rapid prototyping and quick response.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/V ideo/Case	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain world class manufacturing in organisations.	U	1
2	The student will be able to explain the latest concepts and tools of world class manufacturing in organisations.	U	12
3	The student will be able to examine various production planning tools in worldwide organisations.	U	13
4	The student will be able to develop skills and competence to examine and solve manufacturing associated problems using the modern tools.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Manufacturing technology</b>		12 Hrs	
1.1	Manufacturing technology: developments in world-class manufacturing, information age competition, strategic decisions in manufacturing management	4	1
1.2	Choice of technology, capacity, layout, automation in material handling systems, emerging trends, productivity & incremental innovation, coping with continuous change	4	3
1.3	The structure of the Japanese innovation system	4	1
<b>Unit 2 : Production Scheduling</b>		12 Hrs	
2.1	Aggregate planning and Master Production Scheduling	6	2
2.2	Materials Requirement Planning (MRP), Manufacturing Resources Planning (MRP – II), implementation problems	6	2

<b>Unit 3 : Review of operations scheduling process</b>		12 Hrs	
3.1	Review of operations scheduling process, job shop scheduling, batch production, scheduling, flow production line balancing, technological innovation in manufacturing	4	4
3.2	Computer integrated manufacturing, flexible manufacturing systems, cellular manufacturing, factory of the future automated systems, CNC Machines	3	2
3.3	Human factors in automated systems, Automation	2	2
3.4	Optimised production technology, modelling, optimising, simulation of manufacturing systems, integration of design & manufacturing	3	3
<b>Unit 4 : Total quality strategies</b>		12 Hrs	
4.1	Total quality strategies for manufacturing success and WCM model	6	4
4.2	Productive maintenance, Total Productive Maintenance, objectives, total system effectiveness	6	2
<b>Unit 5 : World-Class manufacturing</b>		12 Hrs	
5.1	World-Class manufacturing, international scenario and Indian scenario	3	1
5.2	Manufacturing innovations, quick response manufacturing, agile manufacturing, rapid prototyping, concurrent engineering	5	2
5.3	Core competencies in technology and its commercialisation	4	2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. R. Panneerselvam, *Production and Operations Managements*. PHI learning India Ltd., [www.phiindia.com](http://www.phiindia.com)
2. William J. Stevenson, *Operations Management*, Special Indian Edition, Tata McGraw Hill
3. B.S. Sahay and others Macmillan, *World Class Manufacturing*, India Ltd., Chennai.
4. OP. Khanna, *Industrial Engineering and Management*, Dhanpatrai publications Pvt. Ltd., New Delhi.

## SUGGESTED READINGS

1. James R. Evans. David A. Collier, *Operations Management*, India Edition Cengage learning, Chennai.
2. Norman Gaither and Gregory Frazier, *Operations Management*, Cengage India Edition, Cengage learning, Chennai.
3. Scott.T. Young, *Essentials of Operations Management*, Sage South Asia Edition, [www.sagepublications.com](http://www.sagepublications.com)
4. Soli.J Engineer, *Progressive manufacturing*, India Edition, Cengage learning.

<b>Course Name</b>	<b>Global Transportation and Export/Import Documentation</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E56					
Course Summary & Justification	This course includes introduction to international transportation and export/import documentation. The course deal with world sea transportation, shipping services, types of ships, air transportation, air cargo handling, Indian shipping industry etc. The course provides an understanding on the export/import document and regulation. It also provides a brief idea about marine insurance also.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/Ca se/Video	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21E43 – Supply Chain Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the global transportation infrastructure.	U	1
2	The student will be able to explain various characteristics of water transportation.	U	1
3	The student will be able to explain various characteristics of air transportation.	U	1
4	The student will be able to explain the documentation systems in export/import processes.	U	3
5	The student will be able to examine various documents in export/import processes.	A	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

	Hrs.	CO No.
<b>Unit 1: International Transportation Infrastructure &amp; Foreign Trade Policy of India</b>	12 Hrs	
1.1 Significance of transportation in Global Trade	2	1
1.2 Components of international transportation infrastructure: Seaports, Rivers, Canals, Waterways, Airports, Roads and Railways	4	1
1.3 Foreign trade policy of India - Introduction	2	1
1.4 Foreign trade policy of India – Major provisions – Evaluation of current policy – Export incentives- SEZ – Recognition of Export units - DDS procedure	4	1
<b>Unit 2 : World Sea and Air Transportation</b>	12 Hrs	
2.1 International ocean transportation: Importance	1	2
2.2 World Sea borne trade - Volume and value of trade - World tonnage	1	2
2.3 Types of shipping services - Classification of vessels	2	2
2.4 Major seaports of the world -Advantages and constraints of sea transportation	2	2

2.5	International air transportation: Significance – Advantages and disadvantages - Types of aircrafts	3	3
2.6	International regulations – Air Cargo handling – Types of air cargo – Major airports of the world - IATA – Future trends in air transportation	3	3
<b>Unit 3 : Insurance and Indian Shipping</b>		6 Hrs	
3.1	Shipping in India: Major Ports in India - Nature of cargo handled - Govt. Policy on shipping	4	2
3.2	Port Infrastructure development - Major Indian shipping companies - Shippers association	4	2
3.3	Marine Insurance: Meaning and significance - Kinds of policies - Losses under marine insurance	4	2
<b>Unit 4 : Introduction to Export Documentation</b>		12 Hrs	
4.1	Need for documentation in International Trade – Classification of documents: Commercial and Regulatory	3	4
4.2	Standardisation of documents: Aligned Documentation System (ADS) – Master Document I & II - Merits of ADS	3	4
4.3	Generation of export enquiries – Offer to buyers and preparation of Proforma Invoice	3	4
4.4	Issue of L/C by importer – Meaning of L/C – Parties to L/C – Types of L/C	3	5
<b>Unit 5 : Commercial and Regulatory Documents</b>		12 Hrs	
5.1	Uses of commercial documents - Major commercial Documents: Commercial invoice: Types	1	4
5.2	Packing list – Pre-shipment inspection and Certificate of Inspection – Bill of Lading - Types	3	4
5.3	Significance of Regulatory documents - Exchange declaration form (GR form): Types and their application – Central Excise clearance form (ARE)	2	5
5.4	Shipping Bill/Bill of Export – Procedure for customs clearance using Shipping Bill – Electronic Processing of Export Documents	3	4
5.5	Import procedure - Documents used for imports: Bill of Entry – Import licenses	3	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> Continuous Assessment (CA) <ul style="list-style-type: none"> <li>• Tests: Extended answer type</li> <li>• Individual assignments: Every student to write report on a topic</li> <li>• Group assignments: Students discuss in groups and submit report</li> <li>• Seminar Presentation: A theme is to be discussed and identified to prepare a paper and present in the seminar</li> </ul> End Semester Examination

## REFERENCES

1. Krishnaveni Muthaiah, Logistics Management and World Sea borne trade, Himalaya Publishing
2. M. N. Mishra, Insurance Principles and Practice, S. Chand & Company Ltd, New Delhi
3. C Ramagopal, Export Import Procedures- Documentation and Logistics, New Age Publishers
4. Jain Khushpat. S, Export Import Documentation & Procedure, Himalaya Publishing.
5. Paul Murphy and Donald Wood, Contemporary Logistics, Prentice Hall

## SUGGESTED READINGS

1. M K Venugopalan, A Handbook on Export Import Trade and Documentation, Sara Book Publication
2. Justin Paul & Rajiv Aserkar, Export Import Management, Oxford
3. P K Khurana, Export Management, Galgotia Publishing

<b>Course Name</b>	<b>Industry 4.0</b>					
Type of Course	Elective - Operations Management					
Course Code	MBM21E57					
Course Summary & Justification	This course includes introduction to concepts of various stages of industrial developments and Industry 4.0. The course discusses various technological advancement related to Industry 4.0 viz., artificial intelligence, big data, internet of things, cloud computing, machine learning etc. it also discusses smart devices, RFID, security aspects of Industry 4.0 etc.					
Semester	3/4		Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical/C ase/Video	Others	Total Learning Hours
	Collaborative learning	60	12	6	2	80
Pre-requisite	MBM21C12 - Operations Management					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
1	The student will be able to explain the various stages of industrial development and Industry 4.0.	U	1
2	The student will be able to explain the need of Artificial Intelligence and related technologies in a firm.	U	3
3	The student will be able to explain the need of Big Data and related technologies in a firm.	U	3
4	The student will be able to explain the how IoT and related technologies change the performance of a firm.	U	3
5	The student will be able to assess the explain the threat to security of a firm through Industry 4.0	U	4
6	The student will be able to examine the various career choices associated to Industry 4.0.	A	11
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT & SUB-UNITS FOR CLASS TRANSACTIONS

		Hrs.	CO No.
<b>Unit 1: Industrial Revolutions</b>		<b>12 Hrs.</b>	
1.1	Various Industrial Revolutions - Digitalisation and the Networked Economy - Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0	4	1
1.2	Developments in USA, Europe, China and other countries - Comparison of Industry 4.0 Factory and Today's Factory	3	1
1.3	Need for Adopting Industry 4.0 - Definition – Goals and Design Principles - Difference between conventional automation and Industry 4.0	5	1
<b>Unit 2 : Artificial Intelligence</b>		<b>12 Hrs.</b>	
2.1	Artificial Intelligence: Artificial Intelligence (AI) – Need - History of AI - Foundations of AI - The AI - Environment	3	2

2.2	Societal Influences of AI - Application Domains and Tools - Associated Technologies of AI - Future Prospects of AI - Challenges of AI	2	2
2.3	Cyber-physical systems – Definitions - Core elements of Cyber-Physical Systems and Cyber-Physical Production Systems - Applications for cyber-physical systems	3	2
2.4	Robotic Automation and Collaborative Robots - Human-Robot Collaboration in Industry	3	2
2.5	Smart Manufacturing - Smart Devices and Products - Smart Logistics - QR codes and RFID - Applications with Augmented Reality	1	2
<b>Unit 3 : Big Data</b>		<b>12 Hrs.</b>	
3.1	Big Data: Evolution - Data Evolution - Data: Terminologies - Big Data Definitions - Essential of Big Data in Industry 4.0	3	3
3.2	Big Data Merits and Advantages - Big Data Processing Frameworks - Big Data Applications - Big Data Tools	4	3
3.3	Big Data Domain Stack: Big Data in Data Science - Big Data in IoT - Big Data in Machine Learning - Big Data in Databases	3	3
3.4	Cloud Computing Basics- Cloud Computing and Industry 4.0 - Connected factory	2	3
<b>Unit 4 : Internet of Things</b>		<b>12 Hrs.</b>	
4.1	Internet of Things (IoT): Introduction to IoT - Architecture of IoT - Technologies for IoT - Developing IoT Applications - Security in IoT	6	4
4.2	Applications of IoT – Manufacturing – Healthcare – Education – Aerospace and Defence – Agriculture – Transportation and Logistics	4	4
4.3	Industrial Internet of Things (IIoT) & Internet of Services	2	4
<b>Unit 5 : Safety with Industry 4.0</b>		<b>12 Hrs.</b>	
5.1	Safety with Industry 4.0 - Security & Security Risks with Industry 4.0	5	5
5.2	Approach to Cyber-Physical Security in Industry 4.0	4	5
5.3	Career in Industry 4.0 - Skills required for Future	3	6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <i>Direct Instruction:</i> Brainstorming lecture, Explicit Teaching, E-learning, Video presentation, Case study, Analysing real data from firms <i>Interactive Instruction:</i> Seminar, Group Assignments, Library work and Group discussion, Presentation by individual student/Group representative
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## REFERENCES

1. P. Kaliraj, T. Devi, Higher Education for Industry 4.0 and Transformation to Education 5.0
2. Alasdair Gilchrist. Industry 4.0: The Industrial Internet of Things, Apress Publications

### Business Analytics Elective Courses

Course Name	Database and Data Mining Applications in Business					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E58					
Course Summary & Justification	This course covering the essentials of Database implementation and data mining applications					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	30	15	15	--	60
	Collaborative learning	5	2	5	---	12
	Independent learning	4	2	2	....	8
Pre-requisite	Basic Knowledge of DBMS, Data Mining and its applications in Business					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE all commands related with SQL and data mining algorithms	R	1
2	UNDERSTAND basic concepts related with DBMS such as Traditional File Systems vs. Modern Database Management Systems, SQL fundamentals, data models and Data mining concepts	U	1
3	APPLY different principles, tools, SQL commands in a practical way	A	2
4	ILLUSTRATE relationships among data creation, retrieval and manipulation, database transactions using My SQL software	An	2
5	INTERPRET basic statistical data, graphs, Prediction using different data mining models mentioned in Syllabus. DERIVE insights from multiple data sources in MS EXCEL and work with it to answer relevant business questions.	E	3
6	CREATING and Solve real time problems	C	5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1: Introduction to Database systems</b>		15 Hrs	
1.1	Data, information, Fields, Records, Files. Data Dictionary, Data base, Database system, Working of a Simple Centralised Database System	6	1,2
1.2	Traditional File Systems vs. Modern Database Management Systems	3	2
1.3	Properties of Database, Types of Database Users	3	2
1.4	Advantages of using DBMS, Applications of traditional Database	3	2
<b>Unit 2 : Business Data management overview</b>		20 Hrs	
2.1	Principles, Tools and Platforms / (Database Management Systems): Database concepts, Basic components of DBMS, sources of data, logging, cleaning data, data representation	8	1,2
2.2	data models – (hierarchical, network, XML), and Stores, NoSQL database, design for performance / quality parameters	5	2,3
2.3	documents and information retrieval related tools – (Postgres, OLTP, OLAP, Hadoop, Mapreduce)	7	4
<b>Unit 3 : SQL Fundamentals-basics and definition</b>		10 Hrs	
3.1	Query languages- SQL for data creation, retrieval and manipulation	3	1,4
3.2	database transactions, concurrency control, atomicity, recovery, security, backup and recovery	4	1,2
3.3	data base administration- client server architecture based RDBMS	3	2
<b>Unit 4 : Data Mining</b>		20 Hrs	
4.1	Concepts and Applications, Data Mining Stages, Data Warehousing (DWH) and On-Line Analytical Processing (OLAP)	4	2
4.2	Introduction to Model Building Classification Models: Introduction to Classification and Prediction	4	2,4,5
4.3	Association Rules Mining: Concepts, Apriori and FP-Growth Algorithm.	5	2,5
4.4	Clustering: Different types of clustering, Business Intelligence and Decision-making. Data Mining Applications in various business domain	7	3,5,6
<b>Unit 5 : Advanced Data Base Systems</b>		15Hrs	
5.1	Multimedia databases, Geographical Information System	3	2
5.2	Image data bases, Spatial and Temporal Data Bases, Data Warehouse	4	1,2
5.3	Distributed Data bases, Big Data Technologies	3	2
5.4	Characteristics of Big Data, Applications of Big Data in Business Domain.	5	1,2



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>○ Tests – One MCQ based and on extended answer type</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. RamezElmasri, Shamkanth B Navathe, Fundamentals of Database Systems, Pearson 6<sup>th</sup> Edition, 2010.
2. Abraham Silberschatz, Henry F. Korth, S. Sudarshan: Database System Concepts, 6<sup>th</sup> Edition, McGraw Hill, 2010.
3. James Groff, SQL The Complete Reference, 3rd Edition
4. Data Mining – Concepts and Techniques, Jia Wei Han; Micheline Kamber & Jian Pei. Elsevier, 3rd Edition, 2012
5. Mehmed Kantardzic, Data Mining: Concepts, Models, Methods, and Algorithms, Wiley, 2011.
6. Data Mining Techniques – Arun K Pujari, University Press, 2001.

<b>Course Name</b>	<b>Advanced Excel and Business Applications</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E59					
Course Summary & Justification	This course covering the essentials of Spreadsheet Applications in Statistical, Financial and Data Analytical Domains					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	30	15	15	--	60
	Collaborative learning	5	2	5	---	12
	Independent learning	4	2	2	....	8
Pre-requisite	Basic Knowledge of Mathematics, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE All basic formulae covered in the syllabus, SELECT appropriate menus and functions of MS Excel to Create, Format, Import, Merge, Save, Print Spreadsheets	R	1
2	EXPRESS numbers in various forms such as to SHOW how to do basic troubleshooting and fix mistakes most people make when working with spreadsheets.	U	1
3	CALCULATE USE various functions of MS Excel, Execute pivot table analysis, common (and powerful functions), and different types of lookups (vlookup, hlookup, and index/match).	A	2
4	ILLUSTRATE relationships ILLUSTRATE the use of the most commonly used data-manipulation commands in MS Excel, Charts using business data	An	3
5	INTERPRET basic statistical data DERIVE insights from multiple data sources in MS EXCEL and work with it to answer relevant business questions.	E	1
6	CREATING and SOLVING simple simultaneous equations. CREATE standard Excel Templates for routine business data management and analysis activities	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction to Spreadsheets</b>		05 Hrs	
1.1	<b>Excel Basics:</b> Understanding Microsoft Excel, Excel Workbook Windows, Basic Spreadsheet Skills, Excel Help System, Opening and Closing and saving Workbooks, Understanding Workbook File Formats, Creating New Workbooks	1	1
1.2	<b>Excel Essentials:</b> Selecting Cells, AutoSum and AutoFill Function, Cell Referencing and Request. Formatting Cells, Formatting Numbers, Placing Cell Alignment, Cell, Rows and Columns, Page Layouts in Excel	2	1
1.3	<b>Understanding Worksheets :</b> Adding, moving and copying Worksheets, Editing, Copying and Moving Cells	1	1
1.4	<b>Basic Options:</b> Understanding Ribbons and Toolbar	1	1
1.5	Proofing Workbooks	1	1
<b>Unit 2 : Introduction to Excel Tables, Excel Functions and Charts</b>		15 Hrs	
2.1	Defining Names in Excel, Sorting Data, Using Excel Tables, Filtering Data in Excel	2	2,4
2.2	Understand Charts, Chart Design Options and Tools, Chart Format Tools, Combo Charts	4	3,4
2.3	Functions within Excel, Understanding Date Function, Information Functions, Logical Functions	7	3
2.4	Find and Replace, Headers and Footers, Adding Comments, Conditional Formatting.	2	3,4
<b>Unit 3 : Data Analysis</b>		12 Hrs	
3.1	Using Text to Columns, The Paste Special Function, Data Validation, Subtotals and Grouping, Consolidating Data, Scenario Analysis, Data Tables in Scenario Analysis, What-if Analysis	2	5
3.2	Mats and Trig Functions, Text Functions in Excel, Using Lookup Functions, Vlookups, HLookups, Match, Advanced Functions: Using Statistical Functions, Database Functions, Financial Functions	3	3,5
3.3	Formula Auditing and Error Tracing, Hyperlinks in Excel, Linking Data, Understanding Pivot Tables, Using Pivot Charts	3	3,5
3.4	Workbook Properties, Protecting and Sharing Worksheets, Data Encrypting and Finalising Workbooks, Understanding Macros	4	2,4
3.5	Custom Number Formats in Excel, Using Custom Lists, Working with Templates, Tracking Changes in Excel, Merging and Compare Excel Workbooks.	2	3
<b>Unit 4 : Pivot Tables</b>		13 Hrs	
4.1	Using Pivot tables – Slicers -Report Filters for basic analytics	2	2,5
4.2	Contact Management and Marketing With Excel, Managing Customers, Vendors And Employees, Gaining Product And Service Insights	4	6
4.3	Sales reports using Excel, Supervising Sales With Excel, Preparing Invoices	2	5
4.4	Assessing Account Aging, Analysing Demographics Creating Scheduling and Marketing Calendars	2	3,5
4.5	Creating Standard Excel Templates for routine business data management and analysis activities.	4	5

<b>Unit 5 : Financial and Business Applications</b>		<b>15Hrs</b>	
5.1	Managing Money With Excel, Building & Tracking Budgets, Planning And Tracking Loans, Keeping Account Registers	2	1
5.2	Creating Formulas for Financial Applications, PV, PMT, NPER, RATE, Creating Balance Sheet, Investment Calculations, Depreciation calculations	3	1,3
5.3	Lab based Evaluation, Gauging Business Status with Excel, Configuring Cash Flow Statements, Resolving Business Ratios	6	4
5.4	Creating Standard Excel Templates for routine business data management and analysis activities.	5	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>○ Tests – One MCQ based and on extended answer type</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. Excel 2016 Bible, John Walkenbach, John Wiley & Sons
2. Excel: Formulas & Functions, Robert Dinwiddie
3. Excel 2007 for Dummies by Greg Harvey

## SUGGESTED READINGS

1. Excel 2016 Bible, John Walkenbach, John Wiley & Sons
2. Excel: Formulas & Functions, Robert Dinwiddie
3. Excel 2007 for Dummies by Greg Harvey
4. New Perspectives on Microsoft Office Excel 2007
5. Microsoft Excel 2016 Step by Step, Curtis Frye

<b>Course Name</b>	<b>Business Analytics using R</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E60					
Course Summary & Justification	This course covering the importance and implementation of business analytics using R programming					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	30	15	15	---	60
	Collaborative learning	4	1	2	---	7
	Independent learning	5	3	5	---	13
Pre-requisite	Basic implementation of business analytics using R					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	IDENTIFY opportunities for creating value using business analytics and DESCRIBE the basic concepts in Business Analytics, DATA Science and Business Intelligence.	R	1
2	EXPLAIN the applications of Business Analytics in multiple business domains and scenarios.	U	1
3	DEVELOP a thought process to think like a data scientist/business analyst.	A	2
4	ANALYSE data graphically by creating a variety of plots using the appropriate visualisation tools of R.	An	3
5	SELECT the right functions of R for the given analytics task.	E	1
6	COMBINE various tools and functions of R programming language and use them in live analytical projects in multiple business domains and scenarios.	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Business Analytics Basics</b>		10 Hrs	
1.1	Definition of analytics, Evolution of analytics, Need of Analytics	2	2
1.2	Business analytics vs business analysis, Business intelligence vs Data Science, Data Analyst Vs Business Analyst	3	2
1.3	Types of Analytics, Tools for Analytics. Concept of insights. Importance of data in business analytics	2	1,2
1.4	Differences between data, information and knowledge, various stages of an organisation in terms of data maturity	2	1,2

1.5	Options for organisations in the absence of good quality data	1	2
<b>Unit 2 : Analytical decision-making</b>		20 Hrs	
2.1	Analytical decision-making process, characteristics of the analytical decision- making process.	3	2
2.2	Breaking down a business problem into key questions that can be answered through analytics, Characteristics of good questions, Skills of a good business analyst	4	3
2.3	<b>Overview of Business analytics applications</b> in - Marketing Analytics, HR Analytics, Supply Chain Analytics,	4	2,3
2.4	Retail Industry, Sales Analytics, Web & Social Media Analytics, Healthcare Industry	4	2,3
2.5	Energy Analytics, Transportation Analytics, Lending Analytics, Sports Analytics. Future of Business Analytics.	5	2,3
<b>Unit 3 : Fundamentals of R</b>		10 Hrs	
3.1	R environment, Downloading and Installing R, Using command line in R, Help	2	3,5
3.2	File operations in R -Reading from and Writing to a file, Writing your first code in R, Importing data from spreadsheets, text files	3	3,5
3.3	Spearman's rank correlation coefficient, Coefficient of Determination	2	3
3.4	SAS, SPSS, Connect to RDBMS from R using ODBC, basic SQL queries in R	2	3,5
3.5	Exploration and transformation activities, basics of Web Scraping	1	3,5
<b>Unit 4 - Data types &amp; Data Structures in R</b>		20 Hrs	
4.1	<b>Data types</b> in R and its appropriate uses, Program Structure in R, Flow Control: For loop, If condition, While conditions and repeat loop, Debugging tools	5	1
4.2	Concatenation of Data, Combining Vars , cbind, rbind, Supply, apply, tapply functions, <b>Built-in functions in R like:</b> seq(), cbind (), rbind(), merge()	4	3
4.3	knowledge on the various subsetting methods, <b>summarise data by using functions like:</b> str(), class(), length(), nrow(), ncol(), use of functions like head(), tail(), for inspecting data, summarise data, SQL join in R	5	5
4.4	Introduction to Data Structure in R, Vectors, Lists, Scalars, Data Frames, Matrices, Arrays, Factors	4	3,5
4.5	Use of data structures in different conditions, Advantage of using a particular approach	2	5
<b>Unit 5 : Data Visualisation</b>		20Hrs	
5.1	Concept of Data Visualisation, Popular Data Visualisation tools, Exploratory Data Analysis(EDA), Data Cleaning, Data Inspection	3	1
5.2	uses of the functions like: grepl(), grep(), sub(), summarise(), llist()	2	1,3
5.3	Using graphical functions in R for data visualisation, Line Plots, Bar Plots, Bar Plots for Population, Pie chart	6	4,6
5.4	table plot, histogram, Plotting with base graphics, Plotting with Lattice graphics, Plotting and colouring in R	4	5
5.5	Customising Graphical Parameters to improvise plots, understanding GUIs like Deducer and R Commander, introduction to Spatial Analysis	5	4,5,6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

## REFERENCES

1. R for Business Analytics, A Ohri
2. Data Analytics using R, Seema Acharya, TMGH
3. Data mining and business analytics with R, Johannes Ledolter. New Jersey: John Wiley & Sons.
4. Data Mining for Business Intelligence, Concepts, Techniques and Applications, Shmueli, Patel and Bruce: Wiley

## SUGGESTED READINGS

1. Statistical data analysis explained: applied environmental statistics with R, Clemens Reimann. Chichester: John Wiley and Sons
2. Data science in R: a case studies approach to computational reasoning and problem solving, Deborah Nolan. Boca Raton: CRC Press
3. The analytics revolution: how to improve your business by making analytics operational in the big data era, Bill Franks. Hoboken: Wiley
4. Taming the big data tidal wave: finding opportunities in huge data streams with advanced analytics, Bill Franks. Hoboken: John Wiley & Sons.
5. Big data, big analytics: emerging business intelligence and analytic trends for today's business, Michael Minelli. Hoboken: John Wiley & Sons

<b>Course Name</b>	<b>Advanced Statistical Methods using SPSS</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E61					
Course Summary & Justification	This course covering the essentials of Mathematical, Statistical and computational methods required by a management professional					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	30	15	15	---	60
	Collaborative learning	5	2	5	---	12
	Independent learning	4	2	2	---	8
Pre-requisite	Basic Knowledge of Mathematics, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE, REPRODUCE and RECALL all basic statistical concepts and associated values, formulae.	R	1
2	EXPLAIN the statistical tools and DESCRIBE their applications in multiple business domains and scenarios	U	2
3	APPLY time series analysis in prediction of various trends.	A	2, 5
4	DISCRIMINATE between various types of probability and probability distributions.	An	4
5	FORMULATE and TEST hypothesis using tools of R.	E	2, 5
6	COMBINE various tools and functions of R programming language and Use them in live analytical projects in multiple business domains and scenarios.	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Statistics with R</b>		18 Hrs	
1.1	<b>Computing basic statistics</b> :, Business Hypothesis Testing concepts, Basics of statistical modelling, Logistic Regression	4	1,3
1.2	Comparing means of two samples, Testing a correlation for significance	3	1,3
1.3	<b>Testing a proportion</b> :T test, Z Test, F test, Basics of Analysis of variance (ANOVA), One way ANOVA, ANOVA with interaction effects, Two way ANOVA	5	2,3
1.4	Summarising Data, Data Mining Basics, Cross tabulation	3	2,3
1.5	Case studies in different domains-using SPSS	3	3
<b>Unit 2 : Linear Regression</b>		20 Hrs	
2.1	<b>Concept of Linear regression</b> : Dependency of variables, Ordinary Least Sum of Squares Model, Multiple Linear Regression	4	2
2.2	Data Presentation using Charts& Graphs	3	1,3



2.3	Obtaining the Best fit line, Assumptions and Evaluation, Outliers and Influential Observations, Multi-collinearity	4	3
2.4	Dimension Reduction Techniques–Concept of latent dimensions, need for dimension reduction, Principal Components Analysis, Factor Analysis	6	3,5
2.5	Case studies in different domains-using SPSS	3	3,5
<b>Unit 3 : Probability</b>		14 Hrs	
3.1	Introduction to probability, meaning and Definition	1	3
3.2	Mutually Exclusive events, Independent Events, Marginal Probability, Conditional Probability, Bayes Theorem	7	3,5
3.3	Probability Distributions : Continuous, Normal, Central Limit theorem, Discrete distribution, Poison distribution, Binomial distribution	6	3,5
<b>Unit 4 : Predictive Modelling</b>		19 Hrs	
4.1	<b>Multiple Linear Regression</b> : Concept of Multiple Linear regression, Stepwise Regression, Dummy Regression, Case studies in different domains - using SPSS	5	1
4.2	<b>Logistic regression</b> :Concept of Logistic Regression, odds and probabilities, Log likelihood ratio test, Pseudo R square, ROC plot, Classification table, Logistic regression& classification problems, Case studies in different domains - using SPSS	8	3
4.3	<b>Linear Discriminant Analysis</b> : Discriminant Function, Linear Discriminant Analysis, Case studies in different domains-	6	5
<b>Unit 5- : Time Series</b>		13 Hrs	
5.1	Time Series objects in R, Trends and Seasonality Variation, Decomposition of Time Series	3	1
5.2	Autocorrelation function (ACF) and Partial autocorrelation (PACF) plots	3	1,3
5.3	Exponential Smoothing, holt's Winter Method, Autoregressive Moving Average Models (ARMA), Auto regressive Integrated Moving Average Models (ARIMA)	5	4
5.4	Case studies in different domains- using SPSS	2	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA) <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Open Book Surprise Test</li> </ul> </li> <li>End Semester Examination</li> </ul>

## REFERENCES

1. R for Business Analytics, A Ohri
2. Data Analytics using R, Seema Acharya, TMGH
3. Data mining and business analytics with R, Johannes Ledolter., New Jersey: John Wiley & Sons
4. Statistical Methods, S. P. Gupta
5. Quantitative Techniques, L. C. Jhamb

## SUGGESTED READINGS

1. Richard L. Levin and David S. Rubin, Statistics for Management, PHI, New Delhi.
2. Qazi Zameeruddin, Khanna, Business Mathematics, Vikas Publications, 2004.
3. Edward C. Willet, MS Office, Wiley Publishing Co, New Delhi

<b>Course Name</b>	<b>Data Visualisation using Tableau</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E62					
Course Summary & Justification	This course covering the essentials data visualisation and customisation of data					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	35	15	10	---	60
	Collaborative learning	4	2	1	---	7
	Independent learning	10	2	1	---	13
Pre-requisite	Basic analytic knowledge, logical data processing capability					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE DEFINE Tableau terminology and SHOW how to Connect to your data, Edit and save a data source.	R	1
2	EXPRESS, ILLUSTRATE the use of the Tableau interface to effectively create powerful visualisations and charts.	U	1
3	CALCULATE : Calculated field, aggregate functions, conditional function	A	2
4	ILLUSTRATE INTEGRATE data sources using data blending and Combine data from multiple tables in the same data source using joins.	An	3
5	INTERPRET, CREATE basic calculations including basic arithmetic calculations, custom aggregations and ratios, date math, and quick table calculations.	E	1
6	BUILD spatial visualisations of non-geographic data by using advanced geographic mapping techniques and custom images and geocoding.	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Data Connection in Tableau</b>		13 Hrs	
1.1	<b>Connect to external data:-</b> Tableau terminology, Tableau interface/paradigm, Create and save data connections, Create a live	4	1,2

	connection to a data source, Explain the differences between using live connections versus extracts		
1.2	Joins: Different joins, union and data blending	4	1,3
1.3	Data types:- Manage data properties, Rename a data field, Assign an alias to a data value, Assign a geographic role to a data field, Change data type for a data field (number, date, string, boolean, etc.), Change default properties for a data field (number format, aggregation, colour, date format, etc.)	5	2,3
<b>Unit 2 : Organising Data- Filters</b>		17Hrs	
2.1	Organise data and apply filters, Filter data, Sort data, Build groups, Build hierarchies, Build sets, Add a filter to the view,	4	3
2.2	Filters in Tableau Dimension Filter Date Filter Measure Filter Visual filter Interactive Filter Data Source Filter Context Filter	4	1,3
2.3	Practice using sales data with filter implementation	5	3
2.4	Worksheet: Apply analytics to a worksheet, Add a manual or a computed sort, Add a reference line or trend line, Use a table calculation	5	3
<b>Unit 3 : Applying Analytics to the worksheet</b>		14 Hrs	
3.1	Applying Analytics to the Worksheet, Sets, Parameters, Group, Calculated Fields, Date Functions, Text Functions, Bins and Histogram, Sort Reference and Trend Lines, Table Calculations, Pareto Chart Waterfall Chart	8	3
3.2	spatial visualisations of non-geographic data, Using titles, captions and tooltips, Editing axes, Mark labels and annotations	6	3,5
<b>Unit 4 : Calculations</b>		16 Hrs	
4.1	Manipulating string and date calculations, Create quick table calculations, Introduction to Level of Detail (LODs) Fixed LOD Include LOD Exclude LOD, Use LOD calculations; types of LOD calculations, Use Ad-hoc calculations	6	1,3
4.2	Work with aggregation options, Build logic statements, Build arithmetic calculations, Build grand totals and sub-totals, Use calculations in join clauses, Create a calculated field (e.g. string, date, simple arithmetic), Add a parameter, <u>Practice works using real data</u>	10	3
<b>Unit 5 : Formatting presentation</b>		20Hrs	
5.1	Introduction to dashboard, formatting dashboard, actions, inserting web page, picture, worksheet	4	1,2
5.2	Format view for presentation, Use colour, Use bolding, Use shapes, Change size of marks, Select fonts, Create and modify a dashboard, Create a dashboard layout, Add interactive or explanatory elements,	4	1,3
5.3	Modify existing dashboard layout for mobile devices, Create a story using dashboards or views, Share a twbx as a PDF, Share a twbx as an image.	4	1,3
5.4	Project 1: A comparative study:- Build a dashboard to do a comparative study on various parameters of different countries, using the sample insurance and world development indicators dataset. Domain: Insurance and Finance	4	1,4
5.5	Project 2: Sales Performance Analysis Build a dashboard to present monthly sales performance by product segment and product category for the purposes of identifying the areas that have met or exceeded their sales targets. Domain: E-commerce	4	1,4
5.6	Project : Sales Dashboard Build a dashboard that presents metrics about products (e.g. sales, profits, profit ratio) and the trends of statistics over a given period of time, filtering down to a number of geographic regions	2	1,4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>○ Tests – One MCQ based and on extended answer type</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

### **SUGGETED READINGS**

1. Mastering Tableau, David Baldwin
2. Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations, Ben Jones
3. Learning Tableau, Joshua N. Milligan
4. Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master, Ryan Sleeper

<b>Course Name</b>	<b>Introduction to Big data and Cloud computing</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E63					
Course Summary & Justification	This course offers an introduction towards big data analysis and cloud computing					
Semester	3/4	Credit			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	20	10	10	---	40
	Collaborative learning	10	5	5	---	20
	Independent learning	10	5	5	---	20
Pre-requisite	Basic analytic knowledge, data storage concepts					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE DEFINE basic terminologies in big data and cloud computing	R	1
2	EXPRESS, ILLUSTRATE how data processing and storage occurs	U	1
3	CALCULATE : storage capacity and resource capability	A	2
4	ILLUSTRATE INTEGRATE different service providers and their concepts	An	3
5	INTERPRET, CREATE account in different services	E	1
6	BUILD solution for different services and storage requirement	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1: Introduction to big data</b>		12 Hrs	
1.1	What is big data, why big data, convergence of key trends, unstructured data, industry examples of big data, web analytics	4	1,3
1.2	big data and marketing, fraud and big data, risk and big data, credit risk management, big data and algorithmic trading	4	1,3
1.3	Big data and healthcare, big data in medicine, advertising and big data, big data technologies, introduction to Hadoop, open source technologies, cloud and big data	4	1,3

<b>Unit 2 : Data Modelling</b>		14Hrs	
2.1	Introduction to streamed, structured and unstructured data, Storage of unstructured data	2	3
2.2	Introduction to NoSQL, aggregate data models, aggregates, key-value and document data models, relationships, graph databases, schema less databases,	3	1,3
2.3	Materialized views, distribution models, sharding, master-slave replication, peer-peer replication, sharding and replication, consistency, relaxing consistency, version stamps,	4	3
2.4	Map-reduce, partitioning and combining, composing map-reduce calculations.	5	3
<b>Unit 3 : Cloud computing</b>		11 Hrs	
3.1	<b>Cloud Computing</b> Historical Developments, Building Cloud Computing Environments, Computing Platforms and Technologies, Introduction to Cloud Computing, System Models for Distributed and Cloud Computing	5	3
3.2	Software Environments for Distributed Systems and Clouds – Cloud Computing and Service Models – Public – Private – Hybrid Clouds	6	3,1
<b>Unit 4 : Cloud Infrastructure</b>		12 Hrs	
4.1	Infrastructure-as-a-Service (IaaS) – Platform-as-a Service (PaaS) - Software-as-a-Service (SaaS)-Different Service Providers, Data Analytics as a Service Introduction to Public and Private Clouds ,	5	1,3
4.2	Shared Resources – Resource Pool –Storage as a service, Historical Perspective, Datacenter Components, Design Considerations, Power Calculations, Evolution of Data Centers	4	3
4.3	Cloud data storage – Cloud TM Virtualisation: Introduction, Characteristics of Virtualised, Environments ,Virtualisation and Cloud Computing, Pros and Cons of Virtualisation	3	1
<b>Unit 5 : AWS and Azure</b>		20Hrs	
5.1	Introduction to AWS, AWS Global Infrastructure, Create AWS Account, quick tour of AWS Console, AWS Services Overview, AWS Compute Services, AWS Storage Services, AWS Database Services, sample AWS architecture.	4	1 ,2
5.2	Azure Brief History, Azure Global Infrastructure, Create Azure Account, Quick tour of Azure Console, Azure Services Overview	4	1,3

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Open Book Surprise Test</li> </ul> </li> <li>End Semester Examination</li> </ul>

## **SUGGETED READINGS**

1. Big Data, Big Analytics: Emerging Business intelligence and Analytic trends for Today's Business, Michael Minelli, Michelle Chambers, and Ambiga Dhiraj, John Wiley & Sons, 2013
2. Big Data Analytics, Introduction to Hadoop, Spark, and Machine-Learning, Raj Kamal, Preeti Saxena, McGraw Hill, 2018.
3. George Reese, "Cloud Application Architectures: Building Applications and Infrastructure in the Cloud (Theory in Practice)", O'Reilly Publications, 2009.
4. Haley Beard, "Cloud Computing Best Practices for Managing and Measuring Processes for On-demand Computing – applications and Data Centers in the Cloud with SLAs", Emereo Pty Limited, July 2008

<b>Course Name</b>	<b>Industry 4.0 and Internet of Things</b>				
Type of Course	Elective – Business Analytics				
Course Code	MBM21E64				
Course Summary & Justification	This course covers the basics of Industry 4.0 , key technological components and interconnected IoT systems.				
Semester	3/4	Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Total
	Authentic learning	30	15	15	60
	Collaborative learning	5	2	5	12
	Independent learning	4	2	2	8
Prerequisite	Basics of internet , Mobile Applications and computing environments.				

### COURSE OUTCOMES (CO)

CO NO.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	ENUMERATE the drivers, enablers and compelling forces for industry 4.0, data science in manufacturing, operations analytics and IIOT	R	2
2	DISCUSS various systems used in a manufacturing plant and their role in an Industry 4.0 paradigm and the value added by analytics in the operations function.	U	2
3	DEMONSTRATE the practical applications of data analytics and data science in manufacturing operations.	A	2
4	EXAMINE the Industrial Internet of things (IIoT), the role of Big Data Analytics and the opportunities, challenges brought about by Industry 4.0.	An	2
5	EXPLAIN the applications of analytics in operations.	E	2
6	COMPILE the issues pertaining to the adoption of technologies that will shape industry	C	2,5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1: Data Science for Modern Manufacturing</b>		12 Hrs	
1.1	Business Analytics and Big Data Driving Organisational Change, Industry 4.0, Industrial Internet	1	1
1.2	(Industrial) Internet of Things - A Platform Built for Manufacturing, Big Data and Analytics – Hardware, Platforms. Technology & Global Trends	2	2
1.3	The data-driven manufacturer, Issues and Challenges Data Science for Modern Manufacturing – Blending analytic skills and domain expertise,	2	2
1.4	Rethinking business processes, Factoring in change management, Security, Data Integration	4	2,3
1.5	Autonomous Robots, Augmented Reality, and More: Simulation, Additive Manufacturing.	6	2,3
<b>Unit 2 : Introduction to Industry 4.0</b>		18 Hrs	
2.1	Overview of the Various Industrial Revolutions, Digitisation and the Networked Economy, Industry 4.0 Paradigm	3	1
2.2	Industry 4.0 characteristics – Interoperability, Virtualisation, Decentralisation, Real- time capability, Service orientation , Modularity, Convergence, Cost reduction and efficiency, Mass customisation.	3	1,2
2.3	Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0, Evolution in USA, Europe, China and other countries,	4	2
2.4	Comparison of Industry 4.0 Factory and Today's Factory, Trends of Industrial Big Data and Predictive Analytics for Smart Business Transformation	4	4
2.5	Logic for Problem solving, Logic Programming with PROLOG , PROLOG Systems and Implementations, Execution Control and Procedural Elements, Constraint Logic Programming, Simple Examples	4	4
<b>Unit 3- Technological Ecosystem &amp; Applications and the way ahead of Industry 4.0</b>		19 Hrs	
3.1	Technologies for enabling Industry .0, Cyber physical Systems,	2	4
3.2	Robotic Automation and Collaborative Robots	3	4,5
3.3	Support System for Industry 4.0, Mobile Computing, Related Disciplines	3	4
3.4	Applications : Automotive, Agriculture, Retail, Healthcare, Fintech, Manufacturing, Applications and Case Studies	4	5
3.5	Industry 4.0 laboratories , IIoT case studies, Business issues in Industry 4.0 Opportunities and Challenges	4	5
3.6	Future of Works and Skills for Workers in the Industry 4.0 Era, Strategies for competing in an Industry 4.0 world.	3	5
<b>Unit 4: Industrial IoT- Application Domains:</b>		15 Hrs	
4.1	Healthcare, Power Plants	3	4,5
4.2	Inventory Management & Quality Control	4	5
4.3	Plant Safety and Security (Including AR and VR safety applications.	4	5
4.4	Facility Management.	4	5
<b>Unit 5: Industrial IoT- Application Domains:,</b>		16 Hrs	
5.1	Oil, chemical and pharmaceutical industry, Applications of UAVs in Industries	3	5
5.2	Case study - II: Manufacturing Industries - Part I	3	5
5.3	Case study - III : Manufacturing Industries - Part II	3	5
5.4	Case study – IV, Virtual Reality Lab	3	5
5.5	Case study - V : Steel Technology Lab	4	5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active cooperative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ol style="list-style-type: none"> <li>1. Continuous Assessment (CA)             <ol style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ol> </li> <li>2. End Semester Examination</li> </ol>

## REFERENCES

1. Introduction to Artificial Intelligence by Wolfgang Ertel, Springer, Translated by Nathanael Black
2. Artificial Intelligence by Elaine Rich, Kevin Knight and Nair, TMH
3. A First Course in Artificial Intelligence by Deepak Khemani, McGraw Hill Education(India)

## SUGGESTED READINGS

1. Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig, Pearson
2. Artificial Intelligence by Saroj Kausik, Cengage Learning
3. Artificial Intelligence by Dan W Patterson, Prentice Hall of India

<b>Course Name</b>	<b>Machine Learning using Python</b>				
Type of Course	Elective – Business Analytics				
Course Code	MBM21E65				
Course Summary & Justification	This course covers the basics of machine learning concepts and algorithms through the programming language Python.				
Semester	3/4	Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Total
	Authentic learning	30	15	15	60
	Collaborative learning	5	2	5	12
	Independent learning	4	2	2	8
Prerequisite	Basic Knowledge of Mathematics, Statistics and Business Applications is required.				

### COURSE OUTCOMES (CO)

CO NO.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	DEFINE the key terms in Python, Machine Learning and Cognitive Intelligence	R	2
2	EXPLAIN the applications of Machine Learning in multiple business domains and scenarios	U	2
3	DEVELOP a thought process to think like data scientist/business Analyst	A	2, 5
4	ANALYSE data using supervised and unsupervised Learning Techniques	An	2
5	SELECT the right functions, arrays of Python for Machine Learning algorithms.	E	2
6	COMBINE various tools and functions of Python language in developing Machine Learning algorithms and use them in live analytical projects in multiple business domain and scenarios.	C	2,5
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1 : Python Basics</b>		15 Hrs	
1.1	Overview, Python Features, Basic Syntax, Variable Types	2	1
1.2	Basic Operators, decision making	3	1
1.3	Loops, Python Data Structures - Lists and Tuples, Sets, Dictionaries, Date & time, Functions, Scope of Variables	5	1
1.4	Objects and Classes.	5	1
<b>Unit 2 : Working with Data in Python</b>		15 Hrs	
2.1	Reading files with Open, writing files with Open	1	2
2.2	Loading data with Pandas, working with and saving with Pandas	2	3
2.3	Array oriented Programming with Numpy	4	3
2.4	Data cleaning and preparation, Plotting and Visualisation	4	2,3
2.5	Data Aggregation and Group Operations.	4	3
<b>Unit 3 : Machine Learning</b>		18 Hrs	
3.1	Introduction to Machine Learning- History and Evolution, Machine Learning categories: Supervised, Unsupervised and Reinforcement learning.	3	4
3.2	Framework for building ML Systems	5	4
3.3	KDD process model, CRISP-DM & SEMMA	5	3,4
3.4	Machine learning Python packages, Machine Learning Core Libraries.	5	4,5
<b>Unit 4 : Supervised Learning</b>		18 Hrs	
4.1	Introduction to classification	2	1, 2
4.2	Linear Regression, Metrics for evaluating linear model	3	2
4.3	Multivariate regression, Non-Linear Regression	3	2
4.4	K-Nearest Neighbour, Decision Trees	3	2
4.5	Logistic Regression, Support Vector Machines	3	2
4.6	Model Evaluation, Applications of supervised learning in multiple domains.	4	2,4
<b>Unit 5 : Unsupervised Learning</b>		14 Hrs	
5.1	Clustering	2	1, 2
5.2	Hierarchical clustering	4	2
5.3	Partitioning Clustering- K-mean clustering	4	2
5.4	Applications of unsupervised learning in multiple domains.	4	2

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active cooperative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> 1. Continuous Assessment (CA) <ol style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Open Book Surprise Test</li> </ol> 2. End Semester Examination

## REFERENCES

- Machine Learning using Python - Manaranjan Pradhan, U Dinesh Kumar
- Ultimate Step by Step Guide to Machine Language using Python: Predictive modeling concepts explained in simple terms for beginners by Daneyal Anis
- Machine Learning by Anuradha Srinivasaraghavan and Vincy Joseph
- Machine Learning in Python – Michael Bowles
- Machine Learning for Absolute Beginners: A Plain English Introduction (First Edition) by Oliver Theobald

## SUGGESTED READINGS

- Mastering Machine Learning with Python in Six Steps: A Practical Implementation Guide to Predictive Data Analytics Using Python by Manohar Swamynathan
- Machine Learning by Tom Mitchell

Course Name	Artificial Intelligence in Business Applications				
Type of Course	Elective – Business Analytics				
Course Code	MBM21E66				
Course Summary & Justification	This course covers the application of Artificial Intelligence tools and techniques in various business domains.				
Semester	3/4	Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Total
	Authentic learning	30	15	15	60
	Collaborative learning	5	2	5	12
	Independent learning	4	2	2	8
Prerequisite	Basic Knowledge of Mathematics, Statistics and Business Applications is required.				

### COURSE OUTCOMES (CO)

CO NO.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	IDENTIFY KNOWLEDGE associated and represent it by logical sequence and plan a strategy to solve given problem	R	2
2	UNDERSTAND AI's fundamental concepts and methods.	U	2
3	APPLY various machine learning algorithms on structured data to develop machine learning models.	A	2
4	ACQUIRE advanced Data ANALYSIS SKILLS through algorithm and search processes.	An	2
5	SELECT logical and functional process to develop the model	E	2
6	CREATE SOLUTIONS for various business problems using AI techniques.	C	2,3
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1: Introduction to AI and Programming Tools</b>		10 Hrs	
1.1	Analytics Landscape, Complexity of Analytics, What Is Artificial Intelligence?	1	1,2
1.2	Embedding AI into Business Processes, Basic Concepts of Artificial Intelligence Brain Science and Problem Solving, The History of AI, Benefits of AI Data Pyramid Property of Autonomy, The AI Revolution, Business Innovation with Big Data and Artificial Intelligence.	2	1,2
1.3	AI and Predictive Analytics, Overlapping of Artificial Intelligence with Other Fields Ethics and Privacy Issues, Application Areas, AI and Society.	3	2
1.4	Knowledge-Based Systems Knowledge Based Reasoning: Agents, Facets of Knowledge.	4	2
<b>Unit 2 : Logic and Inferences</b>		14 Hrs	
2.1	Formal Logic, Propositional and First Order Logic, Resolution in Propositional and First Order Logic, Deductive Retrieval, Backward Chaining, Second order Logic	2	2,3
2.2	Knowledge Representation: Conceptual Dependency, Frames, Semantic nets.	2	2,3
2.3	Reasoning Systems for Categories, Reasoning with Default Information.	3	3
2.4	Propositional Logic & Predicate logic - Syntax., Semantics , Computability and Complexity Applications and Limitations.	3	3
2.5	Logic for Problem solving, Logic Programming with PROLOG , PROLOG Systems and Implementations, Execution Control and Procedural Elements, Constraint Logic Programming, Simple Examples	4	3
<b>Unit 3 : Problem Solving, Search and Game Techniques</b>		16 Hrs	
3.1	Problem solving with AI, Study and analysis of various searching algorithms, Local Search in Continuous Spaces, Searching with Non-deterministic Actions	2	3
3.2	General Problem Solver, Gelernter's Geometry Theorem, STRIPS, ABSTRIPS,	3	3
3.3	Search - Overview, Problem representation State-space representation, Problem-reduction representation, Uninformed Search - Blind state-space search, Breadth-First Search, Uniform-cost search, Depth-First Search, Iterative Deepening,	3	3,4
3.4	Heuristic Search, Greedy Search , A★-Search ,IDA★-Search. Games with Opponents- Minimax Search, Alpha-Beta-Pruning Non-deterministic Games.	2	4
3.5	Heuristic Evaluation Functions Game trees, optimal search for an optimal solution. Conditions for optimality: Admissibility and consistency, Optimality of A*	2	4
3.6	Optimisation Problems: Hill-climbing search Simulated annealing, Local beam search, Recursive Best First Search, Pruning the CLOSED and OPEN Lists.	4	3,4

<b>Unit 4: Machine Learning and Data Mining</b>		20 Hrs	
4.1	Introduction - What is machine learning?, Supervised vs. unsupervised learning , Reinforcement Learning.	1	1,2
4.2	Machine Learning Workflow, Learning Algorithms, Linear Regression k-Nearest Neighbour , Decision Trees,	2	2
4.3	Feature Construction and Data Reduction ,Random Forest, k-Means Algorithm, Gradient Boosting,	2	2
4.4	Analysing Big Data Different Deep Learning Models, Auto encoders, Data Analysis, The Perceptron, a Linear Classifier, The Learning Rule, Optimisation and Outlook	3	2
4.5	The Nearest Neighbour Method, Two Classes, Many Classes, Approximation, Case-Based Reasoning, Decision Tree Learning	4	2
4.6	Entropy as a Metric for Information Content, Learning of Appendicitis Diagnosis, Cross-Validation and Over fitting, Learning of Bayesian Networks	4	2
4.7	Learning the Network Structure, The Naive Bayes Classifier, Clustering ,Hierarchical Clustering, Data Mining in Practice	4	2
<b>Unit 5: Natural language processing &amp; Neural Networks</b>		20 Hrs	
5.1	Introduction to Natural Language Processing, Stages in NLP, NLP Models,	1	2
5.2	Morphological Processing - Syntax and Semantics, Text Analytics, Sentiment Analysis, Syntactic Analysis (Parsing), Semantic interpretation	2	2,3
5.3	Discourse and pragmatic Processing, Text Classification, Implementation aspects of Syntactic Analysis (Parsing), Application of NLP in Machine Translation, Information Retrieval and Big Data Information Retrieval.	3	3,4
5.4	Learning: Supervised, Unsupervised and Reinforcement learning. Use Cases of NLP, Applications of NLP in Business Customer Service, Reputation Monitoring.	3	4
5.5	Market Intelligence, Sentiment Technology in Business. Artificial Neural Networks - Concept, Feed forward and Feedback ANNs, Error Back Propagation, Boltzmann Machine,	5	4,5
5.6	Deep Neural Network and Tools, Hopfield Networks , Application to a Pattern Recognition Example, Neural Associative Memory , Linear Networks with Minimal Errors, Applications of Neural Network	6	5



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active cooperative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
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3. A First Course in Artificial Intelligence by Deepak Khemani, McGraw Hill Education(India)

#### SUGGESTED READINGS

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2. Artificial Intelligence by Saroj Kausik, Cengage Learning
3. Artificial Intelligence by Dan W Patterson, Prentice Hall of India

<b>Course Name</b>	<b>Marketing and Retail Analytics</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E67					
Course Summary & Justification	This course covering the essentials of marketing strategies and basic analytics methods and tool for analytics					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	35	15	10	---	60
	Collaborative learning	4	2	1	---	7
	Independent learning	10	2	1	---	13
Pre-requisite	Basic Knowledge of marketing and analytics					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE DESCRIBE the use of Voice of the Customer data in making data driven marketing decisions.	R	1
2	EXPRESS DEMONSTRATE an understanding of utility theory to measure customer preferences and choices.	U	1
3	CALCULATE what customers' value in a product, and assess what they are willing to pay for it.	A	2
4	ILLUSTRATE the use of various tools and frameworks to solve strategic marketing problems using marketing data.	An	3
5	INTERPRET the most effective target markets.	E	1
6	CREATING a study that incorporates the key tools of Marketing Analytics.	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Segmentation Analytics</b>		13 Hrs	
1.1	Market Segmentation Variables, Market Segmentation Types, Marketing Data Landscape, Data for Segmentation, Analytics for Need Based Segmentation	4	1,3
1.2	Voice of the Customer, Managing "Voice of the Customer" Data, Customer Co-Creation, RFM Analysis, Life Cycle Segmentation, Cross Tabulation Segmentation, Regression based segmentation	5	1,3

1.3	Clustering, Conjoint Analysis Segmentation, The Cluster Analysis + Discriminant Analysis Approach	4	2,3
<b>Unit 2 : Approaches to Choosing Target Segment</b>		16 Hrs	
2.1	Rationale for Segment Targeting, Analytics for Perceptual Mapping and Product Positioning, Product Positioning, Multi-Dimensional Scaling (MDS) and Factor Analysis	5	2
2.2	Relevance of Mapping for Product Positioning, Preference Mapping, Incorporating Preferences in Perceptual Mapping.	4	1,3
2.3	<b>Analytics for Product/Service Design:</b> The Relevance of Trade-off Approaches, Conjoint Analysis, Approaches to Conjoint Analysis, Interpreting Conjoint Results, Optimising Design using Conjoint Results.	4	2,3
<b>Unit 3 : Analytics for Tracking Customer Growth</b>		16 Hrs	
3.1	Rationale for Customer Analytics, Customer acquisition cost, Customer Churn, Customer Attrition models, Customer lifetime value, Net promoter score	4	1,2
3.2	Calculating the number of new customers, Calculating average customer age & Days to convert, Calculating customer acquisition cost & Average purchases, Calculating touch points & Lead conversion, Analysing age demographics	4	3,5
3.3	First contact with customer, Customer satisfaction, Understanding customer engagement, Diffusion Models - The Bass Model	5	1,4
<b>Unit 4 : Supply Chain Analytics &amp; Store Operations</b>		15 Hrs	
4.1	Creating a Demand-Driven Supply Chain, Gaining Visibility across the Supply Chain, Resolving Operations Problems Promptly, Logistics, Inventory, Supplier performance, Demand forecasting	6	1,2
4.2	Vendor Intelligence, Vendor Rankings, Fulfillment Intelligence, Inventory Diagnostics, Shrinkage, Optimisation opportunities.	4	1,5
4.3	Using Analytics to Optimise Staffing Plans, Drilling into HR analytics, Customer Traffic, Store Performance Dashboards, Local Market Analytics, Online Offline Analytics, Sales Trends, Brand Performance, Account Performance Forecasts.	5	4,5
<b>Unit 5 : Power Bi for business analytics</b>		20Hrs	
5.1	Introduction to Power BI- Desktop Layout, Features, and Views Connecting to Common Data Sources Query Editor Layout and Functionality Creating Relationships in Your Data Model	1	1
5.2	Built-in Aggregations Calculated Columns and Measures A Visual Demonstration Some Slightly Advanced Measures	3	4,6
5.3	Area Chart, Bar Chart, Card, Clustered Bar Chart, Clustered Column Chart, Column Chart Donut Chart, Funnel Chart, Heat Map, Line Chart, Clustered Column and Line Chart, Line and Stacked Column Chart, Matrix Map, Filled Map	7	4,6
5.4	Slicer, Basic Filters, Advanced Filters, Top N Filters, Filters on Measures, Page Level Filters, Report Level Filters, Drill through Filters, Calculated Columns, Conditional Columns, Calculated Measures, Calculated Tables, Custom Columns	6	4,5
5.5	Introduction to dashboard, sample Project work	3	1,5

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>○ Continuous Assessment (CA)           <ul style="list-style-type: none"> <li>▪ Tests – One MCQ based and on extended answer type</li> <li>▪ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>▪ Open Book Surprise Test</li> </ul> </li> <li>○ End Semester Examination</li> </ul>

### SUGGETED READINGS

1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wayne L. Winston
2. Marketing Analytics: Strategic Models and Metrics, Stephan Sorger
3. Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques, Mike Grigsby
4. Retail Analytics – The Secret Weapon, Emmett Cox
5. Behaviour Analytics in Retail, Ronny Max
6. The Little Book on Big Data: Understand Retail Analytics Through Use Cases and Optimize Your Business, Mahogany Beckford
7. The New Science of Retailing: How Analytics are Transforming the Supply Chain and Improving Performance, Fisher and Raman

<b>Course Name</b>	<b>Social Media, Web and Text Analytics</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E68					
Course Summary & Justification	This course covering the essentials of Analytics technologies for Social Media, Web and Text Analytics, social media awareness and computational methods required by a management professional					
Semester	3/4	Credits			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	35	15	10	---	60
	Collaborative learning	4	2	1	---	7
	Independent learning	10	2	1	---	13
Pre-requisite	Basic Knowledge of Social Awareness, Statistics and Computer Applications					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE, REPRODUCE and DEFINE all basic awareness about social media, The key terms in Social Media Analytics, Web Analytics and Text Analytics	R	1
2	EXPLAIN the applications of Social Media Analytics, Web Analytics and Text Analytics in multiple business domains and scenarios	U	1
3	DEVELOP a thought process to harness the power of social media analytics to improve website or business	A	4
4	ANALYSE Social Media Analytics and Web Analytics Tools	An	2,5
5	SELECT the right metrics for Social Media Analytics and Web Analytics	E	1
6	COMBINE various tools and metrics in building high impact dashboard in multiple business domains and scenarios	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Social Media Overview</b>		15 Hrs	
1.1	<b>Social Media Introduction:</b> definition, evolution, need of social media, Importance of Social Media	3	1
1.2	<b>Social Media Data Sources:</b> Data Resources, Use of Social Media in Business, Objective and KPIs, Measure	4	1,3
1.3	<b>Content flow on Social Network:</b> Challenges, Tools to analyse and measure social data (Facebook, Twitter, Instagram, LinkedIn, YouTube)	4	2,3

1.4	<b>Social Analytics and competitors:</b> Analytics methods, Strategy planning in Social Media Analytics	4	2
<b>Unit 2 : Social Analytics - Measuring Success</b>		25 Hrs	
2.1	<b>Metric categories :</b> Divide and Conquer, Selecting the best metrics for the job, Default and Custom Metrics	3	2
2.2	<b>Elements of effective metrics :</b> Metrics and Strategy, Estimated Metrics, Use and Common applications	5	1,3
2.3	<b>Dashboards:</b> Definition,Purpose,Objectives,defaultandcustomdashboards	4	3
2.4	<b>Reports :</b> elements of reporting, good quality of reporting, 360 overview report	4	3,5
2.5	<b>Data gathering in social Media Analytics :</b> Types of Analytics in Social Media, Charts, Machine learning in Social Media.	9	3,5
<b>Unit 3 : Web Analytics Overview</b>		17 Hrs	
3.1	<b>Introduction to Web Analytics :</b> Web Analytics 2.0	2	3
3.2	<b>Elements of WebAnalytics 2.0:</b> Clickstream, Multiple Outcomes, Experimentation and Testing, Voice of Customer, Competitive Intelligence & Choosing the right web analytic tool	5	3
3.3	Competitive Intelligence & Choosing the right web analytic tool	3	3,5
3.4	<b>Critical Web Metrics :</b> Visits and Visitors, Time on Page and Time on Site, Bounce Rates, Exit Rates, Conversion Rates, and Engagement	5	5
3.5	Attributes of Great Metrics, Web Metrics Lifecycle Process.	2	3
<b>Unit 4: Web Analytics - Measuring Success</b>		15 Hrs	
4.1	<b>Actionable Outcome KPIs :</b> Task completion Rate, Share of Search, Visitor Loyalty and Recency, RSS/Feed Subscribers, % of Valuable Exits	4	1
4.2	Cart and Checkout Abandonment, Days and Visits to Purchase	2	3
4.3	Average Order Value, Identify the Convertible, Measuring Macro and Micro Conversions	5	5
4.4	Building the action Dashboard, Consolidated Dashboard, Rules for High-Impact Dashboards	4	3,5
<b>Unit 5 :Text Analytics</b>		12 Hrs	
5.1	Introduction to text Analytics	3	1
5.2	Processing and Understanding Text -Tokenisation	4	1,3
5.3	Tagging Chunking, Stemming, Lemmatisation, Applications of Text Analytics	5	4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>a. Tests – One MCQ based and on extended answer type</li> <li>b. Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>c. Open Book Surprise Test</li> </ul> </li> <li>End Semester Examination</li> </ul>

## **REFERENCES**

1. Web Analytics 2.0 : The Art of Online Accountability and Science of Customer Centricity by Avinash Kuashik
2. Web Analytics : An Hour a Day by Avinash Kuashik
3. Web Analytics Action Hero: Using Analysis to Gain Insight and Optimize Your Business by Brent Dykes
4. Practical Web Analytics for User Experience by Michael Beasley
5. Text Analytics with Python: A Practical Real-World Approach to Gaining Actionable Insights from your Data by Dipanjan Sarkar

## **SUGGETED READINGS**

1. Social Media Marketing Step by Step: The Guides to Instagram and Facebook Marketing – Bryan Bren
2. Social Media Analytics Strategy: Using data to optimize Business Performance–Alex Goncalves
3. Effective Advertising and Social Media : Strategy and Analytics– Gerard Tellis
4. Measuring the User Experience: Collecting, Analysing and Presenting Usability Metrics by Tom Tullis, Bill Albert, Morgan Kaufmann
5. Social Media Metrics: How to Measure and Optimize Your Marketing Investment by Jim Sterne, John Wiley & Sons
6. Advanced Web Metrics with Google Analytics by Brian Clifton, John Wiley & Sons

<b>Course Name</b>	<b>HR Analytics</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E69					
Course Summary & Justification	This course deals with the key concepts related with HR Analytics					
Semester	3/4	Credit			4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	35	15	10	---	60
	Collaborative learning	4	2	1	---	7
	Independent learning	10	2	1	---	13
Pre-requisite	Basic Knowledge of HR analytics and implementation.					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	ENUMERATE the key concepts related to the subject matter.	R	1
2	DEMONSTRATE experimentation and innovation	U	1
3	USE thinking & decision making ability beyond the existing capabilities and present environment.	A	2
4	ANALYSE the behavioural Patterns of an individual & Map the competency- the audit Perspective.	An	3
5	EXPLAIN the innovative and formulate strategies which enhance innovative skills and Promote Innovation.	E	1
6	FORMULATE the linkage between HR Analytics and Business Analytics.	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction &amp; Concept</b>		15 Hrs	
1.1	<b>Disruptive Technological Era:</b> Evolution of Industry Revolution 4.0 and aspect of HR	6	1
1.2	Big data in HR, understanding of Machine Learning	5	1,2
1.3	sensors and cloud computing, Business Intelligence in HR.	4	1
<b>Unit 2 : Importance of HR Analytics</b>		15 Hrs	
2.1	Role and Responsibilities of HR Analytics, Framework of contemporary HR Analytics	4	2
2.2	Predictive tools and Applications in solving problems using HR analytics	5	1,3
2.3	Gartner's Analytics Maturity Model	6	3



<b>Unit 3 : Innovation</b>		15 Hrs	
3.1	Concept of innovation, Kinds of Innovation, Developing Innovative culture in an organisation	7	2
3.2	HR analytics linkage to business outcomes	4	1,2
3.3	Measuring use of HR analytics impact on business outcome	4	3
<b>Unit 4 : Strategy Formulation</b>		10 Hrs	
4.1	Redefining HR Policies and Practices, Robust competency mapping	4	2
4.2	understanding future of work and workplace, Decision framework	2	2
4.3	Use of HR analytics in workforce planning: talent acquisition, talent development, talent compensation, talent engagement and retention	4	5
<b>Unit 5 : Learning from Analysis</b>		5 Hrs	
5.1	Case studies and best practices in use of HR Analytics in industry (5 cases)	5	2,4,6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Open Book Surprise Test</li> </ul> </li> <li>End Semester Examination</li> </ul>

## SUGGETED READINGS

1. Winning on HR analytics: Leveraging data for competitive advantage, Ramesh Soundararajan and Kuldeep Singh, Sage Publication
2. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions Paperback, Shonna D. Waters, Valerie N. Streets, Lindsay Mcfarlane, Rachael Johnson-Murray
3. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Boyce Byerly, Gene Pease, and Jac Fitz-enz
4. Doing HR Analytics: A Practitioner's Handbook with R Examples, Lyndon, Mr. Sundmar, Createspace Independent Pub

Course Name	Digital Marketing and Search Engine Optimisation				
Type of Course	Elective – Business Analytics				
Course Code	MBM21E70				
Course Summary & Justification	This course covers various tools and concepts of marketing through digital media.				
Semester	3/4	Credits		4	
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Total
	Authentic learning	30	15	15	60
	Collaborative learning	5	2	5	12
	Independent learning	4	2	2	8
Prerequisite	Familiarity with social medias is expected				

### COURSE OUTCOMES (CO)

CO NO.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	DEFINE various concepts related to Digital Marketing.	R	3,6
2	EXPLAIN the role of Facebook, Google AdWords, YouTube and Email in digital marketing.	U	2,6
3	MAKE USE OF Facebook, Google AdWords, You tube and Email for carrying out digital marketing of real life products.	A	2,6
4	ILLUSTRATE the use of Facebook, Google AdWords, YouTube and Email in various contexts of Digital Marketing.	An	2,6
5	DESIGN digital media campaign using appropriate mix of Facebook, Google Ad words, YouTube and Email.	E	2,6
6	CREATE appropriate content for Facebook, Google AdWords, YouTube and Email campaigns.	C	3,6
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

		Hrs	CO. No.
<b>Unit 1: Digital Marketing Planning and Structure</b>		10 Hrs	
1.1	Inbound vs Outbound Marketing, Content Marketing, Understanding Traffic, Understanding Leads, Strategic Flow for Marketing Activities.	1	1
1.2	WWW, Domains, Buying a Domain, Website Language & Technology, Core Objective of Website and Flow, One Page Website, Strategic Design of Home Page	2	2
1.3	Strategic Design of Products & Services Page, Strategic Design of Pricing Page	3	1,2
1.4	Portfolio, Gallery and Contact Us Page, Call to Action (Real Engagement Happens), Designing Other Pages, SEO Overview, Google Analytics Tracking Code, Website Auditing, Designing WordPress Website.	4	2
<b>Unit 2 : Facebook Marketing Fundamentals</b>		15 Hrs	
2.1	Profiles and Pages, Business Categories, Getting Assets Ready, Creating Facebook Pages, Page Info and Settings	2	1,2
2.2	Facebook Page Custom URL, Invite Page Likes, Featured Video, Pin Post and Highlights, Scheduling Posts, Facebook Events, Reply and Message, Facebook Insights Reports, Competitor's Facebook Page, Ban User on Facebook Page, Connect with Twitter.	2	2
2.3	Facebook Ad Campaigns: Organic v/s Paid, Defining Ad Objective, Performance Matrix, Ad Components, Designing Creative Image, Facebook Ad Structure	2	2
2.4	Setting Up Facebook Ad Account, Create Ad –Targeting, Create Ad – Budgeting, Create Ad - Creative, Content and CTA, Boosting Page Posts, Page Promotion, Video Promotion, Similar Ads and Audiences, Tracking Pixels Code	3	2,3
2.5	Remarketing - Website Visitors, Custom Audiences -Look Alike, Custom Audience - Saved Group, Managing and Editing Ads, Ad Reports and Ad Insights, Billing and Account.	2	4
2.6	Facebook Business Manager, People, Pages and Roles, Ad Accounts Configurations, Ad Agencies and Assigning, Shared Login for FB Business A/C, Power Editor	2	2,5
2.7	Email Targeting on Facebook, Facebook Offers, CTA on Page, Posts for Location, Save Time with Third Party Tools, Case Studies.	2	2,4
<b>Unit 3 : Google AdWords</b>		15 Hrs	
3.1	Understanding AdWords, Google Ad Types, Pricing Models, PPC Cost Formula, Ad Page Rank, Billing and Payments, AdWords User Interface, Keyword Planning	1	1,2
3.2	Keywords Control, Creating Ad Campaigns, Creating Text Ads, Creating Ad Groups, Bidding Strategy for CPC, Case Studies.	3	2
3.3	PPC, CPM, CPA, Other Measuring Tools, Bidding Strategy on Location, Bidding Strategy on Schedule, Bidding Strategy on Devices, Conversion Tracking Code	2	2
3.4	Designing Image Ads, Creating Animated Ads, Examples on Animated Ads, Creating Video Ads, YouTube Video Promotion, Hi-Jack Competitor's Video Audience, Case Studies.	3	3
3.5	Remarketing Strategies, Remarketing Rules, Remarketing Tracking Code, Linking Google Analytics,	3	3

3.6	Designing Remarketing Images, Shared Budget, GWD Software, Case Studies.	3	3,4
<b>Unit 4 : YouTube Marketing</b>		20 Hrs	
4.1	Video Flow, Google Pages for YouTube Channel, Verify Channel, Webmaster Tool –Adding Asset,	2	1
4.2	Associated Website Linking, Custom Channel URL, Channel ART, Channel Links, Channel Keywords, Branding Watermark, Featured Contents on Channel	2	3
4.3	Channel Main Trailer, Uploading Videos, Uploading Defaults, Creator Library, Case Studies	4	4
4.4	Channel Navigation, Video Thumbnail, CTA –Annotation, CTA –Extro, CTA –Cards for Mobile, Redirect Traffic to Website, Post Upload Enhancements	4	4,5
4.5	Live Broadcasting, Managing Playlists, Managing Comments, Managing Messages, Monetisation with AdSense	4	3
4.6	Paid YouTube Channel, Channel Analytics, Real Time Analytics, Case Studies.	4	3
<b>Unit 5: Email Marketing - Content Writing</b>		20 Hrs	
5.1	Introduction to Natural Language Processing, Stages in NLP, NLP Models,	3	1
5.2	Email Machine –The Strategy, Email Frequency, Why People Don't Buy, The Fuel –Value, Triggers in Email using 4Ps,	3	2
5.3	Sequence of Email Triggers, Email Example - Topic, Intro, Product, Secondary Value, Fear, Regret, Ask for Sales, Reinforcement	3	2
5.4	Offers Announcements, Urgency, Cross Sales, Re- Engagement, Buyer vs Consumer. Email Software and Tools, Importing Email Lists, Planning Email Campaign	3	3
5.5	Email Templates and Designs, Sending HTML Email Campaigns, Web Forms Lead Importing, Integrating Landing Page Forms,	4	4
5.6	Campaign Reports and Insights, Segmentation Strategy, Segmentation Lists, Auto-Responder Series, Triggering Auto – Responder Emails, Auto Responder Actions, Case Studies.	4	3,4

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brainstorming lecture, Explicit Teaching, E-learning, interactive Instruction: Active cooperative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> 1. Continuous Assessment (CA) <ol style="list-style-type: none"> <li>Tests – One MCQ based and on extended answer type</li> <li>Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>Open Book Surprise Test</li> </ol> 2. End Semester Examination

## **SUGGESTED READINGS**

1. Industry 4.0: Managing The Digital Transformation, Ustundag, Alp, Cevikcan, Emre, Springer.
2. Hands-On Industrial Internet of Things: Create a powerful Industrial IoT infrastructure using Industry 4.0 , Giacomo Veneri.
3. Internet of Things: A Hands-On Approach , Arsheep Bahga.
4. Industry 4.0: The Industrial Internet of Things Paperback, Alasdair Gilchrist.
5. Data Science for Modern Manufacturing by Li Ping Chu, O'Reilly Media
6. Industry 4.0 Data Analytics Paperback by Rajesh Agnihotri, Samuel New
7. Industry 4.0: The Industrial Internet of Things by Alasdair Gilchrist
8. Industrial Internet of Things: Cyber manufacturing Systems by Sabina Jeschke, Christian Brecher, Houbing Song, Danda B. Rawat

## **Suggested Reference Books:**

1. Advances in Business, Operations, and Product Analytics: Cutting Edge Cases from Finance to Manufacturing to Healthcare (FT Press Analytics) by Matthew J. Drake

<b>Course Name</b>	<b>Financial Modelling and Predictive Analytics</b>					
Type of Course	Elective – Business Analytics					
Course Code	MBM21E71					
Course Summary & Justification	This course offers an introduction towards Financial Modelling and Predictive analytics. Through hands-on practice in class, students will be able to develop their own spreadsheet models covering topics from corporate finance to investment planning and analysis and understanding the implications of uncertainties and risks.					
Semester	3/4	Credit	4			
Total Student Learning Time (SLT)	Learning Approach	Lecture	Tutorial	Practical	Others	Total Learning Hours
	Authentic learning	20	10	10	---	40
	Collaborative learning	10	5	5	---	20
	Independent learning	10	5	5	---	20
Pre-requisite	Basic analytic knowledge, data storage concepts					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, students will be able to;</i>	Learning Domains	PSO No.
1	MEMORISE and REPRODUCE DEFINE basic terminologies in analytics and forecasting	R	1
2	EXPRESS, ILLUSTRATE how trend analysis and forecasting works	U	1
3	CALCULATE : regression value, trend and hypothesis value	A	2
4	ILLUSTRATE INTEGRATE regression models, hypothesis, time series data	An	3
5	INTERPRET, CREATE regression graphs, trendline	E	1
6	BUILD trend models, regression models, forecasting models	C	2
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

		Hrs	CO.No.
<b>Unit 1 : Introduction to Financial Modelling and Forecasting</b>		12 Hrs	
1.1	Financial Modelling, Objectives of Modelling, Various Financial Models for Prediction, Importance of Forecasting-Time Series Data-Component Factors of the Time-Series Model Trend Analysis-Seasonal and Cyclical Behaviour-Smoothing of Annual Time Series	4	1,3
1.2	Moving averages, Exponential smoothing -Least-Squares Trend Fitting and Forecasting: Linear, quadratic and exponential models	4	1,3
1.3	Autocorrelation and Auto regression-Autoregressive Models - ARIMA time-series Model Time-Series Forecasting of Monthly or	4	1,3,2

	Quarterly Data-Accuracy Statistics and Forecast Model Selection-Families of Forecasting		
<b>Unit 2 : Demand Analysis and Forecasting</b>		12 Hrs	
2.1	Equilibrium of consumer - Demand Analysis – Types of Demand – Law of Demand & its Exceptions -	3	1,2
2.2	Elasticity of Demand – Price Elasticity, Income Elasticity, Cross Elasticity, Advertisement Elasticity - Applications of the concept of Elasticity	3	1,3
2.3	Demand Forecasting – An overview of Forecasting Techniques – Statistical & Non-Statistical Methods- Analysis of Consumer Equilibrium under Cardinal Utility Analysis	4	1,3
2.4	Law of equi-marginal utility – Consumer behaviour under Ordinal Utility analysis -Indifference Curve Analysis(12 Hours)	2	1,3
<b>Unit 3 : Hypothesis testing</b>		12 Hrs	
3.1	Introduction to testing of data, different test criteria, difference between Z tests, T test. Chi-Square test for several proportions,	4	1,2,3
3.2	Anova- association of attributes – goodness of fit test One way & two way ANOVA for testing the difference of means of more than two samples.	3	3,1,2
3.3	Time Series Analysis: Components of Time Series, Techniques of measuring seasonal variations – Simple Average Method, Moving Averages Method. Least Square Method of Trend Analysis, Applications of Time Series in Business Forecasting.	5	1,2,3,6
<b>Unit 4 : Time series analysis using excel</b>		13 Hrs	
4.1	What is time-series data?, basics of time series data, moving average chart, Challenge: Analyse time-series data for airline miles, Solution: Analyse time-series data for airline miles.	4	1,3
4.2	How Good Are Your Forecasts? Errors, Accuracy, and Bias, Computing the mean absolute deviation (MAD), mean absolute percentage error (MAPE),sum of squared errors (SSE),forecast bias, Advanced forecast bias: Determining significance	4	2,4,6
4.3	Challenge: Compute MAD, MAPE, and SSE for an NFL game, Using a Trendline for Forecasting, Fitting a linear trend curve, Interpreting the trendline, Interpreting the R-squared value, Computing standard error of the regression and outliers	5	3,5,6
<b>Unit 5 : Regression analysis using excel</b>		13 Hrs	
5.1	Forecasting with Multiple Regressions, What is multiple regression? Preparing data for multiple regression, Running a multiple linear regression, Finding the multiple-regression equation and testing for significance	5	3,5,6
5.2	How good is the fit of the trendline? Predictive Analytics- Simple linear regression- Multiple linear regression-Interpretations of regression coefficients.	4	1,3,5,6
5.3	Case study:- Challenge: Regression analysis of Amazon.com revenue, Solution: Regression analysis of Amazon.com revenue	4	5,6

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Direct Instruction: Brain storming lecture, Explicit Teaching, E-learning, interactive Instruction: Active co-operative learning, Seminar, Group Assignments Authentic learning, Library work and Group discussion, Presentation by individual student/ Group representative
<b>Assessment Types</b>	<b>Mode of Assessment</b> <ul style="list-style-type: none"> <li>• Continuous Assessment (CA)             <ul style="list-style-type: none"> <li>○ Tests – One MCQ based and on extended answer type</li> <li>○ Seminar Presentation – a theme is to be discussed and identified to prepare a paper and present in the seminar</li> <li>○ Open Book Surprise Test</li> </ul> </li> <li>• End Semester Examination</li> </ul>

### SUGGETED READINGS

1. Time Series Analysis-Forecasting and Control., George E. P. Box, Gwilym M. Jenkins, Gregory C. Reinsel, Greta M. Ljung
2. Testing Statistical Hypotheses, Authors: Lehmann, Erich L., Romano, Joseph P. 2021 Edition
3. Excel Data Analysis, Modelling and Simulation Authors: Guerrero, Hector
4. Introduction to Linear Regression Analysis, 5th Edition Douglas C. Montgomery, Elizabeth A Peck, G. Geoffrey Vining



## 18. Curriculum Map

Sem	Course	Core (C ) or Elective (E)	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13
1	Principles and Practice of Management	C		√						√	√	√			√
1	Business Economics	C		√		√	√						√	√	√
1	Business Communication and Soft Skills	C						√	√	√	√				
1	Accounting for Managers	C	√	√			√		√						
1	Quantitative Methods	C	√	√	√										
1	Environment Management	C			√							√	√		
1	Business Law	C		√				√				√		√	
1	Corporate Governance and Ethics	C	√							√		√	√	√	
2	Human Resources Management	C		√										√	√
2	Financial Management	C	√	√	√		√								
2	Marketing Management	C		√										√	√
2	Operations Management	C	√	√		√	√				√				
2	Management Information System	C	√	√	√	√									
2	Organisational Behaviour	C	√	√	√					√	√				
2	Management Science	C	√	√	√										
2	Entrepreneurship Development Project Management	C					√	√			√		√		√
2	Internship and comprehensive viva voce	C				√		√	√						
3	Research Methodology	C	√	√	√		√	√	√						
3	Enterprise Resource Planning and Business Analytics	C	√	√	√	√									
4	Strategic Management	C				√	√			√		√		√	
4	Problem Centered Project work and Comprehensive viva voce	C				√	√	√	√						

Sem	Course	Core (C ) or Elective (E)	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13
	<b>Marketing Electives</b>														
3/4	Consumer Behaviour	E	√		√			√							√
3/4	Marketing Research	E	√	√	√		√		√	√			√		
3/4	Sales management	E	√	√	√		√	√	√	√					
3/4	Marketing Analytics	E	√	√	√	√	√						√		
3/4	Services Marketing	E	√			√	√								
3/4	Rural Marketing	E	√	√	√	√	√								
3/4	B2B Marketing	E	√	√	√										
3/4	Product and Brand Management	E		√	√	√	√	√					√	√	
3/4	Retail Management	E	√		√	√							√		
3/4	Strategic Marketing	E	√	√	√	√	√								
3/4	Integrated Marketing Communication	E	√	√	√										
3/4	Digital Marketing	E		√			√								
3/4	Global Marketing	E		√	√					√			√		√
3/4	Retailing Analytics	E	√	√	√		√						√		
	<b>Finance Electives</b>														
3/4	Management of Banks and Financial Institutions	E	√				√							√	
3/4	Financial Analysis and Business Valuation	E	√	√	√		√								
3/4	Financial Derivatives and Risk Management	E	√	√			√								
3/4	Personal financial planning	E	√	√	√										
3/4	Security Analysis and Portfolio Management	E	√	√	√										
3/4	Behavioural Finance	E		√											
3/4	International Financial Management	E		√										√	√
3/4	Modern Banking and Financial Services	E	√		√	√	√								

Sem	Course	Core (C ) or Elective (E)	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13
3/4	Management Control System	E	√	√	√										
3/4	Financial Modelling	E	√	√	√										
3/4	Corporate Restructuring strategies	E		√		√		√							
3/4	Strategic Financial Management	E	√	√	√										
3/4	Direct Taxation	E	√	√	√										
3/4	Corporate Tax Planning	E	√	√	√										
3/4	Good and Services Tax	E	√	√											
	<b>HRM Elective courses</b>														
3/4	Human Resources Planning	E	√		√										
3/4	Participative Management	E	√	√											√
3/4	Training and Development	E	√	√	√	√	√								
3/4	Organisational Change and Transformation	E	√	√	√	√	√								
3/4	Talent Management	E	√		√										
3/4	Performance Management	E	√		√								√		
3/4	Industrial Relations	E	√		√										
3/4	Managing Interpersonal and Group Process	E	√		√										
3/4	Managerial Counselling	E	√	√	√	√	√								
3/4	Mentoring, Coaching and Management Consulting	E	√	√	√	√	√								
3/4	Organisational Effectiveness and Development	E	√	√	√	√	√								
3/4	Strategic Human Resource Management	E	√	√	√					√					
3/4	International Human Resource Management	E	√	√	√										
3/4	Leadership for Managerial Performance	E								√	√	√	√		

Sem	Course	Core (C ) or Elective (E)	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13
	<b>Operations Elective courses</b>														
3/4	Supply Chain Management	E	√				√								√
3/4	Technology Management	E	√	√	√	√		√							
3/4	Production Planning and Control	E	√	√	√		√								
3/4	Materials and Purchase Management	E		√		√	√								
3/4	Advanced Operations Research	E		√		√	√								
3/4	Maintenance Management	E				√	√								
3/4	Service Operations Management	E	√	√			√								
3/4	Work Study and Ergonomics	E	√				√			√					
3/4	Business Forecasting	E	√	√			√								
3/4	Total Quality Management	E	√				√			√					
3/4	Innovation Management and R&D	E	√		√	√	√								
3/4	World Class Manufacturing	E	√				√							√	√
3/4	Global Transportation and Export/Import Documentation	E	√		√		√								
3/4	Industry 4.0	E	√		√	√							√		
	<b>Business Analytics Elective courses</b>														
3/4	Database and Data Mining Applications in Business	E	√	√	√		√								
3/4	Advanced Excel and Business Applications	E	√	√	√										
3/4	Business Analytics using R	E	√	√	√										
3/4	Advanced Statistical Methods using SPSS	E	√	√		√	√								
3/4	Data Visualisation Using Tableau	E	√	√	√										
3/4	Introduction to Big data and Cloud computing	E	√	√	√										

Sem	Course	Core (C ) or Elective (E)	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13
3/4	Industry 4.0 and Internet of Things	E		√			√								
3/4	Machine Learning using Python	E		√			√								
3/4	Artificial Intelligence in Business Applications	E		√	√										
3/4	Marketing and Retail Analytics	E	√	√	√										
3/4	Social Media, Web & Text Analytics	E	√	√		√	√								
3/4	HR Analytics	E	√	√	√										
3/4	Digital Marketing	E		√	√			√							
3/4	Financial Modelling and Predictive analytics	E	√	√	√										

PSO	Total no. of mapping	No. of core courses mapped
PSO 1	67	10
PSO 2	66	14
PSO 3	56	8
PSO 4	28	7
PSO 5	43	8
PSO 6	12	6
PSO 7	7	5
PSO 8	11	5
PSO 9	6	5
PSO 10	6	5
PSO 11	13	4
PSO 12	10	6
PSO 13	11	5