

CSIBER

**CHHATRAPATI SHAHU INSTITUTE OF BUSINESS
EDUCATION AND RESEARCH, KOLHAPUR-
MAHARASHTRA, INDIA**

(AN AUTONOMOUS INSTITUTE)

CPE Phase III, NAAC A+



STRUCTURE & SYLLABUS

With Effect from 2023-2024

MBA Programme

**MASTER OF BUSINESS ADMINISTRATION (Business Analytics
Specialization)**

M.B.A. PROGRAMME

Programme Specific Objectives (PSO):

PSO1. Practice effective communication skills and soft skills under various business situations.

PSO2. Identify, assess and shape entrepreneurial opportunities and evaluate their potential for starting an enterprise.

PSO3. Take business decisions considering the need for sustainable and holistic (legal, cultural, ethical, creativity) development of stakeholders.

PSO4. Demonstrate attributes of a responsible Global citizen and a lifelong learner.

Vision of M.B.A. department:

“To develop competent global business professionals with academic excellence and research prowess with environmentally responsible and ethical perspectives.”

Mission of M.B.A. department:

1. To impart profound conceptual knowledge to students to enable them to develop excellence in academics.
2. To encourage and develop a culture of sustainable research and innovation to address the challenges faced by the society.
3. To make students proficient in managerial skills necessary for a career in Management.
4. To foster a spirit of entrepreneurship among students.

Please note that in PSOs, we have included the points not covered in POs of entire institute.

GRADUATE ATTRIBUTES FOR MBA PROGRAMME

1. Problem solving using domain knowledge and quantitative techniques
2. Well versed with soft skills
3. Deal with contemporary issues (innovation, emerging technology, disruption)
4. Entrepreneurial and Leadership abilities.
5. Inter-cultural competency
6. Cater to needs of holistic and sustainable development
7. Develop the capacity for independent and lifelong learning.
8. Global citizenship

Programme Outcomes (POs):

The programme outcomes of MBA program are as follows;

1. **Conceptual Knowledge:-** Graduates will be able to conceptualize, organize, analyse and resolve complex business problems by using their domain knowledge of management.
2. **Leadership and Innovation Skills:-** Graduates will be able to adopt and adapt the contemporary trends in their domain area as well as innovations, emerging technology and global changes while leading and managing business.
3. **Soft Skills:-** Graduates will practice and perform effective communication skills and softskills under various business situations.
4. **Entrepreneurial Skills:-** Graduates will be able to identify, assess and shape entrepreneurial opportunities and evaluate their potential for starting an enterprise.
5. **Stakeholder Concern:-** Graduates will address ethical, legal and cultural issues of organization and society by utilizing their conceptual knowledge.
6. **Sustainability:-** Graduates will gain ability to take business decisions keeping in mind the need for sustainable and holistic development.
7. **Research and Lifelong Learning:-** Graduates will be able to participate in active research work, as well as independent and lifelong learning.
8. **Problem Solving:-** Graduates will possess and use competencies in quantitative and qualitative techniques for problem solving in their respective functional areas.

CURRICULUM OF MBA PROGRAMME

The MBA is a Full Time Programme of Two-year duration and is divided into four semesters. Semester I and II will be taught in the First Year of the programme and Semester III and IV during the second year of the programme.

ELIGIBILITY:

Candidate's eligibility to the MBA program will be as per rules of DTE, Government of Maharashtra.

I. DURATION:

The degree of **MBA** shall be full-time course and its duration shall be of **Two Years**. The course consists of Four Semesters. The examination to be held in the First and Second Semester will be called Part – I (First Year) and the examination to be held in the Third and Fourth Semester will be called Part – II (Second Year).

If a candidate fails to clear all the theory papers and project report within **Six** years of his/her registration, the past performance will stand automatically nullified.

If a candidate discontinues any of the terms (i.e. Semester – I to IV) on any account, he/she will be allowed to complete the incomplete terms in the subsequent years subject to the condition that it is within the stipulated time duration of **Six** years.

In addition to the above, once a student's term (Semester) is granted, he/she shall be allowed to appear and pass in any of the subsequent examinations held, provided the examinations are within the stipulated period of **Six** years.

After taking the admission for FIRST YEAR and the Semester term (Semester – I or II) is NOT granted in this case the student has to seek fresh admission in the next year and complete the term and pass the examination also within **SIX** years of his/her registration. After taking the admission for FIRST YEAR and the Semester term (Semester – I and II) is NOT granted in this case student performance will be nullified.

After taking the admission for SECOND YEAR and the Semester term (Semester – III and IV) is **NOT** granted in this case the student has to seek fresh admission in the next year and complete the term and pass the examination also within **SIX** years of his/her first year registration..

Course Completion with Break in Between:

A student who has passed M.B.A. – I and is seeking admission to M.B.A. – II after a long gap (Provided the gap lies within the stipulated duration of **Six** years) should complete the course syllabus which is in existence at the time he is seeking admission for the academic year.

Credit Specification:

- i) Theory Course: A minimum of 15 hrs of teaching per credit is required in a semester.
- ii) Laboratory Course / Field Project: A minimum of 30 hrs in Laboratory activities per credit is required in a semester.

Credit Pattern:

Every course offered will have three components associated with the teaching-learning process of the course, namely

Lecture - L, Tutorial - T, Practice - P

Where, L stands for Lecture session, T stands for Tutorial Session consisting participatory discussion / self-study/ desk work/ brief seminar presentations by students and such other novel methods that make a student to absorb and assimilate more effectively the contents delivered in the Lecture classes and P stands for Practice Session and it consists of Hands on experience / Laboratory Experiments / Field Studies / Case studies that equip students to acquire the much required skill component.

MBA consists of all the three components with weightage depending upon the paper.

If a course is of 4 credits, then the different credit distribution patterns in L: T: P format could be:

Theory Papers: 3: 0.5: 0.5

Practical: 1: 0: 3.0

II. ASSESSMENT:

Taking into consideration the UGC and AICTE requirements, C SIBER has adopted

–Credit Grade Based Performance Assessment System (CGPA). Each course is of 100 marks and contact hours for each paper is 60. One credit is allotted to 15 contact hours. All courses of 100 marks are considered as Full credit course with 4 credits. Courses of 50 marks are considered as half credit course and have 2 credits.

- 1. For the paper of 100 marks. The distribution of the marks will be as follows –
 - i) Formative Evaluation i.e. Internal marks - 40 Marks
 - ii) Summative Evaluation i.e. Semester-end examination - 60 marks
- 2. For the paper of 50 marks. The distribution of the marks will be as follows –
 - i) Formative Evaluation i.e. Internal marks - 20 Marks
 - ii) Summative Evaluation i.e. Semester-end examination - 30 marks

Breakup of Formative Evaluation (internal marks)

Head	Marks Out of 40	Marks Out of 20
Attendance and Class Participation	10	05
Any Two from given alternatives: 1. Case Study 2. Quiz 3. Home assignment 4. Mid-term test 5. Viva voce 6. Library-based assignment 7. Book report 8. Scrap Book 9. Lab. Practical 10. Field-based activity 11. Group Discussion 12. Seminar 13. Group Activity	Out of 30 (As per Module Handbook of the course)	Out of 15 (As per Module Handbook of the course)
	40	20

3. For the report of Project Work done (100 marks) the distribution of the marks will be as follows –
- i) Project Report (given by faculty mentor) - 40 Marks
 - ii) Viva Voce (panel of internal and external examiner) - 60 Marks

ASSESSMENT OF THEORY PAPERS

1) The assessment of papers will be done by an Internal and External examiner. A difference of more than 20% in the marks awarded by these examiners would necessitate the valuation of these papers by the Third examiner. The 'nearest' highest marks will be considered for determining the average mark of such papers.

2) The examiner should submit the marks on separate sheet after completion of on-screen evaluation.

3) Once the Student is passed in the internal head of passing (Concurrent evaluation out of 40) in the report submitted to the examination department, the same should be carried forward whenever required. It will not be changed in any circumstances.

4) The students who failed in the internal head of passing (Concurrent evaluation out of 40) should reappear for the same and the revised marks will be considered further calculation.

Assessment of Field Project: SOB-BA-207

For the paper of 50 marks, the distribution of the marks for theory will be as follows –

- i) Internal Marks i.e. Formative Assessment - 20 Marks
- ii) Examination Marks i.e. Summative Assessment - 30 marks

Formative Assessment:

Sr. No	Head	Marks Out of 20
1	Individual Viva (Department faculty members and Supervisor)	05
2	Presentation (Department faculty members and Supervisor)	10
3	Assignment (Supervisor)	05
	Total	20

***For Assignments the faculty supervisor will assign relevant topic to the individual student as assignment.**

Summative Assessment:

The field project report will be evaluated by a panel consisting of internal faculties including the faculty supervisor out of 30 marks.

Assessment of Lab-Based Courses:

1. SEMESTER THREE:

Course name: Business Analytics Using R (Lab-Based)

Course Code: SOB-BA-305a

Credits: FOUR

The practical examination conducted by internal and external examiner. The weightage of Practical examination is 60 marks.

The practical examination will be of 3 hours duration. The student will be given a choice of six questions of 15 marks each, out of which student will have to solve any four. Internal marks (out of 40 marks) internal evaluation will be as per other 4 credit course in the curriculum.

2. SEMESTER THREE (Systems Specialization)

Course Code: SOB-SYS-I

Course name: Management Information System (Lab-Based)

Credits: FOUR

The practical examination conducted by internal and external examiner. The weightage of Practical examination is 60 marks.

The practical examination will be of 3 hours duration. The student will be given a choice of six questions of 15 marks each, out of which student will have to solve any four. Internal marks (out of 40 marks) internal evaluation will be as per other 4 credit course in the curriculum.

3. SEMESTER FOUR:

Course name: Analytics for Business Decisions (Lab-Based)

Course Code: SOB-BA-404a

Credits: FOUR

The practical examination conducted by internal and external examiner. The weightage of Practical examination is 60 marks.

The practical examination will be of 3 hours duration. The student will be given a choice of six questions of 15 marks each, out of which student will have to solve any four. Internal marks (out of 40 marks) internal evaluation will be as per other 4 credit course in the curriculum.

III. Question Paper Format

A. Question Paper Format for 4 Credits Course

OUTLINE OF SEMESTER-END EXAMINATION QUESTION PAPER (60%):

Class:

Course:

Paper No –

Time: 3 hours

Total Marks: 60

INSTRUCTIONS:

- i) Question No. 1 is compulsory.
- ii) Attempt ANY ONE from Question No. 2 and 3.
- iii) Attempt ANY ONE from Question No. 4 and 5.

Q.1. Case Study	20 marks
Q.2. Long question/ Essay type.	20 marks
Q.3. Long question/ Essay type.	20 marks
Q.4. a) Long question	10 marks
b)	10 marks
Q.5. a) Long question	10 marks
b)	10 marks

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Note:

1. Student is required to score minimum of 40% marks in semester end examination.
2. At the time of paper setting examiner should give the equal weightage for all the units from question number 2 to 5.

B. Question Paper Format for 2 Credits Course

OUTLINE OF SEMESTER-END EXAMINATION QUESTION PAPER (60%):

CHHATRPATI SHAHU INSTITUTE OF BUSINESS EDUCATION AND RESEARCH (CSIBER)

University Road, Kolhapur – 416 004

Out Line Theory Question paper for all the programmes

(Two Unit Course)

Class:

Course:

Paper No –

Time: 2 hours

Total Marks: 30

INSTRUCTIONS:

- i. Q.1. is Compulsory.
- ii. Attempt any TWO from Q.2. To Q.4.
- iii. All questions carry equal marks.

Q.1. Case study	10 marks
Q.2. Long question/ Essay type. (based on Unit 1)	10 marks
Q.3. Long question/ Essay type. (based on Unit 2)	10 marks
Q.4. Long question/ Essay type. (based on any Unit or overlapping)	10 marks

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Note:

1. Student is required to score minimum of 40% marks in semester end examination.
2. At the time of paper setting examiner should give the equal weightage for all the units from question number 2 to 5.

IV. STANDARD OF PASSING:

1. In order to pass in a paper/head, a candidate will have to obtain 50% in the Formative Evaluation (Internal Credit), 40% marks in theory, and a minimum of 50% of the marks in aggregate in each paper head.
2. To pass the M.B.A. examination, a candidate will have to pass in all Four Semester in Two Parts i.e. Part – I (Semester – I & II) and Part – II (Semester– III & IV)
3. To pass the Project work a candidate must obtain a minimum of 50% of the Project Report and Viva Voce marks. If a candidate fails in the project report and its viva-voce, he/she will have to reappear for the same in the subsequent semester.
4. A candidate from the first year M.B.A. will be eligible to proceed to the Semester III, if he/she is not having more than **5 (Five)** papers backlog of the First Year (that is Semester – I & II).
5. A candidate will be permitted to proceed to the second Semester even though he/she fails in one or more subjects of the first Semester.
6. The students who have a backlog of not more than **five papers** in the Firstyear (Sem. I & II) examination will be eligible to be admitted to the Second year (IIIrd Semester) of M.B.A.
7. A candidate will be permitted to proceed to the Fourth Semester even though he/she fails in one or more subjects in third Semester.
8. If student passed in the internal head (formative assessment) as well as theory examination but fails in aggregate (total) head of passing in that case student has to appear only for the theory examination.
9. If students fails in internal marks (formative assessment) and passed in the theory examination, in that case students has to complete the internal marks in next subsequent semester at that time student must clear the aggregate (Total) head of passing otherwise it is required to appear for the theory examination in the next subsequent semester and cleat the total head of passing.
10. Performance Index (SPI) will be as follows:

V. Grading System:

There shall be numerical marking for each course, which will be placed into credits. Each subject is classified as a major or minor. The major and minor subjects will be given 2 and 1 credits respectively.

a. Full Credit (100 Marks) Course:

Grade Table for Semester Examination			
Marks Obtained	Letter Grade	Grade Point	Description of Performance
96-100	S+	10.0	SUPER
91-95	S	9.0	
86-90	E+	8.5	Exemplary
81-85	E	8.0	
76-80	O+	7.5	Outstanding
71-75	O	7.0	
66-70	A+	6.5	Good
61-65	A	6.0	
56-60	B+	5.5	Average
50-55	B	5.0	
--	X	0.0	Defaulter
--	XX	---	Incomplete

b. Half Credit (50 Marks) Course:

Grade Table for Semester Examination			
Marks Obtained	Letter Grade	Grade Point	Description of Performance
48-50	S+	10.0	SUPER
46-47	S	9.0	
43-45	E+	8.5	Exemplary
41-42	E	8.0	
38-40	O+	7.5	Outstanding
36-37	O	7.0	
33-35	A+	6.5	Good
31-32	A	6.0	
28-30	B+	5.5	Average
25-27	B	5.0	
--	X	0.0	Defaulter
--	XX	---	Incomplete

9. Final Result: For the final result of the student Cumulative Performance Index (CPI) based on total earned credits vis-à-vis total earned grade points shall be calculated will be as follows.

Total earned grade points / Total credits **100**

Result		
CPI	Final Grade	Classification of Final Result.
9.6-10.0	S+	SUPER
9.1-9.5	S	
8.6-9.0	E+	Exemplary
8.1-8.5	E	
7.6-8.0	O+	Outstanding
7.1-7.5	O	
6.6-7.0	A+	Good
6.1-6.5	A	
5.6-6.0	B+	Average
5.0-5.5	B	

Note: An aggregate of **5.0** credit points are required to pass the MBA program.

Grade Table for Semester Examination			
Marks Obtained	Letter Grade	Grade Point	Description of Performance
48-50	S+	10.0	SUPER
46-47	S	9.0	
43-45	E+	8.5	Exemplary
41-42	E	8.0	
38-40	O+	7.5	Outstanding
36-37	O	7.0	
33-35	A+	6.5	Good
31-32	A	6.0	
28-30	B+	5.5	Average
25-27	B	5.0	
--	X	0.0	Defaulter
--	XX	---	Incomplete

VI. CALCULATION OF PERFORMANCE INDICES:

A distinction of the performance of one student from the other student is rather impossible to carry out from the grades obtained by a student in all the courses taken by him in a Semester/year. Hence, the evaluation of various courses is cumulated in two performance indices termed as Semester performance index (SPI) and cumulative performance index (CPI) the explanation of which is given below:

Semester Performance Index (SPI):

The performance of a student in a Semester is indicated by a number called Semester Performance Index (SPI). SPI is the weighted average of all the grade points obtained by him in all the courses registered during the Semester r. If G_i is a grade with numerical equivalent as G_i obtained by a student for the course with credit C_i then, SPI for that Semester is calculated using formula.

$$SPI = \frac{\sum C_i G_i}{\sum C_i}$$

Where summation is for all the courses registered by a student in that Semester. SPI is calculated to two decimal places and rounded off. SPI once calculated shall be modified. Generally, for the students failed in regular examinations SPI is calculated only after the declaration of re-examination grades.

Cumulative Performance Index (CPI):

An up-to-date assessment of the overall performance of a student from the first Semester till completion of the programme is obtained by calculating an index called as Cumulative Performance Index (CPI). The CPI is weighted average of the grade points obtained in all the courses registered by a student since the first semester of the programme.

$$CPI = \frac{\sum C_i G_i}{\sum C_i}$$

Besides SPI, CPI is also calculated at the end of every semester upto two decimal places and is rounded off. It is necessary to ensure that one course appears only once in calculation of CPI and the denominator in above equation does not exceed the total number of credits registered by him.

Initially there is certain trepidation in the minds of students and there are some difficulties in understanding the mechanics of this system. Therefore, it was decided that for the first year of implementation, on the mark sheets, both, the marks and the grade points and credits should be shown.

VII. GRACE MARKS UNDER DIFFERENT ORDINANCE.

S.O. No. 1:-Grace Marks for Passing in each head of Passing (Theory/Practical/ Oral/ Sectional/External/Internal)

The Examinee shall be given the benefit of grace marks only for passing in each head of Passing (Theory/Practical/Oral/Sectional/ in External Internal examination as follows.

.Head of Passing	Grace Marks
Upto -50	2
051-100	3
101-150	4
151-200	5
201-250	6
251-300	7
301-350	8
351-400	9
401 and above.	10

Provided that the benefit of such gracing marks in different heads of passing shall not exceed 1% of the aggregate marks in that examination.

Provided further that the benefit of gracing of marks under this ordinance shall be applicable only if the candidate passes the entire examination of Semester/year.

Provided further that this gracing is concurrent with the rules and guidelines of professional statutory bodies at the all India level such as AICTE and UGC.

S.O. No. 2:- Grace Marks for getting higher Class

A Candidate who passes in all the subjects and heads of passing in the examination without the benefit of either gracing or condonation rules and whose total number of Marks falls short for securing Higher Class or Grade by marks not more than 1% of the aggregate marks of that examination or upto 10 marks, whichever is less, shall be given the required marks to get the next higher class of grade as the case may be.

Provided that benefits of above mentioned grace marks shall not be given, if the candidate fails to secure necessary passing marks in the aggregate head of passing also, if prescribed in the examination concerned.

Provided further that the benefits of above mentioned grace marks shall be given to the candidate for such examination/s only for which provision of award of class has been prescribed. Provided further that this gracing is concurrent with the rules and guidelines of Professional statutory bodies at the All India level such as AICTE and UGC.

S.O. No. 3 Condonation

If a candidate fails in one or more head of passing, having passed in all other heads of passing, his/her deficiency of marks in such head of passing may be condoned by not more than 1% at the aggregate marks of that examination or 10 marks of the total Number of marks of that of passing in which he/she is failing whichever is less. However condonation, whether in one head of passing or aggregate head of passing be restricted to maximum upto 10 marks only.

Condonation of deficiency of marks be shown in the statement of Marks in the form of asterisk and Ordinance number

Provided further that this gracing is concurrent with the rules and guidelines of Professional statutory bodies at the All India level such as AICTE and UGC.

BACKLOG:

1. A candidate will be permitted to proceed to the second Semester unconditionally even though he/she fails in one or more courses of the first semester, provided the first semester term is granted.
2. The students who have a backlog of not more than five courses (25% of passing heads) in the First year examination (Semester I & II) will be eligible to be admitted to the Second year (III Semester) of MBA.
3. A Candidate will be permitted to proceed to the Fourth Semester unconditionally even though he/she fails in one or more courses of the third semester, provided the third semester term is granted.

NO VERIFICATION OF MARKS AND RE-EVALUATION:

As CSIBER adopted the double evaluation system as well as ONSCREEN evaluation system due to this the verification of marks and re-evaluation of Answer book facility is NOT available in CSIBER.

MBA (Business Analytics specialization) Programme Structure

With Effect from 2023-24

MBA-I (Business Analytics Specialization), Semester – I

Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
SOB BA 101	Principles of Management	02	30	20	30	50
SOB BA 102	Marketing Management	04	60	40	60	100
SOB BA 103	Business Statistics	04	60	40	60	100
SOB BA 104	Research Methodology	04	60	40	60	100
SOB BA 105	Programming Fundamentals using Python	04	60	40	60	100
SOB BA 106	Financial Accounting	04	60	40	60	100
SOB BA 107	Information Technology for Management	04	60	40	60	100
SOB BA 108	Database Management System	02	30	20	30	50
	Total	28	420	280	420	700

MBA-I (Business Analytics Specialization), Semester – II

Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
SOB BA 201	Organizational Behavior and Human Resource Management	04	60	40	60	100
SOB BA 202	Financial Management	04	60	40	60	100
SOB BA 203	Data Warehousing and Data Mining	04	60	40	60	100
SOB BA 204	Business Laws	02	30	20	30	50
SOB BA 205	Operations Management	02	30	20	30	50
SOB BA 206	Business Communication	02	30	20	30	50
SOB BA 207	Field Project in Data Exploration and Visualization	02	30	20	30	50
SOB BA 208	Data Exploration and Visualization	02	30	20	30	50
	Total	22	330	220	330	550

MBA-II (Business Analytics Specialization), Semester – III

Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
SOB BA 301	Strategic Management	04	60	40	60	100
SOB BA 302	Cloud Computing	04	60	40	60	100
SOB BA 303	Research Project (Master Thesis)	06	50 days + 30	40	60	100
SOB BA 304	Specialization 1 a) Machine Learning	04	60	40	60	100
	b)	04	60	40	60	100
SOB BA 305	Specialization 2 a) Business Analytics Using R(Lab Based)	04	60	40	60	100
	b)	04	60	40	60	100
	Total	30	420	280	420	700

List of courses offered in different specializations

Specialization	Semester III
Finance	i) SOB-FIN-I International Finance ii) SOB-FIN-II Direct and Indirect Taxes
Marketing	i) SOB-MKT-I Consumer Behaviour ii) SOB-MKT-II Services Marketing
Human Resource Management	i) SOB-HRM-I Employee Relations and Labour Laws ii) SOB-HRM-II International Human Resource Management
Systems	i) SOB-SYS-I Management Information System(Lab-Based) ii) SOB-SYS-II Information System Audit and Control
Production and Operations Management	i) SOB-POM-I Supply Chain Management ii) SOB-POM-II Purchasing and Inventory Management
Agri-Business Management	i) SOB-ABM-I Indian Agri-Business Management ii) SOB-ABM-II Rural Marketing in India

MBA-II (Business Analytics Specialization), Semester – IV

Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
SOB BA 401	Business Ethics and Corporate Governance	04	60	40	60	100
SOB BA 402	Big Data Analytics	04	60	40	60	100
SOB BA 403	Specialization 1 a) Social Media Analytics	04	60	40	60	100
	b)	04	60	40	60	100
SOB BA 404	Specialization 2 a) Analytics for Business Decisions(Lab-Based)	04	60	40	60	100
	b)	04	60	40	60	100
	Total	24	360	240	360	600

List of courses offered in different specializations

Specialization	Semester IV
Finance	iii) SOB-FIN-III Management Control System iv) SOB-FIN-IV Investment and Portfolio Management
Marketing	iii) SOB-MKT-III Sales and Distribution Management iv) SOB-MKT-IV Advertising and Integrated Marketing Communication
Human Resource Management	iii) SOB-HRM-III Performance and Compensation Management iv) SOB-HRM-IV Talent and Human Capital Management
Systems	iii) SOB-SYS-III Applied Data Science and Business Analytics using R iv) SOB-SYS-IV Software Engineering
Production and Operations Management	iii) SOB-POM-III Project Management iv) SOB-POM-IV Quality Management
Agri-Business Management	iii) SOB-ABM-III Agri Production , Supply Chain and Logistics Management iv) SOB-ABM-IV Agricultural Marketing, Commodities Markets and Agri-Business.

- Specialization will be offered only if 12 students or more opt for it.

MBA (Business Analytics Specialization) – I
SEMESTER – I

Semester	I	Total Credit	2
Course Code	SOB-BA-101	Credit Pattern	L-22, CH-8
Course Title	PRINCIPLES OF MANAGEMENT		
Course Objectives:			
1	To make students understand fundamental concepts and principles of management, including the basic roles, skills, and functions of management.		
2	To make students aware historical development, theoretical aspects and practical application of managerial process.		
3	To introduce students to modern concepts and trends in Management		
Course Outcomes: Students will be able to;			
1.	Describe the concepts of Management		
2.	Analyze the management process		
3.	Apply the management functions to take appropriate business decisions		

Unit Number	Contents	Number of Sessions
1	Basic Management Concepts: Management- definition, Who is a Manager?, levels of Management, Managerial Skills, Henry Mintzberg- Roles of Manager, Management vs Administration, Evolution of Management- Classical approach- Scientific Management, Fayol's Administrative management, Behavioral approach- Hawthorne experiments Contemporary approach- Systems approach, contingency approach.	L-11
		CH 08
2	Functions of Management Planning- characteristics, types, process. Organizing – Mechanistic and organic structures, span of management- factors to be considered while deciding span of management, departmentalization- bases, directing- principles of directing, controlling- importance of controlling, types of controls. Decision-making- process, types of decisions.	L= 11
		CH 08

Learning Resources		
1	Text books	1. Robbins, S P, Coulter M K, DeCenzo D A, (2020), Fundamentals of Management, 11th Edition, Pearson Education Inc. New York. 2. Koontz, H. & Weihrich, H, 2017, Essentials of Management, 10th Edition, TMH Publications
2	Reference Books:	1. Bhat, A & Kumar, A, 2016, Principles of Management -Competencies, Processes, Practices, Second Edition Oxford Higher Education, India. 2. Williams, C & Tripathy, M. 2013, Principles of Management, Original Edition, Cengage Learning, India. 3. Reddy, P, & Tripathy, P 2012, Principles of Management, 5th Edition, TMH Publications, India. 4. Hellriegel, D, Jackson, S & Slocum, J 2016, Management -A Competency-based Approach, 10th Edition, South-Western a division of Thomson Learning.
3	Websites:	www.managementstudyguide.com. www.hbr.org
4	Supplementary Reading:	Magazines like: Time, Outlook

Semester	I	Total Credit	4
Course Code	SOB-BA-102	Credit Pattern	L-45, T-8, P-7
Course Title	MARKETING MANAGEMENT		
Course Objectives:			
1	To create an awareness about fundamentals of marketing		
2	To cover the basic concepts of marketing and develop conceptual abilities and substantive knowledge in marketing through a variety of real-life marketing situations.		
3	To understand the use of marketing mix in marketing decision making		
Course Outcomes: Students will be able to;			
1.	Discuss conceptual knowledge of Marketing Concepts.		
2.	Analyze marketing situation and provide appropriate solution for the issue.		
3.	Devise Market segmentation strategies for product and services.		
4.	Develop 4Ps of Marketing for Product and Services.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction to Marketing & Demand Measurement Definition – Importance and Scope – Core concepts of Marketing – Company Orientation Towards Market place; Building Customer Value, satisfaction and loyalty – cultivating customer relationship - Scanning the Marketing Environment Macro – Demographic, Economic, Social – Cultural –Political –Legal- Technology- Natural and Micro environment. Concept of Market Demand and Demand Measurement, estimating current and future demand, Definition, Need & Benefits	L= 11	
		T= 2	P= 2
2	Market Segmentation& Product Mix Market research and its importance – Consumer behavior, Factors affecting Consumer behavior Consumer and Industrial buying process, Identifying market segments and Targets – base for consumer segmentation, market targeting, evaluating segments. Develop brand positioning, Concept of Product - product levels, product Classification. Product & brand relationship, Branding, Packaging and Labeling. Product Life Cycle – New Product Development -process	L= 12	
		T= 2	P= 1
3	Price, Place & Promotional Mix Importance of pricing, Pricing Objectives, Price Determination Procedure –Methods of Pricing. Importance, Functions of Distribution channels - Introduction to the various Channels of Distribution – Channel Management Decision. – Marketing	L= 11	
		T= 2	P= 2

	Communication, AIDA model of Consumer responses, developing effective communications, Advertising, Sales Promotion, Publicity and Personal Selling, Managing digital communication, Introduction to Digital Marketing framework.		
4	Marketing Planning & Control Nature, Scope and Contents Of Marketing Plan - Process of planning Concept – Importance- Techniques of control- Annual Plan Control – Profitability Control – Efficiency Control – Strategic Control Marketing Sustainability & Ethics, Green Marketing	L=11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. Kotler P., Keller, K., Koshy, A., & Jha, M., (2013) 13 th Ed., Marketing Management, Pearson Education, New Delhi, India. 2. Kotler P., Keller, K., Koshy, A., & Jha, M., (2016) 15 th Ed., Marketing Management, Pearson Education, New Delhi, India.
	Reference Books	1. Kotler, P., (2015) 17 th Ed., Marketing Management, Prentice Hall of India, New Delhi. 2. Ferrell, O. C., Hartline, M. D., (2007), 3 rd Ed., Marketing Strategy, Thompson Learning, India. 3. Saxena Rajan, “Marketing Management 2nd Edition 2002”, Tata McGraw Hill, New Delhi
	Websites	1. https://www.ama.org/ 2. https://www.academyofindianmarketing.org/(Academy of Indian Marketing (AIM) Management Institutions) 3. https://www.ima-india.com/ (https://www.ima-india.com/)
3	Supplementary Reading	1. Economics Times, Brand Equity 2. Business Standard, The Strategist.
4	Practical Component	1. Student will select any product of their choice and prepare a poster presentation on core concept of Marketing applicable for the product. 2. Student will select any industry of their choice, identify the major companies operating in industry and compare the segmentation strategy used by companies. 3. Group Activity: Students will develop a conceptual new product, identify the target market for the product and develop a marketing plan for the product. 4. Group Activity: Students will prepare an advertisement to promote the conceptual product developed to the target customer.

Semester	I	Total Credit	4
Course Code	SOB-BA-103	Credit Pattern	L-45, T-8, P-7
Course Title	BUSINESS STATISTICS		
Course Outcomes: Students will be able to;			
1. Provide solution to management decision problems.			
2. Analyze company/organization data for taking decisions.			
3. Interpret the relevance of statistical findings for business problem solving and decision making.			
4. Evaluate the data collected for management decision and provide inference towards it.			

Unit Number	Contents	No. of Sessions
1	Measures of Central Tendency: Introduction, Objectives of statistical average, Requisites of a Good Average, Statistical Averages - Arithmetic Mean - Properties of arithmetic mean - Merits and demerits of arithmetic mean, Median - Merits and demerits of median, Mode - Merits and demerits of mode, Measures of Dispersion: Appropriate Situations for the Use of Various Averages, Positional Averages, Dispersion – Range - Quartile deviations, Standard Deviation -Properties of standard deviation, Coefficient of Variation.	L 11, T 2, P 2
2	Simple Correlation: Introduction , Correlation - Causation and Correlation - Types of Correlation - Scatter diagram - Karl Pearson's correlation coefficient - Properties of Karl Pearson's correlation coefficient, Spearman's Rank Correlation Coefficient Regression: Regression analysis - Regression lines - Regression coefficient, Testing of Hypothesis: Introduction, Simple & Composite, Null & Alternate Hypothesis, Type I and Type II Error, Level of Significance, One Tail & Two Tail, General Procedure of Testing of Hypothesis,	L 11, T 2, P 2
3	Parametric Tests: Introduction – Assumptions of Parametric Tests, Small Sample t - Test for – Single Sample Mean, Two Sample Means, Single Sample Proportion, Two Sample Proportions. Paired Sample t-Test, Large Sample - Z-Test for - Single Sample Mean, Two Sample Means, Single Sample Proportion, Two Sample Proportions,	L 12, T 1, P 2
4	Non-Parametric Tests: Introduction – Assumptions of Non-Parametric Tests, – Chi Square Test of Goodness of Fit, Chi-Square Test for Independence of Attributes, One Sample Sign Test, Two Sample Sign Tests, Signed Rank Test, Wilcoxon Mann-Whitney Test (U-Test), Kruskal Wallis Test (H-Test),	L 11, T 2, P 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. S C Gupta, Fundamentals of Statistics 2. S C Gupta, Business Statistics 3. C R Kothari, Research Methodology – Methods Techniques
2	Reference books	1. N D Vohra, Business Statistics, Tata McGraw Hill 2. G C Beri, Business Statistics, Tata McGraw Hill 3. Devid M Levine etc., Business Statistics – A First Course, Pearson Publication. 4. Ken Black, Business Statistics For Contemporary Decision Making, Wiley 5. Albright, Winston, Zappe, Decision Making Using Microsoft Excel, Cengage Learning.
3	Journals	1. Journal of Indian Business Research 2. International Journal of Statistics & Management Systems 3. International Journal of Statistics and Analysis 4. Calcutta Statistical Association Bulletin 5. Vikalpa: The Journal for Decision Makers
4	Websites	www.stattrek.com www.statisticsbyjim.com
5	Supplementary Reading	Glyn Davis & Branko Pecar, Business Statistics Using Excel, Oxford University Press.
6	Practical Component	1. Analyzing collected raw data or online available data. 2. Finding relations among two or more variables and fitting regression equation to predict value of dependent variables.

Semester	II	Total Credits	4
Course Code	SOB-BA-104	Credit Pattern	
Course Title	RESEARCH METHODOLOGY		

Course Objectives	
1	To provide an international outlook and assessment of issues relating to the developments and growth in the global, national and micro contexts
2	To Develop Analytical skills, for sound understanding of the discipline and analytical ability for research orientations

Course Outcomes	
	The students will able to learn:
1.	To Conceptualize a topic of Interest and need to define a problem to be investigated
2.	Analyze the various methodologies for application to their own research
3.	Demonstrate applications of the research findings in a meaningful way with validity

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Research Strategies: Empiricism, Deductive and Inductive Inquiry, Philosophical Assumptions in Research. Planning Research Project and Developing Research Questions: Research Thought, Importance, Supervisor, managing Time and Resources, Developing Research Questions Research Design: Reliability, Replicability and validity, Experimental Design, Cross Sectional Design, Case Study Design, Comparative Design Reviewing the Literature for Research: critical reading, systematic review, narrative review, searching online databases, keywords and defining search parameters, referencing, avoiding plagiarism	L=11	
		T=2	P=2
2	Nature of Qualitative Research – Main Steps of Qualitative Research, Reliability and Validity in Qualitative Research, Evaluating Qualitative Research, Credibility, Transferability, Dependability, Conformability, Preoccupations of Qualitative Researchers, Concepts and theory grounded in data, Critique of Qualitative Research, Contrast and Similarities between Qualitative Research Sampling in Qualitative Research – Levels of Sampling, Purposive Sampling, Theoretical Sampling, Generic Purposive Sampling, Snowball Sampling, Sample Size Determination; Ethnography and Participants Observations, Interviewing in Qualitative Research, Qualitative Data Analysis.	L=11	
		T=2	P=2
3	Introduction to Quantitative Research - Steps in Quantitative	L=12	

	Research, Concepts and measurements, Indicators, Reliability of Measures, Stability, Validity of Measures, Connection between Reliability and Validity, Main preoccupants of Quantitative Researchers, Critique of Quantitative Research Sampling in Quantitative Research – Planning a survey, Basic concepts in sampling – population sample, representative sample, sampling bias, probability sample, non – probability sample, sampling error, non – sampling error, Types of probability sample, Types of non – probability sample. Structured Interviewing – Asking questions – open and close ended questions, Self- completion of questionnaires, Quantitative Research using naturally occurring data	T=2	P=2
4	SPSS (Statistical Package for Social Sciences) Statistics – Basic Operations in SPSS, Entering data, Recording and Computing variables, Data Analysis with SPSS, Quantitative Data Analysis – Bivariate analysis, Multivariate analysis. Mixed Method Research – Combining Qualitative and Quantitative Research, Natural Science Model and Qualitative Research, Quantitative Research and Interpretivism, Quantitative Research and Constructionism, Problems with Quantitative/ Qualitative Contrast – behavior vs. meaning, Reciprocal Analysis – Qualitative analysis and Quantitative data, Quantitative analysis of Qualitative data Ethics in Research – Importance of Research Ethics, Ethical principles, Ethical Considerations in Online Research, copyright issues, copyright and photographs, Writing up of Research Project	L=12 T=2	P=2
Learning Resources			
1	Text book	• Bell, E., Bryman, A. & Harley, B. (2019), 2nd Ed., Business Research Methods, Oxford University Press, New Delhi, India • Kothari, C. R. & Garg, G., (2019), 4th Ed., Research Methodology – Methods and Techniques, New Age International Publishers, New Delhi, India • Creswell, J.W., (2014), 3rd Edition, Research Design, Qualitative, Quantitative and Mixed Methods Approaches, Sage Publication, New Delhi, India	

Semester	I	Total Credit	4
Course Code	SOB-BA-105	Credit Pattern	L-45, T-08, P-07
Course Title	PROGRAMMING FUNDAMENTALS USING PYTHON		

Course Objectives	
1.	To understand computer programming fundamentals – algorithms and flowcharts
2.	To use data types, control structures, looping statements, and functions for Python programs through example
3.	To demonstrate data visualization using plots from matplotlib.
4.	To illustrate data handling with pandas dataframe.

Course Outcomes: The students will able to	
1.	Discuss computer programming fundamentals – algorithms and flowcharts.
2.	Use data types, control structures, looping statements, and functions for Python programs through example.
3.	Demonstrate data visualization using plots from matplotlib.
4.	Illustrate data handling with pandas dataframe.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Programming Fundamentals and Overview of Python Introduction, Algorithm, Flowchart, Introduction to types of Software, History and Overview of Python, Basic features of Python, Python Resources, Python Installation, IDEs	L= 11	
		T=2	P= 2
2	Getting started with Python Python Programming Environment, Data Types - Number, String, List, Tuple, Dictionary, Attributes, Methods Control Structures – If Else, Looping Statements – For Loop, While Loop, Functions, Python Scripts File Handling, Overview of Object-Oriented Programming (OOP)	L= 12	
		T= 2	P= 1
3	Numpy and Matplotlib Python packages, Introduction to Numpy, ndarray object and its attributes, Understanding the N-dimensional data structure, Basic operations and manipulations on N-dimensional arrays, indexing, slicing Data visualization: plotting with matplotlib scatter plots, line plots, box plots, bar charts and histograms with matplotlib Customizing plots: important attributes and arguments	L= 11	
		T= 2	P= 2
4	Data Handling with Pandas Pandas data structures: Series and Data Frames, Read and write tabular data, Filtering subset of a table, indexing, slicing, Exploring dataframe – attributes and methods, combining rows and columns, handling missing values, Basic Statistical Analysis, accessing data from multiple sources, Introduction to web analysis	L=11	
		T= 2	P= 2

Learning Resources		
1	Text Books	- Gries, P., Campbell, J. & Montoyo, J. (2019). Practical Programming: An introduction to Computer Science Using Python (2nd ed.). O'Reilly. - Fakari, W. F. (2021). Programming Fundamentals (1st ed.). Politeknik Kuala Terengganu.
2	Reference books	- Lutz, M. (2013). Learning Python (5th ed.). O'Reilly. - McKinney, W. (2017). Python for Data Analysis: Data Wrangling with Pandas, Numpy, and IPython Book. - Müller, A. C. & Guide, S. (2016). Introduction to Machine Learning with Python: A Guide for Data Scientists (1st ed.). O'Reilly Media. - Madhavan, S., (2015). Mastering Python for Data Science, PACKT.
3	Websites	- Python documentation https://docs.python.org/3/ - Python Downloads https://www.python.org/downloads/ - ANACONDA, https://www.anaconda.com/ - numpy, https://numpy.org/doc/stable/user/basics.html - pandas, https://pandas.pydata.org/docs/getting_started/index.html#getting-started - matplotlib, https://matplotlib.org/stable/users/getting_started/
4	Supplementary Reading	- Python Tutorial, https://www.w3schools.com/python/ - Data Analytics With Python: Use Case Demo, https://www.simplilearn.com/tutorials/data-analytics-tutorial/data-analytics-with-python - Data Analysis, https://pythonprogramming.net/data-analysis-tutorials/
5	Practical Components	Python installation, developing scripts, working with python packages

Semester	I	Total Credits	4
Course Code	SOB-BA-106	Credit Pattern	L-45, T-8, P – 7
Course Title	FINANCIAL ACCOUNTING		
Course Outcomes	The Student Will be able to		
1	Acquire the requisite theoretical framework for understanding practical problems in Accounting		
2	Apply basic accounting principles and concepts for preparation of Financial Statements		
3	Evaluate the financial position by preparing the financial statement as per Schedule III		

Syllabus

Unit Number	Contents	Number of Sessions	
1	Introduction to Accounting: Meaning of Accounting, Branches of Accounting, Users of Accounting Information, Advantages and Limitations of Accounting, Accounting Concepts and Conventions, Introduction of Accounting Standards and IFRS	L = 11	
		T = 2	P = 2
2	Accounting Process: Accounting Cycle, Journal, Ledger, Subsidiary Books of Accounts, Trial Balance Bank Reconciliation Statement: Introduction, Significance and Need of Bank Reconciliation Statement, Causes for Difference between Bank Balance Shown by Cash Book and Pass Book, Preparation of Bank Reconciliation Statement	L = 12	
		T = 2	P = 1
3	Accounting for Depreciation: Meaning of Depreciation, Accounting Concept of Depreciation, Causes of Depreciation, Objectives of Providing Depreciation, Methods of Providing Depreciation – Straight Line Method, Diminishing Balance Method. Funds Flow Statement: Meaning and Definition, Nature of Funds Flow Statement, Utility of Funds Flow Statement, Preparation of Funds Flow Statement	L = 11	
		T = 2	P = 2
4	Financial Statements: Preparation and Understanding of Financial Statements – Balance Sheet and Statement of Profit and Loss and Notes as per Schedule III, Preparation of Cash Flow Statement Introduction of Tally Software Package in Accounting: Creating Companies, Journal Entries and Ledger Accounts	L = 11	
		T = 2	P = 2

Note:

1. Case Studies on each Aspects mentioned in Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class.

Learning Resources		
1	Text Books	a. Mukherjee A and Hanif M, (2018), 4th Edition, “Financial Accounting”, Tata McGraw Hill Education Pvt. Ltd. b. Kalpesh Ashar, (2019), 4th Edition, “Financial Accounting”, Vibrant Publishers
2	Reference Books	a. Goyal B K and Tiwari H N, (2019), 7th Edition, “Financial Accounting – Text and Illustrations”, Taxmann Publication Pvt. Ltd. b. Ramchandran N and Ramkumar K, (2020), 5th Edition, “Financial Accounting for Management”, McGraw Hill Education Pvt. Ltd. c. Gupta A, (2022), 7th Edition, “Financial Accounting for Management – An Analytical Perspective”, Dorling Kindersley (India) Pvt. Ltd d. Jawaharlal and Srivastava S, (2017), 1st Edition, “Financial Accounting- Text and Problems, Himalaya Publishing House e. Narayanaswamy R, (2017), 6th Edition, “Financial Accounting – A Managerial Perspective”, PHI Learning Pvt. Ltd. f. Gupta R L And Gupta V K, (2014), 3rd Edition, “Financial Accounting”, Sultan Chand & Sons (P) Ltd. g. Singh Y P and Singhal A, 1st Edition, “Financial Accounting”, Thakur Publication Pvt. Ltd.
3	Websites	a. www.emeritus.org/blog/finance-fundamentals-of-financial-accounting/ b. www.icaai.in/upload/Students/Syllabus2016/Inter/Paper-5 c. www.ddeegjust.ac.in/studymaterial/mba/cp-104 d. www.illumio.com/blogs/illumio-customer-success/2022/02/28/financial-accounting-what-its-importance-examples
4	Research Articles	a. Mert H, Dil S E, 2016, ‘Effects of Depreciation Methods on Performance Measurement Methods : A Case of Energy Sector’, Journal of Economics, Finance and Accounting, Vol. 3 (4), pp 330 - 344 b. Clementina K, Gabriel I, 2015, ‘Bank Reconciliation Statements, Accountability and Profitability of Small Business Organizations’, Research Journal of Finance and Accounting, Vol. 6 (22), pp 21 – 30 c. Khan H F, 2016, ‘Accounting Information System: The Need of Modernization’ , International Journal of Management and Commerce Innovations, Vol. 4 (1), pp. 4 -10
5	Journals	a. Journal of Accounting & Finance, b. ICAI Journals c. ICSI Journals
6	Practical Component	a. Practical Problems on Bank Reconciliation Statement b. Practical Problems on Depreciation Accounting c. Practical Problems on Funds Flow Statement d. Practical Problems on preparation of Balance Sheet, Income Statement and Notes as per Schedule III e. Practical Problems on Preparation of Cash Flow Statement

Semester	I	Total Credits	4
Course Code	SOB-BA-107	Credit Pattern	L-45, T-8, P-7
Course Title	INFORMATION TECHNOLOGY FOR MANAGEMENT		
Course Objectives			
1	To develop students' discipline to manage I.T resources in accordance with business needs.		
2	To make use of database management system using MS Access.		
3	To develop the Skill for preparing an effective presentation.		
4	To understand all aspects of E-Commerce.		
Course Outcomes: Students will be able to;			
1	Analyze industry data using MS-Excel.		
2	Develop an effective presentation using software.		
3	Appreciate importance of IT in Digital Economy.		
4	Design conceptual models of a database using MS Access for real-life applications and also construct queries, data entry forms using wizard.		

Unit Number	Contents	Number of Sessions	
1	Organizational Performance- I.T. Support and Applications: Concept of I.T., How I.T. supports people and Organizational Activities, Concept of Information Systems (I.S.), Difference between computers and I.S., Doing Business in the Digital Economy, Major I.T. characteristics in Digital Economy, Major capabilities of Computerized Information Systems, Managerial issues in I.T. Management.	L= 11	
		T= 2	P= 2
2	MS- Word- Creating, Formatting, Saving, Printing Documents, Using Visual Aids In Business – Factors To Be Considered Before Creating A Presentation, making presentation using PowerPoint- creating presentation, adding slide, formatting slides, animation, slide transition, adding media, images, charts, tables to presentation, visual media, Designing, setting up the room.	L= 12	
		T= 2	P= 1
3	Data Analysis Through Excel –Creating workbook, work sheets, adding and renaming worksheets, Formatting Work Sheet, Naming Cells and Range, Advanced conditional Formatting, Data visualization using Spark lines and Excel Charts, Formula and Functions and relative and absolute addressing, SUM,SUMIF, COUNT, COUNTIF, COUNTBLANK Functions, Amortization Tables ,Excel Settings, Basic Data Analysis – Sorting, Summarizing, Filtering, Validating Data, Subtotal	L= 11	
		T= 2	P= 2
4	DBMS and RDBMS, Characteristics Of RDBMS, Role And Responsibilities Of DBA, Using MS Access - Creating A Table, Add and Delete columns Calculation using access, Importing table, Creating query using wizard, Query with relationship, Create Form using Form Wizard, Create reports using report wizard, Computer Network, Network Topologies, Meaning of Network Protocol, Concept of Internet, Intranet and Extranet, e-Commerce– Introduction,	L=11	
		T= 2	P= 2

	Advantages of e-Commerce, Types of e-commerce, e-Governance. Computer Virus- Types of Viruses and remedial measures.		
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Note:

1. Students Will Have To Complete All Practical Assignments Based On Business Applications.
2. Students will have to complete all tutorials, assignments and lab session for internal credits.

Learning Resources	
Text Books	1. Turban E., Leidner D. , McLean E., Wetherbe J. (2013), “Information Technology for Management – Transforming Organizations in the digital Economy”- 6th Edition, Wiley India Pvt. Ltd., New Delhi. 2. Bocuki L., Walkenbach J., Wempen F., Alexander M., Kusleika D., (2013), Microsoft Office 2013 Bible-The comprehensive tutorial resource, Wiley India Pvt. Ltd. New Delhi. 3. Melton B., Dodge M., Swinford E., Couch A., Legaulty E., Schorr B., Rusen C., (2013), Microsoft Office Professional 2013- Step by Step, PHI Learning Pvt. Ltd., Delhi.

Semester	I	Total Credit	2
Course Code	SOB-BA-108	Credit Pattern	L-22, T-8
Course Title	DATABASE MANAGEMENT SYSTEM		
Course Objectives			
1	To understand the design of Database aspects and to understand various Data Modeling concepts for better database design.		
2	Also to know various Phases involved in building simple well-structured database(s).		
Course Outcomes			
After completion of this course the student will be able to:			
1	Assess the Database Concepts, design of Database aspects and to understand various Data Modeling concepts for better database design, Concurrency Control and Backup and Recovery Techniques.		
2	Evaluate various Data Modelling Techniques, Phases involved in building simple well-structured database(s), Transaction Control Management and Backup and Recovery Methods.		
Unit Number	Contents		
1	Database Systems Concepts And Architecture: (12) Introduction, Significance of Database, Database system Applications, Data Independence, Data Modeling for a database, Entities and their Attributes, Entities, Attributes, Relationships and Relationship Types, Advantages and Disadvantages of DBMS, DBMS Vs. RDBMS, Concepts of Data Models Network, Hierarchical, Relational, concepts of – Relation, attributes, domain, tuple, entities, DBA and Responsibilities of DBA, concept of Normalization : Normalization: Meaning & Functional Dependencies And Normalization For Relational Databases: functional dependencies; normal forms based on primarykeys-1NF with example; general definitions of 2nd and 3rd normal forms; Boyce-Codd normal (BCNF)forms, 4 Normal Form.		
2	Structural Query Language(SQL): (12) Introduction, Data types, table creations, Applying Constraints, Inserting, Deleting, Updating Searching and Retrieving of the data. Features of SQL, data types- fixed length, variable length, examples, and types of SQL commands-DDL, DML, DCL, and TCL. Operators and Functions: Data Constraints: Primary key, Foreign Key, Unique, Null, Not Null, Check, Default, Select statement with where, group by, order by clause, SQL Operators: Logical, Relational, Special operators- In, Between, Like.		

Learning Resources		
1	References	• Narciso, F. and Hajek, D. (2020) Introduction to database systems. Independently Published. • Pods 2011 Committee (2011) Pods'11 proceedings of the 30th symposium on principles of database systems. ACM. • Sumathi, S. and Esakkirajan, S. (2010) Fundamentals of relational database management systems. Berlin, Germany: Springer. • Goodyear, M. (ed.) (2017) <i>Enterprise system architectures: Building client server and web based systems</i>. London, England: CRC Press.
2	Text Books	• Gillenson, M. L. (2023) Fundamentals of database management systems. 3rd ed. Nashville, TN: John Wiley & Sons. • Last, M. <i>et al.</i> (2020) <i>Concepts of database management</i>. 10th ed. Florence, AL: Course Technology
3	Website	• <i>Introduction of DBMS (database management system)</i> (2016) <i>GeeksforGeeks</i>. Available at: https://www.geeksforgeeks.org/introduction-of-dbms-database-management-system-set-1/ • <i>DBMS Tutorial</i> (no date) www.javatpoint.com. Available at: https://www.javatpoint.com/dbms-tutorial

MBA (Business Analytics Specialization) – I
SEMESTER – II

Semester	II	Total Credit	4
Course Code	SOB-BA-201	Credit Pattern	L-45, T-8, P-7
Course Title	ORGANIZATIONAL BEHAVIOUR AND HUMAN RESOURCE MANAGEMENT		

Course Objectives

1	To study individual and group perspectives of behavior in an organization.
2	To develop skills in understanding and appreciating individual, inter-personal and group process for increased effectiveness, both within and outside organizations
3	To enable student to gain insights for effectively managing human resource in the organization
4	To design and implement different HR functions covered in the course.

Course Outcomes: Students will be able to:

1	Demonstrate a thorough knowledge of organizational behavior.
2	Apply relevant contemporary theories, concepts and models in order to analyse organizational environment, cases and issues.
3	Identify the wide range of sources for attracting and recruiting talent and appropriate process for selecting candidates
4	Conduct job analysis interview develop job descriptions and job specifications, conduct performance appraisal
5	Develop, implement, and evaluate employee orientation, training, and development programs.

Unit Number	Contents	Number of Sessions	
1	Definition and Importance of OB, Perception – Definition, Importance and Factors Influencing Perception, Motivation: Definition, Theories in Motivation- Maslow, Theory X and Y, Z Theory. Individual Perspective: Personality – Determinants of personality, Theories of personality- Type A and B, Big five, Locus of control.	L = 12	
		T=2	P= 1
2	Attitude – Characteristics, Components, Formation, Concept of Values. Concept of Groups, Stages in Group Development, Types of power, Power and Politics. Human Resource Management- Meaning, Objectives, Scope, Functions, Job Analysis- Job Description and Job Specification.	L = 11	
		T=2	P=2
3	Concept of Human Resource Planning and importance, Recruitment- Definition, Sources of Recruitment, Employee Selection Process. Training and development- Methods of training and development.	L= 11	
		T=2	P=2
4		L= 11	

	Performance Appraisal- Methods of Performance Appraisal, Problems in Performance Appraisals and solutions, Factors to be considered for Fixing Compensation, Employee Health, Safety and Welfare.	T=2	P= 2
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Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources

1.	Reference books	1. David A. Decenzo, Stephen P. Robbins, Personnel / HRM (3rd Edition), Prentice Hall Of India, New Delhi. 2. Fred Luthans, Organisational Behavior, McGraw Hill, 11th Edition, 2001. 3. Hellrigal, Slocum and Woodman, Organisational Behavior, Cengage Learning, 11th Edition 2007. 4. Ivancevich, Konopaske&Maheson, OranisationlBehaviour& Management, 7th edition, Tata McGraw Hill, 2008. 5. Mc Shane & Von Glinov, OrganisationalBehaviour, 4th Edition, Tata McGraw Hill, 2007. 6. Schermerhorn, Hunt and Osborn, Organisational behavior, John Wiley, 9th Edition, 2008. 7. P G Aquinas, Organisational Behaviour : concepts, realities, applications and challenges, Excel Books. 8. Gary Dessler, Human Resource Management Prentice Hall Of India, New Delhi, Tenth Edition. 9. Bohlander And Snell, Managing Human Resources 13th Edition, Thomson – South Western.
2.	Journals	1. IUP Journal of Organisational Behavior 2. Indian Journal of Training and Development 3. Indian Journal of Human Development

Semester	II	Total Credit	4
Course Code	SOB-BA-202	Credit Pattern	L = 45, T = 7, P = 8
Course Title	FINANCIAL MANAGEMENT		

Course Objectives

1	Familiarizing the participants with the skills related to basic principles, tools and techniques of financial management.
2	To provide conceptual clarity about the management tools and techniques used in financial planning, analysis, control and decision making.
3	To provide knowledge of ratios, working capital, capital budgeting, cost of capital, cost sheet and standard costing to enable the candidates to tackle practical situations.

Course Outcomes

1	Relating and interpreting financial statement analysis techniques.
2	Evaluating cost of capital, capital budgeting and standard costing.
3	Critically evaluation working capital requirement.

Unit No.	Topic	Number of Sessions	
1	Introduction : Meaning and Objectives of financial management, Profit Maximization vs. Wealth Maximization, Cardinal Principles of Financial Management, Role of Finance Manager in Modern Competitive Environment, Concept of Financial Decisions, Major Financial Decision Areas, Basic Factors influencing Financial Decisions Analysis of Financial Statement: Concepts, Tools of Financial Analysis: Trend Analysis, Common size statements, Comparative Statements, Concept of Ratio Analysis, Advantages and Limitations of Ratio Analysis, Analysis and Interpretation of Financial Statement using the technique of Ratio Analysis	L = 11	
		T = 2	P = 2
2	Cost of Capital & Capital Budgeting: Concept and significance of cost of capital, Factors affecting Cost of Capital, Measurement of Cost of Capital, Weighted Average Cost of Capital, Marginal Cost of Capital Concepts and Techniques of Capital Budgeting Decisions: Nature and types of Investment Decisions, Investment Evaluation Criteria, Evaluation of Different Proposals under Capital Budgeting and use in Decision Making	L = 11	
		T = 1	P = 2
3	Working Capital Management: Concept of Working Capital, Significance and Importance of Working Capital, Determinants of Working Capital, Constituents of Working Capital, Estimating Working Capital Needs	L = 12	
		T = 1	P = 2
4	Introduction to Cost Accounting & Techniques: Introduction to Cost Accounting, Elements of Cost and Cost Sheet, Use and Importance of Standard Costing, Including Variance Analysis – Materials and Labour Variances. Cost Control Techniques.	L = 11	
		T = 2	P = 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class.

Learning Resources		
1	Text Books	1. Pandey I M, 11th Edition, Financial Management, Vikas Publishing House, Mumbai 2. Kishore R M, (2020), 8th Edition, Financial Management – Theory, Problems, Cases, Taxmann’s Publication Pvt. Ltd., Chennai 3. Reddy G S, (2020), 4th Edition, Financial Management – Principles and Practices, Himalaya Publishing House, Mumbai
2	Reference Books	1. Pandey I M, 11th Edition, Financial Management, Vikas Publishing House, Mumbai 2. Prasanna C, (2019), 10th Edition, Financial Management Theory and Practice, Tata McGraw Hill Education Pvt. Ltd., Noida 3. Khan M Y and Jain P K Theory and Problems in Financial Management. New Delhi : Tata McGraw Hill Publishing Company Limited
3	Websites	• www.aafmindia.co.in/financial-statement-analysis-tools-limitation-uses-process • www.corporatefinanceinstitute.com/resources/equities/dividend-policy • www.economicdiscussion.net/financial-management/dividend-policy/33373 • www.corporatefinanceinstitute.com/resources/capital-markets/cash-management • INFLIBNET http://nlist.inflibnet.ac.in • J-GATE http://jgateplus.com • EBSCO http://search.ebscohost.com • Library online Opac Address: http://192.168.1.111:8080/opac • *For INFLIBNET individual usernames and passwords are already given. Use the same
4	Journals	1. Madhumitha Kesavan, 2019, ‘Profit Maximisation vs. Wealth Maximisation’, Indian Journal of Applied Research, Vol. 9(2) 2. Ntiedo B E, Nseabasi E and Paul O U, 2017, ‘Finance Manager and the Finance Function in Business Sustainability’, Indian Journal of Business Marketing and Management, Vol. 2(1) 3. Wang D and Zhou F, 2016, ‘The Application of Financial Analysis in Business Management’, Vol. 4 4. Gowsalya R S and Hasan M M, 2017, ‘Financial Performance Analysis’, International Journal for Research Trends and Innovation, Vol. 2(6)
5	Supplementary Reading	• The Economic Times • The Business Standard • The Hindu • Business World • Business Today • Business India • Outlook Money • Forbes India
6	Practical Component	• Practical Problems on Ratio Analysis • Practical Problems on Working Capital • Practical Problems on Cost of Capital • Practical Problems on Capital Budgeting • Practical Problems on Cost Sheet • Practical Problems on Standard Costing(Material and labour variance) • Companies Financial Reports & Corporate case studies.

Semester	II	Total Credit	4
Course Code	SOB-BA-203	Credit Pattern	L-48, T-08, P-4
Course Title	DATA WAREHOUSING AND DATA MINING		

Course Objectives	
1	To provide students with basic concepts of data warehouse and data mining.
2	To develop abilities to solve real time problem by applying appropriate data mining algorithm.
3	To make students acquaint to different tools and techniques used for Knowledge Discovery in Databases.

Course Outcomes: The students will able to			
1	Explain concept of data warehouse and ETL process.		
2	Develop acquaintance with the tools and techniques used for Knowledge Discovery in Databases.		
3	Discover interesting patterns from large amounts of data to analyze and extract patterns to solve problems.		
4	Evaluate and select appropriate data-mining algorithms.		
5	Apply Web Data mining techniques on problem domain data for better insights of data interpret and report the output appropriately.		
Unit Number	Contents	Number of Sessions	
1	DATA WAREHOUSING Overview and Concepts: Need for data warehousing, The building blocks of a Data warehouse , Data Warehouse Architecture, Extract Transform Load Cycle: ETL overview, Extraction, Loading, Transformation techniques. Reporting and Query tools and Applications, OLAP – the need, Design of the OLAP database, OLAP operations: slice, dice, rollup, drill-down etc.	L= 12	
		T=3	P= 0
2	INTRODUCTION TO DATA MINING AND ASSOCIATION RULE MINING Introduction – Data – Types of Data – Data Mining Functionalities – Classification of Data Mining Systems – Data Mining Task Primitives, Data Mining Applications, Integration of a Data MiningSystem with a Data Warehouse – Issues –Data Preprocessing. Mining Frequent Patterns, Associations and Correlations –Mining various Kinds of Association Rules – Market Basket Analysis, Apriori Algorithm, FP tree Algorithm, Correlation Analysis.	L= 12	
		T= 3	P= 0
3	CLASSIFICATION Classification and Prediction - Basic Concepts - Decision Tree Induction - Bayesian Classification – Rule Based Classification – Classification by Back propagation – Support Vector Machines – Associative Classification – Lazy Learners – Other Classification Methods – Prediction.	L= 12	
		T= 1	P= 2

4	CLUSTERING AND WEB MINING Cluster Analysis - Types of Data – Categorization of Major	L=12	
	Clustering Methods – K-means– Partitioning Methods – Hierarchical Methods – Outlier Analysis – Web Mining: Web Content Mining, Web Structure Mining, and Web Usage mining.	T= 1	P= 2

Learning Resources			
1	Text Books	- Alex Berson and Stephen J. Smith, — Data Warehousing, DataMining & OLAP, Tata McGraw – Hill Edition. - Jiawei Han and Micheline Kamber, –Data Mining Concepts and Techniques, Second Edition, Elsevier	
2	Reference books	- Pang-Ning Tan, Michael Steinbach and Vipin Kumar, — Introduction To Data Mining, Person Education, 2007. - K.P. Soman, Shyam Diwakar and V. Ajay –, Insight into Data mining Theory and Practice, Easter Economy Edition, Prentice Hall of India G. K. Gupta, — Introduction to Data Mining with Case Studies, Easter Economy Edition, Prentice Hall of India - Daniel T.Larose, –Data Mining Methods and Models, Wile-Interscience	
3	Websites	http://guidetodatamining.com/, –A Programmer's Guide to Data Mining https://www.classcentral.com/course/independent-data-mining-with-weka-1152, –Data Mining with Weka https://www.geeksforgeeks.org/data-mining/ https://www.tutorialspoint.com/data_mining	
4	Journals	- Inderscience Publisher –International Journal of Business Intelligence and Data Mining - Inderscience Publisher –International Journal of Knowledge Engineering and Data Mining” - IEEE Transactions on Knowledge and Data Engineering - Wiley Interdisciplinary Reviews: Data Mining and KnowledgeDiscovery	
5	Supplementary Reading	https://www.techgig.com/webinar/Understanding-SVM-Support-Vector-Machine-Algorithms-1083 https://www.searchtechnologies.com/blog/web-data-mining-tools-techniques	
6	Practical Components	Experimenting different mining algorithms on available datasets Using and R programming.	

Semester		II	Total Credit	2
Course Code		SOB-BA-204	Credit Pattern	22L+ 2 T + 6P
Course Title		BUSINESS LAWS		
Course Objectives				
1	To enable students to appreciate the relevance of business law to individuals and businesses.			
2	To equip students with knowledge needed to manage business successfully from legal point Of view.			
Course Outcomes: Students will be able to;				
1	Explain the legal principles of Business Laws			
2	To solve legal issues of Business.			

Syllabus:

Unit Number	Contents	Number of Sessions	
1	A) Indian Contract Act – 1872: Meaning and sources of law, Definition of contract and essential elements of a valid contract, Modes of discharge of contract, Remedies for breach of contract. B) The Sale of Goods Act – 1932: Definition of Sale, essentials of a valid Sale, Conditions and Warranties, caveat emptor, passing of property, unpaid seller. C) Consumer Protection Act – 1986: Definition of consumer, complaint, complainant, unfair trade practice, Consumer dispute Redressal Agencies. (15)	L= 11	
		T=1	P=3
2	A) The Companies Act – 2013: Definition of company, kinds of companies, Memorandum of Association, Articles of Association, And Boards of Directors: duties and powers, Meetings in a company, Winding up. B) Information Technology Act – 2008: Objectives of IT Act, Digital Signature, E-Governance, Controller, Certifying authority, offences and penalties. C) The Negotiable Instrument Act – 1881: Definition and characteristics of NI, kinds of Negotiable Instruments, Holder and holder in due course, Crossing of Cheque, Discharge of Negotiable Instruments. (15)	L= 11	
		T= 1	P= 3

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class.

Learning Resources		
1	Text Books	1. Mercantile Law by N. D. Kapoor 2. Business Law by S. S. Gulshan & G. K. Kapoor
2	Reference books	1. Business Law by Kuchhal M. C. 2. Business Law by K. R. Bulchandani
3	Websites	1. www.lawctopus.com 2. https://indiacorplaw.in
4	Journals	1. India Law Journal 2. Corporate Law reporter 3. India Business Law Journal- Delhi High Court 4. IOSR Journals
5	Supplementary Reading	1. Bare Acts on Consumer Protection Act 1986 2. Bare Act on Information Technology Act 2008
6	Practical Components	1. Case studies to be discussed on all the above topics 2. Seminars to be conducted on the above topics

Semester	II	Total Credit	2
Course Code	SOB-BA-205	Credit Pattern	
Course Title	OPERATIONS MANAGEMENT		

Course Objectives	
1	To make students understand fundamental concepts Operations Management, including Production Planning & Control, Quality Management.
2	To familiarize the students with various techniques of facilities location, layout & supply chain Management.
3	To introduce students to the modern concept & recent trends in Operations Management.

Course Outcomes: Students will be able to	
1	Illustrate basic terms and concepts related to Production & Operations Management
2	Plan effective plant location & layout for the organization.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	AN OVERVIEW OF OPERATIONS MANAGEMENT Concept of Operations Management, Types of Production System, Objectives and Scope of Operations Management, Manufacturing Operations (Goods) versus Service Operations, Operations in Service Sector, Decisions in Operations Management.	L= 12	
		T= 1	P=2
2	OPERATIONS SYSTEM DESIGN Facility Location: Importance, Factors Affecting Location Decision. Facility Layout: Importance, Types of layout. Functional Areas of Operations Management: Inventory Management, Logistics & Supply Chain Management, Quality Management	L= 11	
		T= 2	P= 2

Learning Resources		
1	Text Books	1. K. Shridhara Bhat, Production and Operations Management, Himalaya Publishing House 2. Anmol Bhatia, Industrial Engineering and Operations Management, S.K. Kataria & Sons 3. R. B. Khanna, Production And Operations Management, PHI
2	Reference books	1. Alan Muhjemenn, John Oakland And Keith Lockyer: Production And Operations Management, (Sixth Edition), Pearson Education 2. S. A. Chunawalla And D. R. Patel: Production And Operations Management, Himalaya Publishing House, Mumbai. 3. R. Paanneerselvam, Production And Operations Management, Eastern Economy Edition
3	Websites	1. https://learn.saylor.org/course/view.php?id=86 2. https://www.managementstudyguide.com/production-and-operations-management-articles.htm

4	Journals	1. Journal of Operations Management – Elsevier 2. Journal of Operations Management - Wiley Online Library 3. Journal of Operations Management ScienceDirect.com 4. International Journal of Services and Operations Management(IJSOM)
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Semester	II	Total Credit	2
Course Code	SOB-BA-206	Credit Pattern	L-22, T-4, P-4
Course Title	BUSINESS COMMUNICATION		

Course Outcomes	
1	Internalize the basics of business communication
2	Prepare written documents for business decision making

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Foundations of Business Communication Basic Communication Process, barriers to communication the mobile revolution, using technology for communication. Interpersonal communication – team communication, meetings, listening skills, using nonverbal communication effectively, developing business etiquette – at workplace, in social settings, online and using mobile devices. Understanding the 3 step writing process. Planning Business messages – analyzing situation, gathering information, selection of media and channels, organizing information.	L= 11	
		T= 2	P= 2
2	Written Communication Writing business messages – adapting to audience, routine messages, negative messages, persuasive messages Types of written communication – letters, memorandums, circulars, minutes of meetings etc. Letter Writing – Formats of letters: block, semi block and modified block, Parts of letter. 7 C's of letter writing. Types of letters – inquiry, reply to inquiry, order letters, acceptance letter, thank you letters. Memorandums, circulars, agenda, minutes of meeting and note taking Use of digital technology - Email writing, instant messaging, website content, podcasting.	L= 7	
		T= 2	P= 6

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.

Learning Resources		
1	Text books	1. Bovee C L, Thill J V & Raina R L (2017) Business Communication Today 13th edition, Pearson Publication Tamil Nadu India. 2. Bovee, C & Thill J, (2010), 4th Ed., Business Communication Essentials, Pearson India, New Delhi, India.
2	Reference books	1. Kalia, S. & Aggarwal, S. (2015), 2017Reprint, Business Communication A Practice-Oriented Approach, Wiley India Pvt. Ltd. 2. Koneru, A., (2008) 1st Ed., Professional Communication, Tata McGraw-Hill Publishing Company Limited. 3. Raman, M & Sharma S, (2018) 3rd Ed Technical Communication Principles & Practice, Oxford University Press, New Delhi, India.
3	Practical	Writing letters, creating messages, conducting meetings.

Course Code: SOB-BA-207

Course Title: Field Project

Field Project is a full credit i.e. 2 credits compulsory paper. One credit is allotted to 15 contact hours. In the similar computation 2 credits are 15 hours * 2 credits = 30 hours for this course.

This field project course/module will help students to learn about different aspects of management in a real-world setting. Through field project, students can gain first-hand experience in managing people, projects, and resources. Additionally, field studies provide students with an opportunity to apply the theoretical concepts they have learned in the classroom to a real-world situation. As such, field projects play an important role in preparing students for careers in management.

- The student pursuing MBA(General) can choose any topic from Management discipline in consultation with the assigned faculty.
- For student pursuing MBA with Business Analytics specialization, the field-project will be in Data Exploration and Visualization.
- While for student pursuing MBA with Banking and Financial Services specialization, the field- project will be in Financial Markets and services.

Learning outcomes:

1. To understand the environmental factors of business and how it affects management.
2. To identify and examine the different issues and challenges surrounding businesses.
3. To develop and suggest solutions to solve the issues or mitigate the challenges identified in the research.

Knowledge and understanding outcomes

On successful completion of the module, students will be able to:

1. To develop the ability of building teamwork, group skills, and critical and scientific interpretation.
2. To improve as critical thinking and time management proficiency.
3. To develop skills such as observation, recording data, drawing conclusions, making decisions, and solving research and field problems.

Ability Outcomes

1. Appraise different challenges of environment.
2. Use scientific literacy and practical knowledge for managing people, projects, and resources.
3. To apply the theoretical concepts they have learned in the classroom to a real-world situation.
4. To inculcate research trend in higher education for addressing issues of study.

Assessment Criteria

For the paper of 50 marks, the distribution of the marks for project work will be as follows-

- i.) Formative Assessment 20 Marks

ii.) Summative Assessment 30 marks

Break-up of formative evaluation:

Sr. No.	Head	Marks out of 20
1	Individual viva	05
2	Presentation	10
3	Assignments	05

Individual Viva: weightage – 05 Marks

The students are expected to have knowledge of visits which are covered under this module. Viva will be assessed with weightage of 05 marks of the module of as a part continuous internal evaluation. Each student will be provided with only ten minutes time for viva.

- Viva is limited to 10 minutes at the maximum per person
- Viva will be assessed with weightage of 05 marks
- Students are expected to have knowledge of field visits made by them

Individual Presentation assessment weightage – 10 Marks

The students are expected to make a power point presentation on the given topic covering the learning outcomes.

Each student will be provided with only five minutes time to present his part of the topic. Presentations will be held in the 10th week.

- Presentation size should not exceed 5 slides per presenter
- Presentation is limited to 7 minutes at the maximum per person
- Individual presentations need to adhere to the time limit.
- Any duplication of similar topic or exchange of PPT and content between or among the groups should be avoided / in such a case the module leader will use arbitration of acceptance or rejection.

Summative Assessment

Assesment:

- The field project report will be evaluated by a panel consisting of internal facutlies including the faculty supervisor out of 30 marks.

Semester	II	Total Credit	2
Course Code	SOB-BA-208	Credit Pattern	L-20, P-10
Course Title	DATA EXPLORATION AND VISUALIZATION		
Course Objectives			
1.	To discuss the basics concepts of R		
2.	To use basic plots and exploration for effective data analysis		
3.	To illustrate univariate, bivariate, multivariate analysis		
4.	To demonstrate dimensionality reduction, principal components, and clustering		
5.	To discuss web analytics and social network analysis		

Course Outcomes: The students will able to	
1.	Discuss the basics concepts of R
2.	Use basic plots and exploration for effective data analysis
3.	Illustrate univariate, bivariate, multivariate analysis
4.	Demonstrate dimensionality reduction, principal components, and clustering
5.	Discuss web analytics and social network analysis

Unit Number	Contents
1	Getting started with R Overview of R, R Installation, Getting started with R interface, R Nuts and Bolts, Basic Syntax, R Data Types, Control Structures, Functions, Getting Data into R, Data Frames, R Packages, Exploratory Data Analysis (EDA) - Role of EDA, Data Exploration in R, Frequency Tables, Data Sampling, Data Preprocessing, Data Cleaning, Data Visualization, Basic plotting - Histograms, Bar Charts, Scatter Plots, Box Plots
2	Data Visualization- Univariate Analysis, Bivariate Analysis, Multivariate Analysis Summary Statistics, Correlation and Regression Analysis, Data Dimensionality, Principal Component Analysis, Cluster Analysis, Clustering Objects, Time Series and Web Analytics- Introduction, Web Analytics Process, Google Analytics, Key Metrics, Data Sources, Segmentation, Server Log File Analysis, Time Series – Data, Analysis, Visualization, Social Network Analysis – Networks, Tie Strength, Key Players, Cohesion

Learning Resources		
1	Text Books	- Wickham, Hadley, and Garrett Grolemund., R for Data Science, O'Reilly, 2017 - Schmuller, Joseph, Statistical Analysis with R for Dummies, Wiley, 2017
2	Reference books	- Chang, W, R Graphics Cookbook, O'Reilly Media Inc. 2013 - Michael Mahoney, Introduction to Data Exploration and Analysis with R, https://bookdown.org/mikemahoney218/LectureBook/ - Elena N. Ieno, Alain F. Zuur, A Beginner's Guide to Data Exploration and Visualization with R, Highland Statistics Ltd, 2015
3	Websites	http://uc-r.github.io/gda https://www.sanfoundry.com/r-programming-quiz-online/ https://towardsdatascience.com/data-exploration-and-visualization-with-r-ggplot-7f33c10ec1c http://www.rdatamining.com/docs/data-exploration-and-visualization-with-r
4	Journals	- IEEE Transactions on Knowledge and Data Engineering ISSN: 1041-4347 - Big Data Mining and Analytics ISSN: 2096-0654 - IEEE Intelligent Systems ISSN: 1541-1672
5	Supplementary Reading	- Data Visualization in R, https://www.datacamp.com/courses/data-visualization-in-r - Exploratory Data Analysis in R: Case Study, https://www.datacamp.com/courses/exploratory-data-analysis-in-r-case-study
6	Practical Components	- Students have to complete Practical assignments given to them - Project on Data Exploration and Visualization of 2 credits will be done

MBA (Business Analytics Specialization) – II
SEMESTER – III

Semester	III	Total Credit	4
Course Code	SOB-BA-301	Credit Pattern	L-45, T-8, P-7
Course Title	STRATEGIC MANAGEMENT		

Course Objectives	
1	To familiarize students with strategic management process in detail
2	To analyze organizations for strategy formulation and implementation.
3	To design various types of strategies for a given industry.
4	To evaluate an industry using various tools and techniques for strategic choice.
5	To be able to evaluate strategies implemented.
Course Outcomes Students should be able to:	
1	Discuss various concepts and theories in the field of strategic management.
2	Formulate various types of strategies for a given industry.
3	Evaluate an industry using various tools and techniques for strategic choice.
4	Critique strategies implemented.
5	Devise strategic approaches to managing a business successfully in a global context

Unit Number	Contents	Number of Sessions	
1	Introduction to Strategic Management & External Environment Introduction to Concept of Strategy and Strategic management; Stages of strategic Management, key terms in Strategic Management; The Strategic Management Model; Benefits and pitfalls of strategic Management; Strategy formulation – Vision and Mission; importance of vision and mission statements; importance of vision and mission statements, characteristics of Mission statements; evaluating and writing mission statements. External environment Audit – purpose and nature; Ten external forces that affect an organisation; Porters Five Forces Model, External Factor Evaluation Matrix, Competitive profile Matrix.	L=11	
		T=2	P=2
2	Internal Analysis & Corporate Strategies Nature of Internal Audit; Integrating strategy and culture; management, marketing, finance, operations audit; Value Chain Analysis; Internal Factor Evaluation Matrix. Strategies in Action – long term objectives; Types of Strategies – levels, integration strategies, Intensive Strategies, Diversification Strategies, defensive Strategies, Michael Porter’s Generic Strategies -Blue, red &Purple Ocean strategies Means for achieving strategies.	L=12	
		T=2	P=1

3	Strategic Analysis and Choice Strategic Analysis & Choice Process; Strategy formulation Analytical Framework; SWOT Matrix, Strategic Position and Action Evaluation (SPACE) Matrix, BCG Matrix, Internal- External (IE) Matrix, Grand Strategy Matrix, Quantitative Strategic Planning (QSPM) Matrix; Cultural Aspects of SAC, Politics of SAC. McKinsey's 7s framework Strategy Implementation – Need for clear objectives and policies, allocate resources and manage conflict; Match structure with strategy, Strategic HR, Operations, Marketing, Finance Issues.	L=11	
		T=2	P=2
4	Strategic Evaluation and Key Strategic Management Issues Strategy Evaluation Process Criteria And Methods, Strategy Evaluation Activities, Balanced Score Card, Sources of Strategy Evaluation Information, Characteristics of Effective Strategy Evaluation System, Contingency Planning, Auditing, 21 st Century Challenges in strategic Management; Business Ethics, Social & Environmental Responsibility – Whistle blowing, bribery and workplace balance, Social responsibility Policy, Environmental Sustainability, wildlife Welfare; Global and International Issues – Nature of doing business globally, advantages and disadvantages of doing business globally.	L=11	
		T=2	P=2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. David F R and David F R (2018), 16 th Ed, Strategic Management Concepts – A Competitive Advantage Approach, Pearson India Education Services, Noida India. 2. Hoskisson, Hitt, Ireland & Manikuttu, “Strategic Management”- A south Asian Perspective Cengage Learning, 9 th Edition. 3. Rao, V. S. P., (2013), 2 nd Ed., Strategic Management Text & Cases, Excel Books, New Delhi, India. 4. Thomas Wheelen, T., Hunger J. D, Hofman, A. N., & Banford, C. E., (2018), Concepts in Strategic Management and Business Policy Pearson Publication , New Delhi, India.
2	Websites	www.mckinsey.com/in
3	Supplementary reading	Business Standard : The Strategist supplement Economic Times
4	Practical component	Case studies and assignments on real life situations

Semester	III	Total Credit	4
Course Code	SOB-BA-302	Credit Pattern	L-48, T-12, P-00
Course Title	CLOUD COMPUTING		
Course Objectives:			
1	To explain cloud computing technologies.		
2	To explain the concept of Virtualization and design of cloud Services		
3	To introduce the broad perceptive of cloud architecture and model		
4	To introduce the fundamental ideas of the cloud computing model and its origin		
Course Outcomes:			
After completion of this course the student will be able to:			
1	Identify the architecture and delivery models of cloud computing.		
2	Identify security, privacy and interoperability issues.		
3	Select suitable cloud service		
4	Apply suitable virtualization concept		
5	Implement cloud services and set a private cloud		
Unit Number	Contents		Number of Sessions
1	Introduction to cloud computing: Cloud computing definitions, History of cloud, Characteristics and Principles of cloud, SaaS Maturity Model, commercial cloud offerings, cloud storage, live migration, ISO image, Layers and types of clouds, Challenges, Service Models, opportunities and challenges, advantages and disadvantages of cloud computing, Comparison of Cloud computing, Cluster computing and Grid computing; Applications: Technologies and process required when deploying Web services. Service Oriented Architecture (SOA), WSDL structure, protocols used in SOA, web service integration, service catalogs. Cloud Computing Architecture: Cloud Interoperability and standards, Scalability and Fault tolerance, System Models for Distributed and cloud computing –NIST cloud computing reference model. Cloud Cube Model, Cloud Reference Model, Cloud Models – Service Model(Iaas, Paas, Saas), Deployment Model		L= 12 T=03 P=00

2	Cloud computing costs – Right sizing, auto scaling, vertical scaling Vs horizontal scaling, service level agreement, service credits, defining licensing models. Capacity planning, steps in capacity planning, baseline measurements, resource ceiling, server instance types, measuring network capacity. Virtualization: Introduction to Virtualization, Characteristics of virtualization, Virtualization and Cloud Computing, Pros and Cons of Virtualization, Types of Virtualization- Implementation Levels of Virtualization - Virtualization Structures - Tools and Mechanisms - Virtualization of CPU, Memory, I/O Devices . Fundamental concepts of compute ,storage, networking, desktop and application virtualization, Virtualization benefits, server virtualization, Infrastructure Requirements , Virtual LAN(VLAN) and Virtual SAN(VSAN) and their benefits ,Load balancing, benefits of load balancing, load balancing algorithms, hypervisor (virtual machine monitor), types of hypervisors, machine imaging, porting applications, challenges in porting applications, simple cloud API, AppZero virtual Application Appliance.	L= 12 T=03 P=00
3	Cloud Infrastructure: Cloud Application Platform: Aneka Framework Overview, Building Aneka Clouds: Infrastructure Organization, Logical Organization, Platform Deployment: Private Cloud Deployment Mode, Public Cloud Deployment Mode, Hybrid Cloud Deployment Mode, Resource provisioning, Inter cloud resource management. Layered Cloud Architecture development, Cloud Security, OSI standard for security model, role and rule management, access control list, specific attacks, sniffing, spoofing, phishing, pharming (DNS Spoofing), cryptography, encryption, decryption, types of cryptography. Format of digital certificate, working of digital signature, Electronic money (Digicash), security mechanism in Digicash, types of electronic money, double-spending problem.	L= 12 T=03 P=00
4	V Programming Model: Principles of Parallel and Distributed Computing, Paradigms: Map Reduce-Hadoop Library from Apache, Amazon Web Services (AWS), Manjra soft Aneka, Parallel vs. Distributed Computing, centralized vs distributed systems, Difference between distributed and network operating system, Features and characteristics of distributed systems, distributed architectures, system models, Elements of Parallel Computing Hardware Architectures for Parallel Processing, Approaches to Parallel Programming ,Levels of Parallelism, classification of parallel computers, Flynn’s classification, dependency conditions, Bernstein conditions for detection of parallelism, parallelism based on grain size, Handler’s classification, Components of a Distributed System , Architectural Styles for Distributed Computing , Models for Inter-Process Communication, Technologies for Distributed Computing: Remote Procedure Call.	L= 12 T=03 P=00

Learning Resources		
1	Text Books	1. Kumar Saurabh, "Cloud Computing", Wiley Pub 2. Buyya Selvi, "Mastering Cloud Computing", TMH pub. 3. Soninky, "Cloud Computing", Wiley Pub. 4. Kurtz, Vines, "Cloud Security", Wiley Pub.
2	Reference books	1. John W. Rittinghouse and James F. Ransome, "Cloud Computing: Implementation, Management, and Security", CRC Press, 2010. 2. Kumar Saurabh, "Cloud Computing – insights into New-Era Infrastructure", Wiley India, 2011. 3. George Reese, "Cloud Application Architectures: Building Applications and Infrastructure in the Cloud" O'Reilly 4. Katarina Stanoevska-Slabeva, Thomas Wozniak, Santi Ristol, "Grid and Cloud Computing – A Business Perspective on Technology and Applications", Springer. 5. James E. Smith, Ravi Nair, "Virtual Machines: Versatile Platforms for Systems and Processes", Elsevier/Morgan Kaufmann.
3	Websites	• https://cloudacademy.com • https://acloud.guru • https://geekflare.com/collections/learn-cloud-computing/
4	Journals	• IEEE Transactions on Cloud Computing (http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=6245519#AimsScope) • Journal of Cloud Computing: Advances, Systems and Applications (JoCCASA) (http://www.journalofcloudcomputing.com/) • International Journal of Cloud Computing (http://www.inderscience.com/jhome.php?jcode=ijcc) • The International Journal of Cloud Computing (IJCC) (http://www.hipore.com/ijcc/)
5	Supplementary Reading	• https://www.ibm.com/cloud/learn • https://linuxacademy.com/library/search/cloud/ • https://www.lynda.com/Cloud-Computing-training-tutorials/1385-0.html

Semester	III	Total Credit	4
Course Code	SOB BA 304a	Credit Pattern	L-45, T-9,P-6
Course Title	MACHINE LEARNING		

Course Objectives	
1	Provide a concise introduction to the fundamental concepts in machine learning and popular machine learning algorithms
2	To familiarize various python data structures
3	To familiarize various python libraries for machine learning
4	To demonstrate implementation of various machine learning algorithms using python

Course Outcomes: The students will able to	
1.	Understand various concepts of machine learning
2.	Able to use various python data structures fluently
3.	Able to use various python libraries for machine learning
4.	Able to implement supervised and unsupervised machine learning algorithms using python.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction: Basic definition, types of learning – supervised, unsupervised and Reinforcement, Bias and variance hypothesis space and inductive bias, evaluation, cross-validation. Python: Introduction, NumPy, Pandas, visualization using Matplotlib and Seaborn, Scikit - learn package for Machine Learning	L= 11	
		T=3	P=1
2	Regression – simple Linear regression, model evaluation in regression model, evaluation metrics in regression model, multiple linear regression. Implementation of regression on dataset using python, Classification: KNN, Decision trees, over fitting, Logistic Regression, Support Vector Machine. Implementation of classification algorithms in python	L= 12	
		T= 2	P= 2
3	Bayesian learning: probabilistic reasoning: prior, likelihood and posterior, belief networks: modelling independencies, Markov equivalence in belief networks, hidden Markov models (HMM).Naïve Bayes classifier, learning with hidden variables, Expectation Maximisation (EM). Clustering: Different clustering approaches- partition based clustering, hierarchical clustering and density based clustering. Implementation of clustering algorithms	L=11	
		T=3	P= 1
4	Artificial neural networks (ANN): different learning rules, single-layer perceptron, multi-layer neural nets, back propagation algorithm, feed-forward networks, network training, radial basis function networks, recurrent neural networks.	L=11	
		T= 2	P= 2

Learning Resources		
1	Text Books	1. Machine Learning. Tom Mitchell. First Edition, McGraw- Hill, 1997. 2. Introduction to Machine Learning Edition 2, by Ethem Alpaydin 3. Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython Book by Wes McKinney
2	Reference books	1. Python Machine Learning by Sebastian Raschka 2. Introduction to Machine Learning with Python - A Guide for Data Scientists, Publisher: Shroff Publishers & Distributors Pvt Ltd
3	Websites	1. www.python.org 2. machinelearningmastery.com 3. tutorialspoint.com
4	Journals	1. IEEE xplore digital library 2. International journal of machine learning and computing
5	Supplementary Reading	1. Building Machine Learning Systems with Python - Willi Richert, Luis Pedro Coelho 2. Learning scikit-learn: Machine Learning in Python - Raúl Garreta, Guillermo Moncecchi
6	Practical Components	1. Implementation of supervised and unsupervised machine learning algorithms using python

Semester	III	Total Credit	4
Course Code	SOB-BA-305a	Credit Pattern	L-45, T-8, P-7
Course Title	BUSINESS ANALYTICS USING R (Lab--Based)		

Course Objectives	
1	To understand and adopt the skills of big data analytics and Business Intelligence to varied aspects of managerial decision making
2	To enable a student to use analytics to solve business problems
3	To make use of a language R for applied data science.
4	To Apply BI tools for problem-solving
Course Outcomes: Students will be able to	
1	Identify and describe complex business problems in terms of analytical models.
2	Apply appropriate analytical methods to find solutions to business problems that achieve stated objectives.
3	Apply the knowledge of R gained to data Analytics for real-life applications

Unit Number	Contents
1	Introduction to Business Analytics, Prerequisites for effective business analytics, Applications of Business Analytics, ETL Process, Role of statistics in Analytics, The R community, The R environment, Installing R, Variables in R
2	Types of Digital Data, Input of data, Output in R, In-built functions in R, Single-mode Data Structure- Create, Data structure Attributes, subscripting data structure
3	Multi-mode data structure- Create, Data structure Attributes, subscripting data structure, Decision making Structures, Importing and Exporting, Predictive analytics, Emergence of Predictive Analytics, Applications of Predictive Analytics
4	Basic Visualization-Pie Chart, Bar Chart, Line Chart, Q-Q Plot, Box-and-Whisker plot, Basic Statistics using R, Time-series Models, Decision Tree, Clustering using R, Machine learning for text data, Building web applications with Shiny

Note:

1. Students Will Have To Complete All Practical Assignments Based On R
2. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.
3. The evaluation of 60 marks will be based on the practical exam. The external examiner will be assessing the Practical Paper

Learning Resources

1	References	1. Hadley Wickham, Garrett Golemund. R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. Shroff/O'Reilly, 2017. 2. Lander, Jared P. R for Everyone: Advanced Analytics and Graphics. 2018: Pearson, n.d. 3. Ledolter, Johannes. Data Mining and Business Analytics with R. Wiley, 2013. 4. R N Prasad, Seema Acharya. Fundamentals of Business Analytics. Apress, 2017. 5. Fundamentals of Business Analytics. Wiley, 2016. 6. Schniederjans, Marc J. Business Analytics Principles, Concepts, and Applications: What, Why, and How (FT Press Analytics). Person, 2016. 7. Webb, Christopher. Power Query for Power BI and Excel. Apress, 2016. Laursen, GHN. Business Analytics for Managers - Taking Business Intelligence Beyond Reporting 2e: Taking Business Intelligence Beyond Reporting. Wiley, 2016.
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Semester	III	Total Credits	4
Course Code	SOB-FIN-I	Credit Pattern	L 45, T 6, P – 9
Course Title	INTERNATIONAL FINANCE		
Course Outcomes	The Student Will be able to		
1	Assess Foreign Exchange Rates and apply the same for conversion of currency		
2	Ascertain finance avenues for Export and Import		
3	Evaluate Foreign Direct Investment Design		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction to International Finance: Meaning and Importance, International Financial Environment, Risk Associated with International Finance, International Financial Markets, International Money Market, Money market Instruments, International Capital Market, International Bond Market. International Monetary System – Multilateral Financial Institutions, International Institutions, Brettenwood and International Monetary Fund (IMF) – Objectives, Role of IMF in International Liquidity.	L = 11	
		T = 2	P = 2
2	Foreign Exchange Markets – Spot Prices and Forward Prices, Factors influencing Exchange Rates, The effects of Exchange Rate in Foreign Trade, Tools for Hedging against Exchange rate Variations, Forward, Futures and Currency Options, Determination of Exchange rate and Forecasting, Law of One Price, PPP Theory, Interest rate Parity, Exchange Rate Forecasting, Two way and Three way arbitrage, arbitrage with IRP and PPP	L = 11	
		T = 1	P = 3
3	Determination and Forecasting of Exchange Rates – Currency Risk Management, Measuring and Managing Transactions, Translation and Economic Exposure, International Cash Management, Cost of Capital for Foreign Direct Investment, Designing Global Capital Structure, Foreign Direct Investment, Cost and Benefits, Derivative in International Trade.	L = 11	
		T = 2	P = 2
4	Export and Import Finance: Special Need for Finance in International Trade, Letters of Credit and its type, Pre Shipment Finance, Post Shipment Finance, Forfaiting, Financing methods for import of Capital Goods, ECGC and its schemes. Export Documents like Performa, Commercial, Legalized, Invoice, Packing List, Bills of Lading, Airway Bill, Insurance Policy, Export Incentive, Duty Exemptions, Export house.	L = 12	
		T = 1	P = 2

Note:

1. Case Studies on each Aspects mentioned in Syllabus need to be discussed
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	a. Shailaja G, (2011), 2nd Edition, “International Finance”University Press. b. Srivastava R, (2014), 1st Edition, “International Finance”,Oxford University Press
2	Reference Books	a. Prakash Apte, (2008), 2nd Edition, “International Finance”,Tata Mcgraw Hill Education Pvt. Ltd. b. Ramchandran K and Chandrashekara B, (2017), 4th Edition, “International Finance”, Himalaya Publishing House c. Suraj E S, Deshpande B and Khursale M (2022), 1st Edition, “International Finance”, Iterative International Publisher d. Desai M A, (2006), 1st Edition, “International Finance : A Casebook, Wiley e. Saini M, Kumar P (2013), 1st Edition, “ International Finance”, Thakur Publishers f. Richard T. Baillie, Patrick C. McMahon, (1990), The Foreign Exchange Market: Theory and Econometric Evidence, Cambridge University Press g. Jessica James, Ian W. Marsh, Lucio Sarno, (2012), Handbook of Exchange Rates, John Wiley & Sons h. Michael Rosenberg, (2003), Exchange-Rate Determination:Models and Strategies for Exchange-Rate Forecasting, McGraw-Hill Companies
3	Websites	a. www.economicdiscussion.net/foreign-exchange-rate-2/determination-foreign-exchange-rate-2/foreign-exchange-rate-meaning-and-its-determination/11952 b. www.finder.com/foreign-exchange-derivative c. www.yourarticlelibrary.com/international-trade/ documentation-for-international-trade-transactions/77195
4	Articles	a. Alam Ahmad, 2016, ‘EXIM Bank of India’s Export Financing Strategies : An Analysis’ Research Journal of Economics and Business Studies Vol 5(8), pp 33-41 b. Vrajlal K Sapovadia and Vaishali Patel, 2007, ‘Critical Analysis of Credit & Guarantee Corporation Limited, India (ECGC): Finance, Risks & Guarantee in context of Contemporary Crisis of Currency Appreciation’, SSRN Electronic Journal, SSRN: https://ssrn.com/abstract=1021685 c. Michael G Papaioannou, 2016, ‘Exchange Rate Risk Measurement and Management: Issues and Approaches for Firms’, IMF Working Papers Vol. 06(255) d. B. Sudha, 2013, ‘Foreign Direct Investment’, International Journal of Scientific Research, Vol 2(4), pp 175-177
5	Journals	a. International Journal of Trade, Economics and Finance(IJTEF) – open access journal b. International Trade Journal (ITJ) c. Journal of International Money and Finance d. Global Finance Journal
6	Practical Component	a. Practical Problems on Foreign Exchange rates, Premium, Discounts on Forward rates b. Simple Problems on Pay off from Derivates c. Practical Problems on Arbitrage

Semester	III	Total Credit	4
Course Code	SOB-FIN-II	Credit Pattern	L-45, T-6, P-9
Course Title	DIRECT AND INDIRECT TAXES		

Course Objectives

1	To understand the concept of Indian Income Tax
2	To Enable the students to compute taxable income of individual
3	To make students aware about various provisions in GST

Course Outcomes

1	To summarize tax basics
2	To experiment with direct tax provisions
3	To aware students about GST Provisions

Unit No.	Topic	Number of Sessions	
1	Direct Tax Basics: Important definitions, incomes exempt under section 10, deduction from gross total income under chapter VI, Types of Assessee, filling of income tax return, maintenance of accounts and audits of accounts, TDS and TCS	L = 11	
		T = 2	P = 2
2	Computation of income: Computation of income under different heads of income namely – salary, house property, profits and gains from business and profession, income from other sources, Meaning of Presumptive taxation	L = 12	
		T = 1	P = 3
3	Introduction to GST : Existing indirect tax structure in India, Need of constitutional amendment, Important definitions under GST, Concept of supply, interstate and intrastate supply, Levy of GST	L = 11	
		T = 1	P = 2
4	GST Time and Place of supply and Concept of input tax credit: Time and value of supply, Place of supply, Concept of input tax credit, Blocked credit, Input Tax Credit Rules	L = 11	
		T = 2	P = 2

Note:

1. Case studies on each of the aspects mentioned in the syllabus need to be discussed
2. Videos cassettes, CDS and documentary films exhibited.

Learning Resources		
1	Text Books	• Singhanian, V. K. and Singhanian, M. (66th edition) Students' guide to Income Tax including GST for AY 2022-23. New Delhi: Taxmann's publication • Singhanian, V. K. and Singhanian, M. (24th edition AY 2022-23) Students' guide to Income Tax including GST Problems & Solutions. New Delhi: Taxmann's publication • Manoharan, T. N. (40th edition, 2023) Students' Handbook on Taxation for AY 2023-24. Mumbai: Snow white publication
2	Reference Books	• Sekar G (2015) Direct Taxes A Ready Referencer AY 2016-17, 16th edition. New Delhi : Taxmann's publication • Goyal, M. (2nd edition 2013) Direct Taxation AY 2013-14. New Delhi : biztantra publication • Myneni, S.R. (2013) Law of Taxation, Allahabad : Allahabad Law Agency publication • GST A Complete Perspective (2nd Edition , 2017) Chandigarh: Walter Kluwer's Publications Deloitte
3	Websites	• Income Tax Department, Government of India – www.incometax.gov.in • Income tax and GST informative sites – www.cleartax.in • Income tax and GST informative sites – www.taxguru.in • Income tax and GST informative sites – www.caclub.in • Income tax and GST informative sites – www.taxmann.com • Income tax and GST informative sites – www.indiafilings.com • Income tax and GST informative sites – www.charteredclub.com • Library online Opac Address: http://192.168.1.111:8080/opac
4	Journals	• https://resource.cdn.icai.org/65855cajournal-aug2021-21.pdf - Whether Tax Audit and Presumptive Taxation, by CA Dindayal Dhandaria, ICAI e-Journal August, 2021, Volume 69, No. 10 • https://resource.cdn.icai.org/65857cajournal-aug2021-23.pdf - Section 115BAC of Income Tax Act, 1961: A step towards the New-Normal, by CA. Saurav Somani, ICAI e-Journal August, 2021, Volume 70, No. 10
5	Supplementary Reading	• Financial Express • Economics Times • Business Standard • Times of India • Indian Express.
6	Practical Component	• Practical Problems on Computation of income from Salary, House Property, profits and gains from business and profession and other source. • Practical Problems on Exemptions and deductions • Case studies on GST time of supply, schedule I and II

Semester	III	Total Credit	4
Course Code	SOB-MKT-I	Credit Pattern	L-45, T-8, P-7
Course Title	CONSUMER BEHAVIOUR		
Course Objectives:			
1	Impart conceptual knowledge of Consumer Behavior		
2	Equip students to analyze impact of various factors on consumer behavior.		
Course Outcomes: Students will be able to;			
1.	Discuss conceptual knowledge of Consumer Behavior		
2.	Analyze impact of various factors on consumer behavior.		
3.	Evaluate the impact of social and psychological factors on consumer behavior.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	An Introduction to Consumer Behaviour – Meaning, Consumers’ Impact on Marketing Strategy, Marketing Strategy’s’ Impact on Consumers, Consumer Behaviour as a Field of Study; Consumer and Social Well Being – Business Ethics and Consumer Rights, Consumer Rights and Product Satisfaction, Major Policy Issues Relevant to Consumer Behaviour, Dark Side of Consumer Behaviour; Internal Influences on Consumer Behaviour – Perception – meaning, Stages of Consumer Behaviour; Learning and Memory – meaning, Learning Theories, Memory	L= 11	
		T= 2	P= 2
2	Motivation and Affect – The Motivation Process, Affect, Consumer Involvement; The Self, Gender Identity, The Body; Personality, Brand Personality, Lifestyles and Consumer Identity, Values;	L= 12	
		T= 2	P= 1
3	Power of Attitudes, Formation of Attitudes, Persuasion – change of attitudes; Decision making – Cognitive Decision Making, Habitual Decision Making, Collective Decision Making, Family Decision Making; Situational Effects on Consumer Behaviour, Shopping Experience, Post – purchase satisfaction and Disposal.	L= 11	
		T= 2	P= 2
4	Consumers in Social and Cultural Settings – Groups, Word of Mouth Communications, Opinion Leadership, Social Media Revolution; Income & Social Class – Income and Consumer Identity, Social Class & Consumer Identity, Status Symbols and Social Capital; Subcultures – Ethnic & Racial Subcultures, Religious Subcultures, Family Unit & Age Subcultures, Place Based Subcultures; Culture – Cultural Systems, Cultural Stories & Ceremonies, Sacred & Profane Consumption, Diffusion of Innovations, Fashion System, Global Consumer Culture.	L=11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and videos relating to the syllabus to be exhibited in the class

Learning Resources

1	Text Books	1. Soloman, M. R. & Panda, T. K., (2020), 13th Ed., Consumer Behaviour, Pearson India, New Delhi, India. 2. Schiffman, L.G, Wisenblit, J. & Kumar, S. R., 11th Ed., Consumer Behaviour, Pearson India, New Delhi, India. 3. Mothersbaugh, D. L., Hawkins, D. I. Kleiserc, S. B., & Mookerzi, C. A., (2002), 14th ed., Consumer Behaviour, McGraw Hill, New Delhi, India. 4. Sarma, S., (2019), 1st Ed., Consumer Behaviour, Dreamtech Press, New Delhi, India. 5. Sahaney, S., (2017), 1st Ed., Consumer Behaviour, Oxford University Press, New Delhi, India. 6. Kumar, S. R., & Krishnamurthy, A, (2020), 1st Ed., Advertising, Brands & Consumer Behaviour – The Indian Context, Sage Publications, New Delhi, India. 7. Batra, S. & Kazmi, H. H., (2008), 1st Ed., Consumer Behaviour: Text & Cases, Excel Books, New Delhi, India.
2	Websites	https://www.ama.org/ https://www.academyofindianmarketing.org/ (Academy of Indian Marketing (AIM) Management Institutions) https://www.ima-india.com/ (https://www.ima-india.com/)
3	Supplementary Reading	Economics Times, Brand Equity Business Standard,
4	Practical Component	Case studies on all units.

Semester	III	Total Credit	4
Course Code	SOB-MKT-II	Credit Pattern	L-45, T-8, P-7
Course Title	SERVICES MARKETING		
Course Objectives:			
1	To impart knowledge about Services Marketing.		
2	To develop knowledge and understanding regarding factors affecting Services Marketing.		
3	To develop quality Services for consumers.		
Course Outcomes: Students will be able to;			
4.	Discuss conceptual knowledge of Services Marketing.		
5.	Apply 7 P's to the concept of services marketing.		
6.	Devise strategies for Services.		
7.	Evaluate strategies for Services.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction to Services Marketing Why study Services, principal industries of Service Sector, Historical view of Services, Benefits without ownership, four broad categories of services, 7 P's of Services; Framework for developing Service Market Strategies; Three-Stage Model of Service Consumption – Pre-purchase Stage, Service Encounter Stage, Post Encounter Stage; Positioning Services In Competitive Markets – Customer driven Services Marketing Strategy, Segmenting Service markets, Targeting Service Markets, Principles of Positioning;	L= 11	
		T= 2	P= 2
2	Applying 4 P's of Marketing to Services- Developing Service Products and Brands; Distribution of Services, How to distribute Services. Location of Facility, When should Service be delivered; Services Pricing and Revenue Management – Effective Pricing, Foundations of Pricing Strategy, Revenue Management, Fairness and Ethical Concerns in Service Pricing, Putting Service Price into Practice; Service Marketing Communications – Integrated Service Marketing Communications, Defining target audience, specifying objectives, tactical objectives, crafting effective service communication messages, Services Marketing Communication Mix; Managing Customer Interface – designing service processes, developing service blueprint, Service process Redesign, customer participation in Service processes, Self Service technologies; Balancing Demand and Capacity – fluctuations in demand, defining productive service capacity, understanding patterns of demand, Inventory demand through Waiting lines and queuing systems, Customer perception of waiting time, inventory through reservation systems, creating alternative use for otherwise wasted capacity.	L= 12	
		T=2	P=2
3		L= 11	

	Crafting Service Environment – service environments, purpose, theory, dimensions of service environment; Managing People for Service Advantage, Service employees, frontline work, Cycles of failure, mediocrity & Success, Human resource management, Service culture, Climate and leadership; Managing relationships and Building Loyalty – search for customer loyalty, wheel of loyalty – foundation for customer loyalty, Strategies for developing loyalty, reducing customer defections, enablers of customer loyalty, CRM	T= 2	P= 2
4	Customer Handling & Service recovery, customer complaint behavior, Customer response to effective service recovery, principles of effective recovery system, service guarantees, discouraging abuse and opportunistic customer behavior; Improving Service quality – meaning, measuring service quality, customer feedback, hard measures of service quality, return on quality; Productivity –defining & measuring, improving service productivity; Integration & Systemic approaches to quality improvement; Building World Class Service Organisation	L=11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and videos relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. Lovelock C, Wirtz J, Chatterjee J (2011) 8th Ed, Services Marketing Pearson Publications New Delhi India 2. Lovelock C, Wirtz J, Chatterjee J (2011) 7th Ed, Services Marketing Pearson Publications New Delhi India 3. Zeithmal , V A., Bitner M. J., Gremler D. D., Pandit, A. (2013), 6th Ed., Services Marketing McGraw Hill Publication, New Delhi India.
3	Websites	1. https://www.ama.org/ 2. https://www.academyofindianmarketing.org/ (Academy of Indian Marketing (AIM) Management Institutions) 3. https://www.ima-india.com/ (https://www.ima-india.com/)
5	Supplementary Reading	• Economics Times, Brand Equity • Business Standard, HBR
6	Practical Component	Case studies on relevant components

Semester	III	Total Credit	4
Course Code	SOB-HRM-I	Credit Pattern	L-45, T-8, P-7
Course Title	EMPLOYEE RELATIONS AND LABOUR LAWS		
Course Outcomes : Students will be able to			
1	Describe the concepts and theories to manage Industrial Relations and Labor Laws		
2	Apply the concept of industrial relations, legal issues to the system in which it operates.		
3	Solve industrial Related legal issues used in the resolution of conflict.		
4	Critically evaluate emerging trends in employment law		

Unit Number	Contents	Number of Sessions	
1	Industrial Relations and Trade Union:- Industrial Relations:- Concepts of Industrial Relations, Approaches to Industrial Relations, Role of Employer/Management, Trade Union and Government in Industrial Relations. Trade Union:- Purpose, Functions of trade unions, Problems of Trade unions, Measures to strengthen Trade Union, Recognition of Trade Union as Collective Bargaining Agent. Trade Union Act (1926), Standing Order	L=11	
		T=2	P=2
2	Collective Bargaining and Industrial Unrest: - Collective Bargaining:- Structure, Procedure and machinery for collective bargaining process, Negotiation Skills, Productivity Bargaining, emerging trends in collective bargaining. Industrial Unrest: Causes of Industrial Disputes, Prevention and Settlement of Industrial Disputes- Relevant Provisions related to Industrial Disputes Act, 1947. Purpose and procedure of disciplinary action, Meaning and scope of misconduct	L=12	
		T=2	P=1
3	Positive Employee Relations and Labour Laws:- Building positive employee relations, Participative Management:- Workers participation in Management (statutory and Non statutory Schemes), VRS:- Reason and acceptance of VRS, Management of Sexual Harassment and Sexual Harassment Laws in India,	L=11	
		T=2	P=2
4	Social Security for emotional Bondage:- Social Securities in India, ESI Act 1948, Workmen's Compensation Act, Maternity Benefit Act 1961, The employees Provident Fund Act, 1952. Payment of Gratuity Act 1972, and Management of Contract Labour.	L=11	
		T=2	P=2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. Sarma A M (2018), Revised Edition, Industrial Relations Conceptual and Legal Framework, Mumbai, Himalaya Publishing House, 2. Venkata Ratnam C S (2017), 3rd Edition. Industrial Relations, New Delhi, Oxford University Press. 3. Sahoo D P (2020), First Edition, Employee Relations Management, New Delhi, Sage Publications. 4. Saiyed I.A (2020), 6th Edition, Labour Law, Mumbai, Himalaya Publishing House. 5. Srivastava, SC (2022), 6th Edition, Industrial Relations and Labour Laws, New Delhi, Vikas Publishing House Pvt. Ltd., 8th e, Part II, III and IV 6. Murthi KK (2021), First Edition, Industrial Relations, New Delhi, Global Academic Publishers and Distributors, 7. Mamoria C.B, (2019), 19th Edition, Dynamics of Industrial relations, Mumbai, Himalaya Publishers
2	Reference books	1. Singh PRN, (2022), Tenth Impression, Industrial Relations, Trade Unions and Labour Legislation, New Delhi, Pearson Publication. 2. Gupta Pearl (2019), First Edition, Industrial Relations and Labour Laws for Managers, New Delhi, Sage Publication. 3. Sen Ratna (2010), 2nd Edition, Industrial Relations: Text and Cases, Macmillan Publishers India Limited. 4. Ramu S.B. (2019), First Edition, Fundamentals of Industrial Relations, New Delhi, New Age Publishers. 5. Sinha, InduBala (2020), 3rd Edition, Industrial Relations, New Delhi. Pearson.
3	Websites	1. www.ILO.org 2. www.labour.nic.in 3. www.labourstat.org
4	Journals	1. Indian Journal of Industrial Relations 2. Indian Labour Journal 3. Current Labour Report 4. Labour Law Journal
5	Supplementary Reading	1. Labour Law Journals 2. https://www.thehindubusinessline.com/opinion/the-recognition-question-in-trade-union-law-ep/article24988006.ece 3. https://www.labourfile.org/rights-of-women.aspx/
6	Practical Component	1. Role Play exercise on Collective Bargaining 2. Arrange a debate in the classroom about rights and duties of trade union of workers.

		3. Students will draft a standing order for certification for a newly started garments factory employing 300 workers. 4. Students will draft a charge sheet about a list of allegations reported against an employee of an organization. 5. Interaction with Trade Union Leaders to identify challenges faced by them and present in class. 6. Students will prepare a policy document to prevent sexual harassment at workplace. 7. Study the procedure including the documents required for PF and Gratuity benefit. 8. Role Play on Economic Coercion
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Semester	III	Total Credit	4
Course Code	SOB-HRM-II	Credit Pattern	L-45, T-8, P-7
Course Title	INTERNATIONAL HUMAN RESOURCE MANAGEMENT		
Course Objectives			
1	To provide theoretical foundations of International HRM to students.		
2	To equip students with the knowledge of HRM Practices in Multi-National Companies.		
3	To enable students to understand the implications of culture on HR Practices in MNCs.		
4	To enable students to understand HR interventions in successful cross-border Mergers and Acquisitions.		
Course Outcomes : Students will be able to :-			
1	Describe the different concepts in International HRM.		
2	Differentiate between International and Domestic HRM.		
3	Interpret the implications of culture on HR Practices.		
4	Evaluate different HR interventions in cross-border mergers and acquisitions.		
Unit Number	Contents		Number of Sessions
1	Globalization: Drivers of Globalization, Effects of Globalization on HRM, Concept of IHRM, Model of International HRM, Differences and similarities between DHRM and IHRM, Issues in IHRM, barriers to effective Global HRM,. Concept of culture, characteristics of culture, types of culture- Dominant, sub-culture, organizational and professional cultures.		L= 11
			T=2
			P= 2
2	Cultural pre-dispositions- Ethno-centricism –Polycentricism – Regio-centricism-Geocentricism. Geert Hofstede’s cultural dimensions, Communication, Leadership and Motivation across cultures, Issues in International Human Resource Planning, International Staffing: Linking staffing with stage of MNC		L= 12
			T=2
			P= 1
3	Identifying Potential expatriate, selection criteria of Expatriates, Challenges faced by Expatriates, Women Expatriates, Challenges and Advantages of Women expats, Process and Importance of Cross-cultural training, Emerging Trends. Issues in Performance Appraisal in International context. Compensation Management: Objectives, Components of International compensation package.		L= 11
			T=2
			P= 2
4	Cross-border Mergers and Acquisitions: Motives, HR Interventions in cross border Mergers and acquisitions. Repatriation: Reasons, Process, benefits from returnees – individual and organizational, Challenges of re-entry, Tips for successful repatriation.		L= 11
			T= 2
			P= 2

Learning Resources

1	Reference books	1. Tayeb, M 2005, International Human Resource Management: A Multinational Company Perspective, second edn., Oxford University Press. 2. Wil Harzing, A & Pinnington, A 2017, International Human Resource Management, Fifth Edition, Sage Publications Limited, London. 3. Aswathappa, K & Dash, S 2017, International Human Resource Management, second edn, McGraw Hill Education. 4. Dowling P, Festing M and Eagle A 2017, International Human Resource Management, Sixth Edition, Cengage India Pvt. Ltd 5. Khandula, S 2018, International Human Resource Management, Sage –Text Publication, First edition 6. Rao, P 2018 International Human Resource Management, Sixth Edition, Excel Books. 7. Connell J, Teo S., Strategic HRM: Contemporary Issues in the Asia Pacific Region,
2	Practical component	1. Debate on the cultural predispositions multinational context will be conducted in class 2. Write an essay on “The challenges I would face if my company sends to on foreign assignment“.

Semester	III	Total Credit	4
Course Code	SOB-SYS-I	Credit Pattern	L-45, T-8, P-7
Course Title	MANAGEMENT INFORMATION SYSTEM(Lab-Based)		

Course Objectives	
1	To understand the concept and importance MIS.
2	To make sense of the technical aspects of MS-Excel for creating dashboards.
3	To develop the skills more effectively to visualize the data using Power query.
Course Outcomes: Students will be able to;	
1	Construct MIS Dashboards, including the use MIS Info graphics.
2	Using Excel Power Query, refined the data using ETL Process.
3	Extract the content of data from website using web scrapping.

Unit Number	Contents	Number of Sessions	
1	MIS Info graphics : Drill Down using pivot table, Pareto charts, Info graphics Chart, Trend chart using SUMIF, Map Chart using XY-Scatter, KPI using excel, Charts with Hyperlink and conditional formatting, Speedometer Chart, See Saw Chart, MIS-Hyperlink with column and Pie Chart,	L= 11	
		T= 2	P= 2
2	Disboarding Techniques: Dynamic Month Disboarding, Dashboard on day wise report, Sales ranking dashboard, weekly sales dashboard, Daily task reminder dashboard, Year wise report , Dashboard using VLOOKUP, INDEX and COUNTIF, MIS Amazing Dashboard, Gantt Chart with conditional formatting, Small project on MIS Dashboard	L= 12	
		T= 2	P= 1
3	Power Query - :Introduction and installation, Create connection with excel table, text file and Access Database, Reconnect data with Power Query, Create Pivot table on Multiple Sheets & text data, Merge Multiple sheets, Power Query Home Tab, Transform Data Dynamically, Combine Multiple tables, Transform raw data real job query, Merge Workbooks, Customer calendar, Merge Data Dynamically.	L= 11	
		T= 2	P= 2
4	MIS using VBA and Power BI- VBA Outlook, Sending email through outlook, Outlook with email attachment, Sending Bulk Mail, Introduction to Web Scrapping, Web scrapping loop, WebScrapping get data from website, Web Scrapping get all links, Web scrapping get exact data from website, VBA Events, Dash boarding using Power BI.	L=11	
		T= 2	P= 2

Note:

1. For this paper, there is no Theory exam. The evaluation will be based on the Practical Exam. The External Examiner will evaluate the practical exam.
2. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.

Learning Resource

1	Reference books	1. Aarora, Ritu. Mastering Advanced Excel. BPB Publications, 2023. 2. Cascarino, Richard. Auditorsw guid to information system auditing. Agra:Auditorsw guid to information system auditing, 2017. 3. Lalwani, Lokesh. Excel 2019 All-in-one. Mumbai: BPB Publication, 2019. 4. Michael Alexander, John Walkenbach. Excel Dashboards and Reports .Woley, 2029. 5. Microsoft Excel VBA and Macros (Office 2021 and Microsoft 365) (BusinessSkills). Microsoft, 2021. 6. Schwartz. "Microsoft office 2013 - Schwartz." Pearson, 2016. 7. Clark, Dan. Beginning Power BI . APress, 2017. 8. Webb, Christopher. Power Query for Power BI and Excel. Apress, 2016.
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Semester	III	Total Credit	4
Course Code	SOB-SYS-II	Credit Pattern	L-45, T-8, P-7
Course Title	INFORMATION SYSTEM AUDIT AND CONTROL		

Course Objectives	
1	To enable a student to use analytics to solve business problems
2	To Make Use of I.S Audit Procedures.
3	To develop skills in the theory, techniques, and practical issues involved in computer-based information systems control and auditing
Course Outcomes: Students will be able to;	
1	Classify the concepts of computer security, computer security threats, and the corresponding remedies.
2	Describe the trend of computer security threats
3	Develop an audit plan to achieve the IT audit objectives.

Unit Number	Contents	Number of Sessions	
1	Introduction – Overview Of Information System Auditing, Need For Control And Audit Of Computers, Need for Assurance, Effect Of Computers On Auditing, Benefits of IS Audit for An Organization. IT Governance and Auditors. Conducting Information System Audit – Audit Charter And Engagement Letter, A Typical IS Audit Charter	L= 11	
		T= 2	P= 2
2	Audit Planning, Audit Approaches, Risk Assessment, Information Gathering Techniques, Vulnerability, System Security Testing, Development Of Security Requirements Checklist, The Road Map For Setting Up Information System Audit For Bank, The Management Control Framework: Introduction, IT Management Framework	L= 12	
		T= 2	P= 1
3	Top Management Controls – Evaluating – Evaluating The Planning, Organizing-Policies and procedures, HR Policies and Procedures Relating To Information System, Leading Function, Controlling Function. Audit of Program Development, Audit of Program Modification, Field level input control, Record level input control, Conversion Audit	L= 11	
		T= 2	P= 2
4	Operational Control Review – Control Requirements for Backup, Backup Procedures, Selection of storage media, Security Measurement Controls – Introduction, Conducting A Security Program, Major Security Threats And Remedial Measures, Need Of Disaster Recovery And Business Continuity, Data Disaster, Virus Disasters, Software Disasters, Data Center Disasters, Core Banking Solution	L=11	
		T= 2	P= 2

Note:

1. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.

Learning References		
1	Reference books	1. Weber, Ron. "Information System Control And Audit." In Information System Control And Audit, by Ron Weber. Delhi: Person, 2016. 2. Cascarino, Richard. Auditors guid to information system auditing. Agra: Shity Bhavan, 2017.

Semester	III	Total Credit	4
Course Code	SOB-POM- I	Credit Pattern	L-45, T-7, P-8
Course Title	SUPPLY CHAIN MANAGEMENT		

Course Objectives	
1	To make students understand fundamental concepts and principles of Logistics & Supply Chain Management.
2	To make students understand supply chain metrics & decisions, supply chain coordination & planning.
3	To introduce students to Global Supply Chain Operations.

Course Outcomes: Students will be able to	
1	Discuss the evolution of Supply Chain & Logistics and how it can affect organization operations.
2	Distinguish between various Supply Chain Distribution Strategies and choose effective strategy for organization.
3	Discuss Global Supply Chain Operation and recent trends in Supply Chain Management.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	INTRODUCTION TO LOGISTICS MANAGEMENT Definition & Meaning of Logistics, Principles of Logistics, Activities of Logistics: Transportation, Warehousing, Packaging, Material Handling. Collaborative Relationship & Alliance, Logistics Outsourcing Activities: 3PL, 4PL, Risk of Outsourcing.	L= 12	
		T= 1	P= 2
2	ESSENTIALS OF SUPPLY CHAIN MANAGEMENT Concept & Definition of Supply Chain, Drivers of SCM, Push/Pull SCM, SC Network Decisions & Designs. Demand Planning & Forecasting, Collaborative Planning Forecasting Replenishment (CPFR), Mass Customization, Role of IT in SC	L= 11	
		T= 2	P= 2
3	STRATEGIC SUPPLY CHAIN MANAGEMENT Distribution Strategies: Milk Runs, Hub & Spoke System, Cross Docking, Pool Distribution, Direct Shipping. Bullwhip Effect, Recent Trends In SupplyChain: Agile Supply Chain, Green Supply Chain, Lean Supply Chain, E-Supply Chain, E-Commerce Supply Chain. Introduction to Supply Chain Analytics.	L= 11	
		T= 2	P= 2
4	GLOBAL SUPPLY CHAIN OPERATIONS Global SCM, International Transportation: Sea, Air, Land, Multi-Modal Transportation. International Documentation for Import/Export, Customs Clearance Formalities, International Logistics Infrastructure	L= 11	
		T= 2	P= 2

Learning Resources		
1	Text Books	1. Shah J., Supply Chain Management 2/e: Text and Cases, Pearson Education India 2. Ganapathi S. & Nandi, Logistics Management, Oxford University Press 3. Chopra S., Meindl P. & Karla D., Supply Chain Management, Sixth edition by Pearson Education India 4. Ailawadi S. & Singh R., Logistics Management, Prentice Hall India Learning Private Limited
2	Reference books	1. Simchi-Levi D., Kaminsky P., Designing and Managing the Supply Chain 3rd Edition, McGraw Hill Education 2. Bowerox D., Tata Mcgrawhill Edition “Supply Chain Logistic Management” 3. Chandrasekaran N. , Supply Chain Management: Process, System & Practice, Oxford University Press
3	Websites	1. https://www.managementstudyguide.com/supply-chain-management-articles.htm 2. https://lecturenotes.in/materials/17685-note-of-supply-chain-management-by-dr-panneerselvam-s 3. https://www.aims.education/study-online/supply-chain-management-notes/ 4. http://www.eiilmuniversity.co.in/downloads/Import-Export-Management.pdf 5. http://www.pondiuni.edu.in/storage/dde/downloads/ibiii_exim.pdf
4	Journals	1. Supply Chain Management: An International Journal - EmeraldInsight 2. Journal of Supply Chain Management - Wiley Online Library 3. Supply Chain Management Journal 4. The International Journal of Logistics Management - Emerald Insight
5	Supplementary Reading	1. Singh R. , International Trade Logistics, Oxford University Press 2. C. Rama Gopal, Export Import Procedures - Documentation and Logistics, New Age International Publishers 3. https://www.managementstudyguide.com/import-and-export-management-articles.htm
6	Practical Component	1. Studying Supply Chain Distribution of any organization and classifying it according to different types of strategies which are studied and justifying why such system is chosen by that organization. 2. Identifying and visiting local business to study its Logistics & Supply Chain Strategies. 3. Group Discussion on Recent Trends in Supply Chain Management. 4. Identifying and visiting local Import/ Export Agency to study International Documentation required for Import/Export.

Semester	III	Total Credit	4
Course Code	SOB-POM- II	Credit Pattern	L-45, T-7, P-8
Course Title	PURCHASING AND INVENTORY MANAGEMENT		

Course Objectives	
1	To make students understand fundamental concepts, principles and practices of purchase management, Including the basic functions of materials management.
2	To make students knowledgeable about theoretical aspects and practical application of Inventory Management.
3	To introduce students to modern concepts and trends in Purchase & Stores Management.

Course Outcomes: Students will be able to	
1	Explain basic terms and concepts related to Purchase & Stores Management.
2	Discuss the functions and benefits of store management including its safety and security aspects.
3	Develop suitable Inventory Model for the organization by determining safety stock requirement.
4	Design effective Vendor Development Programme, Vendor Evaluation and Rating Method for the organization.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	PURCHASING MANAGEMENT Introduction to Materials Management, Purchasing: Objectives, Scope, Principles & Procedure, 5R of Purchasing, Responsibilities of Purchasing Manager, Methods of Buying, Centralized & Decentralized Purchasing, Sources of Supply & Supplier Selection, Legal Aspects of Purchasing.	L= 12	
		T= 1	P= 2
2	STORES MANAGEMENT Meaning of Store Management, Functions of Scientific Store Management, Types of Stores, Stores Procedure, Store Location & Layout, Centralized & Decentralized Store, Storage Safety And Security Aspects, Standardization & Variety Reduction, Codification, Stock Taking.	L= 11	
		T= 2	P= 2
3	INVENTORY MANAGEMENT & CONTROL SYSTEM Defining Inventory, The Need of Inventory & Its Control. Inventory Management: Objectives, Functions & Importance. Costs Associated with Inventory, Inventory Models: Basic EOQ Model, Quantity Discount Model, Safety Stock Determination, Replenishment Systems, Fixed Order Quantity (Q Model) Versus Fixed Time Period (P Model). (Numerical Treatment on Inventory Models)	L= 11	
		T= 2	P= 2
4	STRATEGIC MATERIALS MANAGEMENT Vendor-Vendee Relations, Vendor Development, Vendor Evaluation & Rating Methods, Supplier Quality Assurance Programme, Material Accounting & Audit, Inventory Valuation, Worldwide Sourcing, Government Purchasing Practices & Procedure, Materials Management Information System (MMIS).	L= 11	
		T= 2	P= 2

Learning Resources

1	Text Books	1. Ahuja K., Material Management ,CBS Publishers & Distributors 2. Datta A. , “Materials Management”, Procedure, Text & Cases, Prentice-hallof India Pvt. Ltd, New Delhi. 3. Menon K., Kulkarni S., Purchasing and Inventory Management, SPD Publications 4. Jain K. and Patidar J., Purchasing and Materials Management, S. Chand
2	Reference books	1. Müller M., “Essentials of Inventory Management” Amacom, 2003. 2. Tersine R., “Principles of Inventory and Materials Management” North-Holland, 2007.
3	Websites	1. www.materialsmanagement.info/defscape/index.htm 2. http://www.materialsmanagement.info/inventory/functions-of-inventory.htm 3. https://www.managementstudyguide.com/inventory-management.htm 4. http://www.ispatguru.com/stores-management/
4	Journals	1. Journal of Purchasing and Materials Management - Wiley Online Library 2. Journal of Purchasing & Supply Management - Journals - Elsevier 3. International Journal of Procurement Management (IJPM) 4. International Journal of Purchasing and Materials Management
5	Supplementary Reading	1. Gopalakrishnan P. and Sundaresan M., Material Management: An Integrated Approach, Prentice-Hall of India Pvt.Ltd 2. Monczka R. and Robert B. Handfield, “Purchasing and Supply Chain Management” 6th Edition, Jan 2015.
6	Practical Component	1. To interview Purchasing Manager of any local business to understand responsibilities and limitations of purchasing manager. 2. To visit any local manufacturing organization study functions of Store Management and storage security and safety aspects. 3. To interview Inventory Manager of any local business to study inventory control technique adopted by the organization. 4. Library Exercise on Materials Management Information System (MMIS) undertaken by any one company of your choice.

Semester	III	Total Credit	4
Course Code	SOB-ABM-I	Credit Pattern	L-44, T-8, P-8
Course Title	INDIAN AGRI-BUSINESS MANAGEMENT		

Course Out Comes: Students will be able to	
1	Able to understand and identify the trends in the agribusiness sector in India and the world
2	Will gain introduction to the necessary skill sets being an agripreneur on various production methods
3	Able to review the contribution of national and international organizations in farm sector
4	Develop understanding of policy environment in the country

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction to Agribusiness Management The concept of Agri-business, Historical Review, Scope, Nature of Successful Agri-Business Firm and Challenges, Role of Agriculture in National Economy, Socio-Economic Impact of Agribusiness, Environmental Impact of Agribusiness, Agro-Business Sector: Global Trends, Issues and Challenges.	L= 11	
		T= 2	P= 2
2	Unit 2: Agribusiness Sector in India Growth and Performance of Agricultural Sector, Agricultural Markets in India, Role of Government in Agribusiness Development, Agriculture Technology and its Trends in India, Agro-Based Industries in India: Dairy, Food Processing, Aqua, Sugar, Confectionery, Edible Oils, etc., New Food Processing Policy of India.	L= 11	
		T= 2	P= 2
3	Unit 3: Production Management in Agribusiness: Introduction, Natural Resource Management, Soil Conservation, Biodiversity Conservation, Sustainable Agriculture, Water Resource Management, Labor and Agricultural Wages, Cropping Pattern (Regional Agro-climatic Pattern), Global Positioning System (GPS), Precision Farming, Organic Farming, Sustainable Agricultural Practices in India.	L= 11	
		T= 2	P= 2
4	Unit 4: International Institutions and Agricultural Trade Environment WTO: Functions and Role in Agriculture, FAO: Functions and Role in Agriculture, Agreement on Agriculture (AOA) and India, APEDA and Its Role, Import and Export Procedures for agricultural products in India, Strategies of Exports for agro-based industries. Trend analysis of Agricultural Trade.	L= 11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources

1	Text Books	• Mishra, A., Biswas, D. & Giri, A., (2019), Production Management in Agribusiness. In: H. P. House, AgriBusiness Management. (2019), Himalaya Publishing House, Mumbai (India), pp. 106 -120. • Nagaraja, P. M., (2019), Agricultural Business Management. 1st Ed., Himalaya Publishing House, Mumbai (India) • Diwase, S., (2009), Indian Agriculture and Agribusiness Management. 1st Ed., Krishi Resource Management Network, Pune. • Smitha, D., (2010), Agribusiness Management, Everest Publishing House, Pune. (India)
2	Reference books	• Panigrahy, S. R. et.al., (2020), 3rd Ed., Objective Agribusiness Management, Scientific Publishers, Jodhpur. India • Barnard, L. Freddie, et.al., (2020), 6th Ed., Agribusiness Management, Routledge, UK. • Gupta, Rakhi, et.al., (2017), Advances In Agri-Management: General Management, Business Development And Innovative Practices, New India Publishing Agency, New Delhi. India • Van Fleet, David et.al., (2014), 6th Ed., Agribusiness: Principles of Management. Cengage Learning, USA.
3	Websites	• www.agriculture.gov.in/ • www.manage.gov.in • www.ica.coop/ • www.apeda.gov.in
4	Journals	• Agribusiness: an international journal (Wiley Online Library: https://onlinelibrary.wiley.com/journal/15206297) • Agricultural and Resource Economics Review (ABI/INFORM Complete: https://www.cambridge.org/core/journals/agricultural-and-resource-economics-review) • International Food and Agribusiness Management Review (AgEcon Search: https://www.wageningenacademic.com/journals/ifamr/general-information) • Global Journal of Food and Agribusiness Management (https://www.internationalscholarsjournals.org)
5	News Papers	• The Hindu Survey of Indian Agriculture • The Economic Times • Rural Marketing • The Times of India • The Economic Times • Business Standard • Outlook Business • The Hindu • Frontline • Business Today • Business India • Business World

Semester	III	Total Credit	4
Course Code	SOB-ABM-II	Credit Pattern	L-44, T-8, P-8
Course Title	RURAL MARKETING IN INDIA		

Course Out Comes: Students will be able to

1	Able to identify, understand and evaluate the trends in the rural and agricultural markets in India.
2	Will gain necessary skill sets being a rural marketing expert such as developing various marketing strategies for rural markets, able to adopt rural marketing research tools in a rational way etc.
3	Able to develop Rural Marketing Strategy Model Report on the basis of learning points in the module

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Unit 1: Introduction to Rural Marketing: Definition, Classification, Nature and Characteristics of Rural Markets, Rural Market Structure and Size, Problems and Constraints in Rural Marketing, Constitution of Rural Markets in India, Recent Trends in Indian Rural Markets.	L= 11	
		T= 2	P= 2
2	Unit 2: Rural Marketing Research Introduction, significance and sources of information, key decisions, approaches and tools of market research- case for innovation, participatory approaches, innovative tools, rural vs. urban marketing research, rural research business, challenges in rural marketing research	L= 11	
		T= 2	P= 2
3	Unit 3: Rural Consumer Behavior Rural Consumer: Classification and profile, Rural Consumer Buying Behavior – Major Forces Influencing Rural Consumer Behavior, Changing Characteristics’ of a Rural Consumer, Consumer Buying Process, Opinion Leadership Process, Dissemination of Innovation and Brand Loyalty.	L= 11	
		T= 2	P= 2
4	Unit 4: Rural Marketing Planning and Strategy Development: Rural Segmentation, Market Targeting and Positioning and Procedures in India, Planning For Rural Marketing, Strategic Issues In Rural Marketing: Rural Product Strategy – Rural Pricing Strategy – Rural Distribution Strategy – Rural Promotion Strategy, Introduction to PRA Technique and its importance in Rural Marketing,	L= 11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	• Ramkishan, I., 2004. “<i>New Perspectives In Rural And Agricultural Marketing</i>”, Jaico Publishing House, 2nd Edition • Pradip Kashyap, 2016, “<i>Rural Marketing</i>”, Pearson Publications, Third Edition, • Dr. Badi, R., and Prof. Badi, N.V., 2017. “<i>Rural and Agricultural Marketing</i>”, Himalya Publications, New Delhi
2	Reference books	1. Sarwade W.K., 2006. “Agricultural Marketing” Vatsala Baliram Prakashan Kendra, Mumbai 2. Gopalswamy T.P., 2006, “Rural Marketing: Environment Problems and Strategies”, Vikas Publishing House Pvt. Ltd, New Delhi 2006, Third edition, 2009, 3. Verma S.B; Jiloka S.K., 2006, “Rural Agricultural and Marketing”, Deep and Deep Publications, India 4. Kamat M.; Krishnamurthy R., 2003. Rural Marketing, Himalaya 5. Habeeb-ur-Rahman K.S., 2003, “Rural Marketing In India”, Himalaya Publishing House, New Delhi 6. Abbott J.C.; Makcham J.P, 1992. “Agricultural Economics and Marketing in the Tropics”, Elbs with Longman, 2nd Edition. 7. Singh G.N.; Singh D.S., Singh R. I, 1990. “Agricultural Marketing In India, Analysis Planning And Development” Chugh Publications, Allahabad 8. Rajagopal, 1993. “Indian Rural Marketing”, Rawat Publication.
3	Websites	• www.agriculture.gov.in • www.manage.gov.in • www.ica.coop • www.apeda.gov.in • www.enam.gov.in • www.ruralmarketing.in
4	Journals	• Rural Marketing • Indian Journal of Marketing • Vikalpa
5	News Papers and Magazines	• Rural Marketing • The Times of India • The Economic Times • Business Standard • Outlook Business • The Hindu • Frontline • Business Today • Business India • Business World • Financial Express

**MBA (Business Analytics Specialization) –
II
SEMESTER – IV**

Semester	IV	Total Credit	4
Course Code	SOB-BA-401	Credit Pattern	L-44, T-8, P-8
Course Title	BUSINESS ETHICS AND CORPORATE GOVERNANCE		
Course Outcomes: At the end of the course Students will be able to			
1	Describe ethical decision-making framework.		
2	Analyze ethical and moral issues in life and in Business.		
3	Examine the evolution of Corporate Governance in India.		
4.	Generalize Principles of Good corporate governance.		
Unit Number	Contents		Number of Sessions
1	Unit 1: Introduction to Business Ethics Concept of Ethics, Nature and Characteristics of Business Ethics, Doctrine of Karma, Causes of Unethical Behaviour , Work Ethics, Code of conduct for business, Ethical decision making frameworks, Ethical theories: Rights Theories, Justice Theories, Utilitarianism, The Virtue Approach, The Common Good Approach.		L=11
			T=2 P=2
2	Unit 2: Ethical issues : Identification and Solutions Ethical Dilemma, Resolution of ethical dilemma, Fostering ethics, Whistle blowing concept and policy, Corruption, Bribery. Ethical issues in Global Business, Concept of sustainability reporting, Ethics in various functional areas- Marketing, Advertising, HRM, Accounting, Ethics in environment protection.		L=11
			T=2 P=2
3	Unit 3 : Introduction to Corporate Governance Corporate Governance – Concept, Objectives, History ,Issues in Corporate Governance, Elements of good Corporate Governance, OCED Principles of Corporate Governance, Corporate citizenship, Corporate Social Responsibility and Stakeholders Role, Triple Bottom line and Carroll's model of CSR.		L=11
			T=2 P=2
4	Unit 4 : Corporate Governance in India. Naresh Chandra Committee Recommendations, Narayan Murthy Committee Recommendations, The Cadbury Committee, Recommendations in Companies Act 2013, Amendments by Indian regulators pertaining to Corporate Governance. Recent Developments in India- Corporate Governance Score card, Corporate Governance Awards. Role of Board of Directors, Types of Directors and their Functions, Independent Directors- Functions and Role, Ethics committee.		L=11
			T=2 P=2

Learning Resources		
1	Text Books	1. Business Ethics and Corporate Governance , B.N.Ghosh, Tata Mcgraw Hill
2	Reference books	1. Fernando A.C. , Corporate Governance, Principles, Policies and Practices, Pearson Education 2. Business Ethics and Corporate Governance , B.N.Ghosh, Tata Mcgraw Hill 3. Business and Government , Francis Cherunilam , Himalaya Publishing House 4. Joffy George, The Art of Corporate Governance 5. SEBI Regulations 2015 6. Shaw W.H, Business ethics, Thomson 7. Ferrel O.C., Farrell Linda, Business Ethics, Ethical decision making and cases, Biztantra
3	Websites	www.onlineethics.org www.oecd.org
4	Journals	1. Business Express 2. Bloomberg Business Week 3. Business India
5	Supplementary Reading	1. The Economics Times
6	Practical Component	1. Studying Governance system of any company and classifying it into different types of systems which are studied and justifying why such system is chosen by that organization. 2. Preparing the code of conduct of any five business organization. 3. Class debate on ethical dilemma. 4. Identify three ethical business organizations and list their ethical norms. 5. Library Exercise on Corporate Governance activities undertaken by any of two company

Semester	IV	Total Credit	4
Course Code	SOB-BA-402	Credit Pattern	L-48, T-08, P-04
Course Title	BIG DATA ANALYTICS		

Course Objectives	
1	To master the concepts of HDFS and Map Reduce framework
2	To introduce Hadoop 2.x Architecture
	To understand concept of LFS and HDFS
3	To introduce data loading techniques using Scoop and Flume
4	To introduce data flow technique using Apache Pig, Hive
5	To User stand H Base and Map Reduce integration
Course Outcomes	
After completion of this course the student will be able to:	
1	Setup Hadoop single node Cluster
2	Implement best practices for Hadoop development
3	Perform data analytics using Pig, Hive
4	Master data loading techniques using scoop and Flume.

Unit Number	Contents	Number of Sessions	
1	Big Data Overview, data science, rising and importance of data sciences, big data analytics in industry verticals. Sources of Big Data, 3 V's of Big Data, Benefits of Big Data, Big Data Technologies, classes of Big Data Technologies, Challenges of Big Data, Business Understanding, Data Understanding, Data Preparation, Modeling, Evaluation, Communicating results, Deployment. Overview & analytics life cycle, Need, Structured and multi-structured data analysis, Big-data analytics major components, Analytical models and approaches, Relational and non-relational Databases, Application areas, Design and analysis of Analytics model- Analytics design steps, Understanding different data processing models, Statistical models, Predictive models, Descriptive models.	L=12	
		T=02	P=00

2	Introduction to MapReduce and HDFS. The Hadoop & Tez Ecosystems(Batch Processing)., Hadoop Architecture, Hadoop Modules, Advantages of Hadoop, Hadoop Operation Modes, HDFS Concepts, HDFS Data Node and Name Node images, HDFS Read Image and HDFS Write Image, Secondary Name Node, Hadoop configuration files, MapReduce& HDFS Framework, Yarn, Tez Framework & InternalsTask Parallelization for Hadoop (Models), Hadoop Physical & Logical Resource Requirements. Downloading and installing the Ubuntu12.x, Installing Java, Installing Hadoop, Verifying Hadoop Installation, Creating Cluster, Increasing Decreasing the Cluster size, Monitoring the Cluster Health, Starting HDFS, Starting and Stopping the Nodes. HDFS basic file operations.HDFS commands.	L=12	
	The new multi-platform analytical ecosystem. Beyond the data warehouse – Hadoop, NoSQL and analytical RDBMSs, NoSQL DBMSs, Key Value stores, , introduction to MongoDB, Document DBMSs, Column Family DBMSs and Graph databases, Introduction to Hive, hive data types, hive partitioning, hive DDL commands, DML commands,	T=02	P=01
3	Introduction to Apache PIG, Features of PIG, Introduction to PIG Data Flow Engine, MapReduce vs PIG, SQL vs PIG, PIG Architecture, Components of Apache Pig, Pig Latin Data Model, Pig Data Types, Basic PIG programming, Pig Operators, Pig Diagnostic Operators, Grouping by multiple columns, Co-group operator, join operator, types of joins, cross operator, union operator, split operator, filter operator, distinct operator, foreach operator, order by operator, limit operator, Modes of Execution,	L=12	
	Introduction to SGOOP, Connect to mySql database, SGOOP import and		
4	Introduction to HIVE, HIVE Meta Store, HIVE Architecture, Tables in HIVE, Managed Tables, External Tables, Hive Data Types, Primitive Types, Complex Types, Partition, Joins in HIVE, HIVE UDF's and UADF's with Programs. Introduction to HBASE, Limitations of Hadoop, HDFS vs HBase, Basic Configurations of HBASE, Fundamentals of HBase, HBase Data Model, Table and Row, Column Family and Column Qualifier, Cell and its Versioning, Categories of NoSQL Data Bases, Key Value Database, Document Database, Column Family Database, HBASE Architecture, HMaster Region Servers, Regions, MemStore, HDFS vsHBase, Client side buffering or bulk uploads, HBase Designing Tables, HBase Operations, HBase shell	L=12	
		T=02	P=01

Learning Resources

1	Text books	1. Baesens Bart, Analytics In A Big Data World: The Essential Guide To Data Science And Its Applications, Wiley Publisher.Java 8 Programming Black Book 2. AmbigaDhiraj, Michael Minelli, and Michele Chambers, Big Data Big Analytics: Emerging Business, Wiley CIO Series.Core Java Vol. II (Addison-Wesley) Sun Press ISBN – 981-4058-50-5
2	Reference books	1. Kord Davis, Ethics of Big Data: Balancing Risk and Innovation, O'Reilly. 2. Tom White, Hadoop – A Definitive Guide, O'Reilly. 3. Alan Gates, Programming Pig - Dataflow Scripting with Hadoop, O'Reilly. 4. JarekJarcecCecho and Kathleen Ting, Apache Sqoop Cookbook: Unlocking Hadoop for Your Relational Database, O'Reilly. 5. Lars George, HBase: The Definitive Guide, O'Reilly. 6. Dean Wampler, Edward Capriolo, and Jason Rutherglen, Programming Hive, O'Reilly. 7. FlavioJunqueira, Benjamin Reed, Zoo Keeper Distributed Process Coordination, O'Reilly. 8. HariShreedharan, Using Flume - Flexible, Scalable, and Reliable Data Streaming, O'Reilly MediaJava 2 Programming Black Book by Steven Holzner, Dream Tech Publication
3	Websites	• https://www.tutorialspoint.com • https://www.guru99.com • https://hadoop.apache.org • https://intellipaat.com
4	Journals	• “Journal of Big Data” ISSN:2196-1115(Online), https://link.springer.com/journal/40537 • “Big Data Analytics” ISSN:2058-6345(Online), https://link.springer.com/journal/41044 • “Big Data” ISSN:2167-6461, https://home.liebertpub.com/publications/big-data/611/overview
5	Supplementary Reading	• geeksforgeeks • dataflair • w3schools
6	Practical Components	• Lab Experiments based on Hadoop File System, Pig and Hive, Sqoop

Semester	IV	Total Credit	4
Course Code	SOB-BA-403a	Credit Pattern	L-48, T-9, P-3
Course Title	SOCIAL MEDIA ANALYTICS		
Course Objectives:			
1	To explain numerous Social Media Platforms.		
2	To explain the positive and negative influences of social media on individuals, businesses, and society as a whole		
3	To explain the various methodological approaches that can be used to study social media.		
4	To illustrate concepts of Social Network Analysis.		
5	To demonstrate application of Natural Language Processing		
Course Outcomes			
After completion of this course the student will be able to:			
1	Apply data science to analyze social media and social networks		
2	Analyze social networks by finding communities, identifying important nodes, and influence propagation		
3	Analyze social media by applying Natural Language Processing (NLP) techniques to detect sentiment and events		
4	Describe the theoretical concepts behind the social media and network analytical approaches		
5	Recognize and present insights from the social media and network analysis performed		

Unit Number	Contents	Number of Sessions	
1	Unit I: INTRODUCTION TO SOCIAL MEDIA (15) Introduction to social media, different social media platforms. Introduction to blogging, Introduction to Facebook, Twitter, Google+, LinkedIn. Channel advertising and campaigns. Instagram Vs. Pinterest, Social Media and Marketing, channel advertising and campaigns, internet advertising, social tagging and folksonomies, Social Media and Academics, Social Media Optimization	L=12	
		T=03	P=00
2	Unit II: ANALYSIS BASICS (15) Analysis Basics, Network Analysis Basics - social network analysis, graph models, Influence and Centrality in Social Networks, Information diffusion, Social ties and information	L=12	

	diffusion, Social ties and link prediction, Social Spam and Malicious Behavior, Predicting the future with social media, Emotional contagion theory, Influence of emotional contagion on Group Behavior, Friendship paradox, Crowdsourcing with Mechanical Turk, Social Network Analysis and Visualization Tools	T=03	P=00
3	Unit III: TEXT MINING (15) Information retrieval: bag of words, text segmentation, vector space model, cosine similarity, term frequency, inverse document frequency. Information extraction: entity extraction, relation extraction, topic extraction; Machine learning based Information Retrieval, emoticon analysis multilingual processing: machine translation, cross lingual IR Information visualization: scientific, text and web visualization.	L=12	
		T=00	P=03
4	Unit IV: WEB and SOCIAL DATA MINING (12 Hours) Concept of Web mining, Major web mining tasks(Web Content Mining, Web Structure Mining, and Web Usage Mining), Web 1.0, 2.0, 3.0 Search engines: ranking, search logs, search algorithms, Deep web spidering: forums, IRCs, dark web Social media and crowdsourcing systems: wisdom of the crowd, Web Scraping, Social Media Data Analysis, visualizing social media data. Community Detection, Concept of Recommender System , machine learning model for recommender System, Sentiment analysis, Reviews and Ratings (RnR)	L=12	
		T=03	P=00

Learning Resources		
1	Text books	1. Mastering Social Media Mining with Python, Marco Bonzanin, Packt Publishing 2. Seven Layers of Social Media Analytics: Mining Business Insights from Social Media Text, Actions, Networks, Hyperlinks, Apps, Search Engine, and Location Data, Gohar F. Khan, CreateSpace Independent Publishing Platform, 2015 3. Social Media Analytics Strategy: Using Data to Optimize Business Performance, Alex Gonçalves, Apress 4. Learning Social Media Analytics with R: Transform data from social media platforms into actionable business insights, Raghav Bali, Dipanjan Sarkar, Tushar Sharma, Packt Publishing 5. Mining the Social Web: Data Mining Facebook, Twitter, LinkedIn, Google+, GitHub, and More, Matthew A. Russell, Orielly

2	Reference books	1. “Social Media Analytics”, ISBN-13: 978-9332578463, Publisher: Pearson Education India, Edition: First 2. “Social Media Data Mining and Analytics”, by Szabo Gabor), Publisher: John Wiley & Sons Inc, ISBN: 9781118824856, 9781118824856 3. “Social Media Analytics and Practical Applications: The Change to the Competition Landscape”, By Subodha Kumar and Liangfei Qiu, ISBN 9781032051390, Published December 31, 2021 by CRC Press
3	Websites	1. https://www.socialbakers.com/blog/social-media-analytics-the-complete-guide 2. https://www.talkwalker.com/blog/social-media-analytics-guide 3. https://www.javatpoint.com/social-media-data-mining 4. https://searchbusinessanalytics.techtarget.com/definition/social-media-analytics
4	Journals	1. Journal of Digital and Social Media Marketing, COUNTRY: United Kingdom, PUBLISHER: Henry Stewart Publications, ISSN: 20500076, 20500084 2. Social Networks: An International Journal of Structural Analysis, ISSN: 0378-8733, Copyright © 2022 Elsevier B.V. All rights reserved 3. International Journal of Social Media and Online Communities (IJSMOC), ISSN: 2642-2247 EISSN: 2642-2255 DOI: 10.4018/IJSMOC
5	Supplementary Reading	1. geeksforgeeks 2. javatpoint
6	Practical Components	1. Visualization of Social Media Data, Machine Learning model for information retrieval

Semester	IV	Total Credit	4
Course Code	SOB-BA-404a	Credit Pattern	L-45, T-8, P-7
Course Title	ANALYTICS FOR BUSINESS DECISIONS (Lab-Based)		
Course Objectives:			
1	To make students aware of analytical tools that can be used across functional areas of business.		
2	To equip students with business analytics tools and models that will enable them to identify, analyze and solve real-world business problems.		
COURSE OUTCOME: Students will be able to			
1	Apply a wide variety of business analytics methods in a business or an industry context		
2	Evaluate real-world business and industrial problems by using analytical skill		
Unit Number	Contents		
1	INTRODUCTION TO BUSINESS ANALYTICS: Introduction to Business Analytics, Significance and usages of Business Analytics, The Science of Data-Driven Decision Making, Levels of Business Analytics: - Descriptive Analytics, Predictive Analytics and Prescriptive Analytics in functional areas of Management. Introduction to Data Analytical Tools, Slicing and Dicing Data.		
2	MARKETING ANALYTICS: Introduction to Marketing Analytics: Demand estimation, understanding customer value for different product attributes-Conjoint Analysis, Principal components analysis, Market segmentation using cluster analysis, Calculating Lifetime customer value.		
3	HR ANALYTICS: Introduction to HR Analytics: Use and Importance of HR analytics, Levels of HR Analytics, HR Metrics and Analytics, HR Dashboard Creation, Application of HR Analytics in the areas of Employee Diversity, Employee Turnover, Workforce planning and employee performance by using correlation, Regression, ANOVA and Survival Analysis		
4	FINANCIAL ANALYTICS: Introduction to financial analytics: Use & Importance of financial analytics, Financial modeling concept and its application in finance, analyzing balance sheet using spreadsheet, Financial strategies using predictive analytics, building financial models, building models using influence diagram, Implementing models on spreadsheets, spreadsheet design, spreadsheet quality and spreadsheet applications in finance analytics, Financial simulator.		

Learning Resources		
1	References	1. Dinesh Kumar- Business Analytics: The Science of Data - Driven Decision Making by U, Wiley Publication. 2. R N Prasad-Fundamentals of Business Analytics, 2ed Wiley Publication. 3. Albright Winston, Business Analytics- Data Analysis-Data Analysis and Decision Making, Cengage Learning, Reprint 2016. 4. Sahil Raj, Business Analytics, Cengage Learning. 5. Daniel S. Putler Robert E. Krider- Customer and Business Analytics Applied Data Mining for Business Decision Making Using R- Chapman & Hall/CRC The R Series. 6. Jeff Sauro Customer Analytics for Dummies, John Wiley & Sons, Inc., 7. Chris Chapman Elea McDonnell Feit R for Marketing Research and Analytics Second Edition-Springer-23 8. Edwards, Martin R.; Predictive HR Analytics: Mastering the HR Metric 9. James Evans, Business Analysis Pearson Publication. 10. Data Mining and Predictive Analytics, MISL – Willy Publication by Daniel T Larose & Chantal D. Larose. 11. Financial Analysis for Management Decisions, by M.Sarngadharan & S.Rajitha Kumar
2	Practical Component	1. Case study discussion on application of various data analytical tools in functional areas of Management. 2. Data sets will be given to the students on which study will apply appropriate analytical tools.

Semester	IV	Total Credits	4
Course Code	SOB-FIN-III	Credit Pattern	L 45, T 6, P – 9
Course Title	MANAGEMENT CONTROL SYSTEMS		
Course Outcomes	The Student Will be able to		
1	Apply the concept and technique of Marginal Costing for Decision Making		
2	Analyze the effects of Leverage on Shareholders' Returns		
3	Evaluate different types of Budgets for Managerial Decision Making		

Syllabus

Unit Number	Contents	Number of Sessions	
1	Introduction to Management Control Systems: Definition, Purpose of Management Control System, Importance of Management Control System, Role of Management Control System, Activities of Management Control System, Strategy Formulation, Distinction between Strategy Formulation and Management Control, Task Control, Distinction between Task Control and Management Control, Types of Management Control System, Impact of Internet on Management Control	L = 11	
		T = 2	P = 2
2	Marginal Costing: Meaning and Scope, Uses and Advantages, Terminologies in Marginal Costing, Contribution, Margin of Safety, CVP analysis, BEP and Relevant Cost and Decision Making	L = 12	
		T = 1	P = 3
3	Leverage Analysis : Meaning & Importance of Leverage, Types of Leverages, Use of Leverage in Decision making, Measures of Operating and Financial Leverage, Effects of Leverage on Shareholders' Returns	L = 11	
		T = 1	P = 3
4	Budget and Budgetary Control : Concept of Budget, Budgeting and Budgetary Control, Organization for Budgetary Control, Budget Centres, Budget Committee, Budget Manual, Budget Period, Principal Budget, Advantages and Limitations of Budgetary Control System, Types of Budget	L = 11	
		T = 2	P = 2

Note:

1. Case Studies on each Aspects mentioned in Syllabus need to be discussed
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources

1	Text Books	a. Das S C, (2019), 2nd Edition, “Management Control Systems – Principles and Practices” PHI Learning Pvt. Ltd. b. Anthony R N and Govindarajan V (2007), 12th Edition, “Management Control Systems”, Tata Mcgrath Hill Publishing Co. Ltd.
2	Reference Books	a. Kochar S, (2006), 1st Edition, “Management Control Systems”, Gullybaba Publishing House Pvt. Ltd. b. Halale M S, (2010), 1st Edition, “Management Control Systems – Theory and Cases”, Everest Publishing House c. Aghase A, Inamdar S and Oke J (2006), 1st Edition, “Management Control Systems”, Everest Publishing House d. Aurora R S and Kale S R (2006), 1st Edition, “Management Control Systems”, Jaico Publishing House e. Ghosh N (2006), 1st Edition, “Management Control Systems”, PHI Learning Pvt. Ltd. f. Merchant K A and Van de Stede W A, (2019), 4th Edition, “Management Control Systems” Pearson India Education Services Pvt. Ltd. g. Arora M N, (2021), 11th Edition, “ Cost and Management Accounting” , S Chand and Company h. Jawarharlal, Srivastava S and Singh M, (2019), 6th Edition, “Cost Accounting – Text, Problems and Cases, Tata Mcgrath Hill Publishing Co. Ltd.
3	Websites	a. www.yourarticlelibrary.com/accounting/company-accounts / management-control-system-definition-characteristics-and-factors/52963 b. www.econposts.com/business-management/management-control-systems/ c. www.icmrindia.org/courseware/management%20control%20systems/MCS18.htm d. www.ebooks.ibsindia.org/mac/chapter/determination-of-cost-and-profit-under-marginal-costing/
4	Articles	a. Siska L, 2015, ‘<i>The Concept of Management Control System and its Relation to Performance Measurement</i>’ Procedia Economics and Finance Vol 25, pp 141-147 b. Hatane S E, et.al, 2020, ‘<i>The Design and the Use of Management Control System in Developing Organizational Learning</i>’, International Conference on Logistic and Business Innovation (ICLBI), pp 188 - 206 c. Vahora S G, 2018, ‘<i>An analytical marginal Cost Study of TataSteel</i>’, IJCRT, Vol. 6(2), pp – 1009-1012 d. Khedkar E B, 2015, ‘<i>A Study of Leverage Analysis and Profitability for Dr. Reddy’s Laboratory</i>’, International Journal of Research in Engineering & Social Sciences, Vol. 5(5), pp 17 - 31 e. Jayalakshmi M and et.al, 2023, ‘<i>Impact of Budgetary Control on Organization Performance</i>’, Journal of Survey in Fisheries Sciences, Vol.10(3S), pp 1664 -1670
5	Journals	a. International Journal of Trade, Economics and Finance (IJTEF) – open access journal b. Prabhandan: Indian Journal of Management c. Journal of International Money and Finance

6	Practical Component	a. Practical Problems on Leverages b. Practical Problems on Budget c. Practical Problems on Marginal Costing and Decision Making
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Semester	IV	Total Credit	4
Course Code	SOB-FIN-IV	Credit Pattern	L-45, T-6, P-9
Course Title	INVESTMENT AND PORTFOLIO MANAGEMENT		

Course Objectives	
1	To have understand on investment and avenues in investment
2	To have exposure on analysis, techniques of securities
3	To understand various life cycle stages for portfolio management

Course Outcomes	
1	Identifying various investment avenues as a small and corporate investor
2	To know relationship between security and market portfolio
3	To prepare investment plans for individuals during various life cycle stages

Unit No.	Topic	Number of Sessions	
1	Introduction to Investment: Investment – Basics, Investment categories, Investment avenues, Investment, speculation and gambling, Non marketable financial assets, Money market instruments, Bonds (meaning, valuation of Bonds, Yield to Maturity), Debentures, Equity Shares, Schemes of LIC, Mutual Fund, Financial derivatives (Derivative market, instruments in market, calculations of pay off from options), Real assets, Real estate, Art – antiques & others, Introduction to stock market: Primary & secondary market, Regulations of stock market – companies Act, SEBI, securities contract regulation Act.	L = 11	
		T = 2	P = 1
2	Security Analysis: Fundamental analysis, EIC and CIE Approach, Quantitative and Qualitative Analysis; Technical Analysis, The Dow Theory - Primary Trend, The Secondary Trend, Minor Trend; Chart Analysis (line, bar, Point & figure and Candle stick); Efficient Market Theory – Basic Concepts, Weak form of EMH, Semi strong form, Strong Form, Market Inefficiencies.	L = 11	
		T = 1	P = 2
3	Portfolio Management and performance models: Meaning of Portfolio, Steps of Portfolio Management; Meaning and measurement of return and Risk, types of risks, Portfolio analysis, Portfolio and Single asset Returns and Risk – Mean, Variance, Covariance, coefficient of correlation, Beta (simple problems), Portfolio Markowitz Model, Simple diversification, Risk and return with Different correlation ; Portfolio Risk and Return. Portfolio Performance Models-Sharpe's Performance Index, Treynor's Performance Index	L = 12	
		T = 2	P = 3
4	Construction of Portfolio: Fact sheet, client's database, objectives of investor, motive for investment; risk and return analysis while selecting portfolio;	L = 11	
		T = 1	P = 3

	Traditional portfolio selection: Defining investment objective, Life cycle approach, Identifying objectives and constraints, investment objectives and asset mixes		
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Note:

1. Case studies on each of the aspects mentioned in the syllabus need to be discussed
2. Videos cassettes, CDS and documentary films exhibited.

Learning Resources		
1	Text Books	• Prasanna, C. (2017) <i>Investment analysis and portfolio management</i>. New Delhi: Tata McGraw-Hill Education • KEVIN, S. (2022) <i>Security Analysis and portfolio management</i>. S.l.: PHI LEARNING • Talwar, S. (2016) <i>Security Analysis and portfolio management</i>. New Delhi: Cengage Learning
	Reference Books	• Sasidharan, K. and Mathews, A.K. (2011) <i>Security Analysis and portfolio management</i>. New Delhi: Tata McGraw-Hill Education • Dash, A.P. (2013) <i>Security Analysis and portfolio management</i>. New Delhi: I.K International • Agrawal, O.P. (2011) <i>Security Analysis and portfolio management</i>. Mumbai : Himalaya Publishing House
2	Websites	• Library online Opac Address: http://192.168.1.111:8080/opac
3	Journals	• Journal of Investment and Management • The Journal of Investing • Dalal Street Investment Journal • The Journal of World Investment & Trade
4	Supplementary Reading	• The Times of India • The Economic Times • Financial Express • DainikSakal • DainikLokmat
5	Practical Component	• Practical Problems on Risk and return on single asset or portfolio (max 3 securities) • Practical Problems on Payoff Calculation • Practical Problems on Valuation of bond, yield to maturity • Practical Problems on Performance Index : Sharpe's, Treynor's, • Practical problems on Practical problems or case studies for each stage of life cycle

Semester	IV	Total Credit	4
Course Code	SOB-MKT-III	Credit Pattern	L-45, T-8, P-7
Course Title	SALES & DISTRIBUTION MANAGEMENT		
Course Objectives			
1	To study the sales force management to develop the sales management skills.		
2	To study concepts in Distribution management		
3	Identify and implement appropriate distribution channels.		
Course Outcomes: Students will be able to;			
1	Evaluate concepts related to sales & distribution.		
2	Manage sales force effectively.		
3	Evaluate appropriate use of distribution channels.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Sales Management – Evolution, Meaning, Objectives, sales management & Control; Personal Selling & Salesmanship – Buyer – Seller Dyads, selling situations, Theories of Selling, SPIN selling, prospecting, sales resistance, Closing sale (sales Funnel); Personnel Selling Objectives –types, analysing market potential, Market Indexes, Sales Potential & Forecasting, Sales Forecasting Methods, converting industry forecast to company forecast, evaluation of forecasts; Personal Selling Strategy – competitive settings, determining Kinds of Sales Personnel, Determining Size of Sales Force; Sales Executive – functions & Qualities; Sales Organisation – Purpose, Setting up organisation, types of Sales Organisational Structures, Field organisation.	L=11	
		T=2	P=2
2	Sales force management , recruitment meaning & process, selection process, Sales Training- defining aims, deciding content, selecting training methods, executing training programs; Motivation- meaning, interdependence & Motivation, leadership and Motivation, Communication & Motivation; Compensation of salespeople – devising Sales Compensation Plans, types, Managing Expenses of sales personnel, Sales Meetings and Sales Contests	L=12	
		T=2	P=1
3	Sales Budgets – purpose and procedure; Sales Target, sales Forecast, & Sales Budget; Sales territory, Concept, Size, Allocation & Design, Territory Shapes; Sales Quota, procedure for sales quota. Types of sales quota, Methods of setting quota; Sales control and Marketing cost analysis	L=11	
		T=2	P=2
		L=11	

4	Distribution Management – Introduction-Marketing Channels – channel members, channel functions, designing marketing channels, selecting channel partners, Channel Intensity: Managing Channel Partners – setting cooperative programs, role of manufacturer's sales force, channels partners cooperation, managing channel conflict; Channel Information Systems; E-commerce and Distribution Channel Management	T=2	P=2
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Learning Resources

1	Text Books	1. Still, R.R., Cundiff E. W., Govoni, N. A. P., & Puri S., (2017) 6th Ed., Sales and Distribution Management, Pearson Education, New Delhi, India. 2. Panda, T. & Sahadev, S., (2019), 3rd Ed., Sales and Distribution Management, Oxford University Press, New Delhi, India. 3. Chunawalla, S. A, (2015), 2nd Ed., Sales and Distribution Management, Himalaya Publication, New Delhi India.
2	Supplementary Reading	1. The Economic Times 2. Business Standard 3. Business TIMES
3	Practical Component	1. Group Activity based on all the units 2. Take business Games & other subject related activities 3. Discussion on Cases related to all units 4. Library assignment on all the units

Semester	IV	Total Credit	4
Course Code	SOB-MKT-IV	Credit Pattern	L-45, T-8, P-7
Course Title	ADVERTISING AND INTEGRATED MARKETING COMMUNICATION		
Course Objectives:			
1	Impart conceptual knowledge about advertising and IMC.		
2	Make students familiar with advertising and IMC strategies.		
Course Outcomes: Students will be able to;			
1.	Discuss conceptual knowledge of Advertising and IMC.		
2.	Devise Strategies for advertising and IMC.		
3.	Evaluate IMC policies and campaigns.		
4.	Evaluate performance of advertising and IMC strategies.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Strategic Brand Communication – Marketing Foundation, Integrated Marketing Communication; Advertising – Practice of advertising, Evolution of key concepts of Advertising, Advertising world, Changes in practice of advertising; Public Relations - meaning, process and tools, trends in public relations; Direct Response and Promotions – functions and elements of Direct Response Communications, Importance of Promotions, Multiplatform Communications; Brand Communication – meaning, Facets of Impact, Power of Brand Communication; Strategic Research – Process, Methods of Data Collection, Research Trends and Challenges.	L= 11	
		T= 2	P= 2
2	Segmentation and Targeting Audience – Brand Decisions, Influences on Consumer Decisions, Market Segmentation and Targeting, Profiling Markets and Target Audiences; Strategic Planning – meaning – Business Plan and Marketing Plan, Key Strategic Decisions, Consumer Insight and Account Planning; Creative Communication of Brand – Role of Creativity in IMC, Creative Thinking, Key Message Strategy Approaches, Management of Creative Strategy and its Implementation; Promotional Writing – Writer’s Role in Brand Communication, Types of Brand Communication Writing, Writing for Various Media, Challenges for Writers; Visual Communication – Role of Visual Communication, Basics of Design, Essentials of Production for Print, Essentials of Video Production, Web Design Considerations.	L= 12	
		T= 2	P= 1
3		L= 11	

	Media in World of Change – Media Basics, Fundamentals of Media Strategy, Changing Patterns of Media Use; Paid Media – Traditional Paid Media, Out of Home Media, Online Advertising; Owned, Interactive and Earned Media – Owned Media, Owned but Interactive Media, Earned Interactive Media; Media Planning and Negotiation – Media Plans, Steps in Media Planning, Media Buying and Negotiation, Media Planning and Buying Trends.	T= 2	P= 2
4	IMC and Total Communication – IMC Management, Key Concepts of IMC, IMC Campaign Planning, International IMC Campaigns, Managing 360 degree Communication Programs; Evaluating IMC Effectiveness – Brand Communication Impact, Evaluating IMC Message, evaluating Performance of IMC Tools, IMC Campaign Evaluation Challenges; Social Impact, Responsibility and Ethics – Social Impact of Brand Communications, Communicators’ Ethical Responsibilities, Regulation of Brand Communication	L=11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and videos relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	1. Morianty, S., Mitchell, N., Wells, W D & Wood C, (2003), 11th Ed, Advertising and IMC – Principles and Practice, Pearson Education, New Delhi, India. 2. Dutta, K., (2016), Integrated Marketing Communications, 1st Ed., Oxford University Press, New Delhi, India. 3. Shah, K., (2017), 1st Ed, Advertising and Integrated Marketing Communications, McGraw Hill, New Delhi, India. 4. Clow, K. E., & Black, D. E., (2013), 6th Ed, Integrated Advertising, Promotion and Marketing Communications, 5. Blakeman, R., (2018), 3rd Ed, Integrated Marketing Communication, Pearson Education, New Delhi, McGraw Hill, New Delhi, India.India. 6. Blech, G. E., Blech, M. A. & Purani, K., (2021) 12th Ed, Advertising and Promotion: An Integrated Marketing Communications Perspective, McGraw Hill, New Delhi, India. 7. Shimp, T. & Andrews, J. C., (2005), 9th Ed, Advertising Promotion and Other Aspects of Integrated Marketing Communications, South Western Publishers, New Delhi, India. 8. Juska, J. M., (2021), 2nd Ed, Integrated Marketing Communication: Advertising and Promotion in a Digital World, Routledge Publisher, New Delhi, India.
2	Websites	https://www.ama.org/ https://www.academyofindianmarketing.org/ (Academy of Indian Marketing (AIM) Management Institutions) https://www.ima-india.com/ (https://www.ima-india.com/)

3	Supplementary Reading	Economics Times, Brand Equity Business Standard,
4	Practical Component	Case studies on relevant topics.

Semester	IV	Total Credit	4
Course Code	SOB-HRM-III	Credit Pattern	
Course Title	PERFORMANCE AND COMPENSATION MANAGEMENT		

Course Outcomes: Students will be able to;

1.	Describe the various conceptual aspects of Compensation, Performance Management and competencies and related law to achieve organizational goals.
2.	Develop the performance/competency based compensation system for business excellence and solve various cases.
3	Assess the various theories and concepts of performance and compensation management
4	Designing the performance and compensation strategies for attraction, motivation and retaining high quality workforce

Syllabus:

Unit Number	Contents	Number of Session	
1	Performance Management: Managing and addressing Employee Performance Problems. Performance Management and Employee Development: Employee Assessment system, Potential Appraisal System:- Development and Retention of high potentials, Role of HR Professionals in Performance management.	L= 11	
		T= 2	P= 2
2	Competency Model, Competency Model Pyramid, Application of competency model into various HRM functions, benefits of using competency mapping model in organizations, Benefits of using competency based performance appraisal system, Taking interviews to gather information, Behavioural Event Interview, process for writing competencies.	L= 11	
		T= 2	P= 2
3	Compensation Management: Wage and Salary Administration: Calculation of Wage, Salary, Perquisites, Cost of Living Index and Dearness Allowance, Designing and operating incentives, fringe and non-financial Benefits,. Job Evaluation:- Major Decisions in Job Evaluation, Job Evaluation Methods	L= 11	
		T= 2	P= 2
4	Employee Contributions: Pay For Performance (PFP): Competency Based Pay, Skill based Pay, Team based pay, Gain and Profit sharing, Merit Pay/Variable Pay, Compensation Strategies for Special Groups. Executive compensation, cafeteria compensation. Laws related to wages and salaries: - Minimum Wages, Payment of Wages, Payment of Bonus.	L= 11	
		T= 2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources

1	Text Books	- Gerhart B and Rynes S L (2012), first edition, Compensation, Theory, Evidence and Strategic Implications, New Delhi, Sage Publications. - Armstrong M. Cummins A, Hastings S, Wood W (2006), 6th Edition, Job Evaluation: A Guide to achieving equal pay, New Delhi, Kogan Page India..
2	Reference books	- Kohli A Sand Deb T (2009), Third Edition, Performance Management, Oxford University Press, New Delhi. - Milkovich G.T, Newman J M and Venkata Ratnam CS (2009), 9th Edition, Compensation, Chennai, McGraw Hill Education, - Henderson R I (2017), 10th Edition, Compensation Management in a knowledge based world, Delhi, Pearson. - Appa Rao C (2012), First Edition, Performance Management, New Delhi, biztantra - Armstrong M, Murlis H (2005), 5th Edition, Reward Management, New Delhi, Kogan Page in association with Hay Group.
3	Websites	- www.Razorpay.com - www.Minthr.com
4	Journals	- IOSR <i>Journal of Humanities And Social Science</i> - Indian Labour Journal
5	Supplementary Reading	https://www.toolbox.com/hr/performance-management/articles/what-is-performance-management/ https://www.hibob.com/hr-glossary/compensation-management-planning/ https://www.talentlyft.com/en/resources/what-is-behavioral-based-interview https://www.namanhr.com/services/competency-mapping/
6	Practical Component	- Students must prepare a comprehensive compensation plan to be offered to Executives. - Students must compare and analyze compensation practices in different countries. - Students to collect information from different organization regarding the Cost To Company of an employee. - Students have to prepare questionnaire for conducting wage survey and carry out wage survey for any selected sector and prepare a report for the same. - Students to calculate the bonus amount eligible to an employee working as a HR Executive

Semester	IV	Total Credit	4
Course Code	SOB-HRM-IV	Credit Pattern	L-45, T-8, P-7
Course Title	TALENT AND HUMAN CAPITAL MANAGEMENT		

	Course Outcomes :- Students will be able to:
1	Describe the concept of Talent and Human Capital Management
2	Apply different concepts of Human Capital Management.
3	Critically evaluate emerging trends in Talent and Human Capital Management.

Unit Number	Contents	Number of Sessions	
1	Talent Management: Acquiring talent, Retaining talent, Nurturing talent, and Developing and Recognizing talent, Separation of Talent. Principles of Talent Management, Talent Management Opportunity and Challenges, Myths about Talent Management, Current Trends in Talent Management. Benefits of Talent Management, Role of Human Resource in Remote Working – Meaning, Importance, Advantages and Disadvantages Employee Engagement: Means to promote Employee Engagement, Relationship with Talent Management.	L= 12	
		T=2	P= 1
2	Concept of Human Capital Management HRD Audit: Characteristics, Scope, Process, Methodology, Documents and outcomes. HR Accounting: Objectives, Methods, Advantages and Limitations. Human Resource Information System: Issues while adopting HRIS, Sub-systems of HRIS, Steps in designing HRIS, Advantages of using HRIS.	L= 11	
		T=2	P= 2
3	Employee empowerment- concept, objectives, Pre-requisites, types, Process, benefits, limitations. Concept of Work Life Integration, Flexi-time as a retention tool, Moonlighting: causes and HR interventions, Succession Management, Workforce Diversity, Green HRM, Employer and Employee Branding	L= 11	
		T=2	P= 2
4	Concept of HR Balanced Scorecard. Role of HRM in Learning organization. Quality circle- constitution and process Quality of Work life- objectives, importance, determinants of Quality of Worklife.	L= 11	
		T=2	P= 2

Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.

Learning Resources		
1	Reference books	1. Lyle M. Spencer, Signe M. Spencer, Competence at work –JohnWiley 1993 2. Naik G.P, Competency mapping, Assessment and Growth - IIHRM,2010. 3. Herman Aquinas, Performance Management - Pearson Education,2007. 4. Lance A. Berger &Dorothy. Berger, The Talent Management Hand Book - Tata McGraw Hill.
2	Practical Components	1. Students are expected to conduct a study on how talent is acquired and retained – in various industries – and various strategies followed by the respective companies. 2. Students will collect data about the position of principal, director, and other teachers in your college and prepare a competency dictionary for the said positions. 3. Students will collect data in your college or any other organization using Q 12 instrument and analyze it to find out the engagement level of employees. 4. Students will identify the important positions in your college or any other organization and ascertain the measures if any taken to develop second line of leadership.
3	Journals	1. Harvard Business Review 2. Manpower Journal 3. Human Capital

Semester	IV	Total Credit	4
Course Code	SOB-SYS-III	Credit Pattern	L-45, T-8, P-7
Course Title	APPLIED DATA SCIENCE AND BUSINESS ANALYTICS USING R		

Course Objectives	
1	To understand and adopt the skills of big data analytics and Business Intelligence to varied aspects of managerial decision making
2	To enable a student to use analytics to solve business problems
3	To make use of a language R for applied data science.
4	To Apply BI tools for problem-solving
Course Outcomes: Students will be able to	
1	Identify and describe complex business problems in terms of analytical models.
2	Apply appropriate analytical methods to find solutions to business problems that achieve stated objectives.
3	Apply the knowledge of R gained to data Analytics for real-life applications

Unit Number	Contents
1	Introduction to Business Analytics, Prerequisites for effective business analytics, Applications of Business Analytics, ETL Process, Role of statistics in Analytics, The R community, The R environment, Installing R, Variables in R
2	Types of Digital Data, Input of data, Output in R, In-built functions in R, Single-mode Data Structure- Create, Data structure Attributes, subscripting data structure
3	Multi-mode data structure- Create, Data structure Attributes, subscripting data structure, Decision making Structures, Importing and Exporting, Predictive analytics, Emergence of Predictive Analytics, Applications of Predictive Analytics
4	Basic Visualization-Pie Chart, Bar Chart, Line Chart, Q-Q Plot, Box-and-Whisker plot, Basic Statistics using R, Time-series Models, Decision Tree, Clustering using R, Machine learning for text data, Building web applications with Shiny

Note:

1. For this paper, there is no Theory exam. The evaluation will be based on the Practical Exam. The External Examiner will evaluate the practical exam.
2. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.

Learning References

1	Reference books	1. Hadley Wickham, Garrett Grolemund. R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. Shroff/O'Reilly, 2017. 2. Lander, Jared P. R for Everyone: Advanced Analytics and Graphics. 2018: Pearson, n.d. 3. Ledolter, Johannes. Data Mining and Business Analytics with R. Wiley, 2013. 4. R N Prasad, Seema Acharya. Fundamentals of Business Analytics. Apress, 2017. 5. Fundamentals of Business Analytics. Wiley, 2016. 6. Schniederjans, Marc J. Business Analytics Principles, Concepts, and Applications: What, Why, and How (FT Press Analytics). Person, 2016. 7. Webb, Christopher. Power Query for Power BI and Excel. Apress, 2016. 8. Laursen, GHN. Business Analytics for Managers - Taking Business Intelligence Beyond Reporting 2e: Taking Business Intelligence Beyond Reporting. Wiley, 2016.
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Semester	IV	Total Credits	4	
Course Code	SOB-SYS-IV	Credit Pattern	L-45, T-8, P-7	
Course Title	SOFTWARE ENGINEERING			
Course Objectives				
1	To Understand The Nature Of Software Development And Software Life Cycle Process Models, Agile Software Development, SCRUM, And Other Agile Practices			
2	To Develop The Skill Of Software Design And User-Centric Approach And Principles Of Effective User Interfaces.			
3	To Infer The Need For Project Management And Project Management Life Cycle			
Course Outcomes: Students Will Be Able To;				
1	Needs For Software Specifications Also They Can Classify Different Types Of Software Requirements And Their Gathering Techniques			
2	Identifying The Role Of SDLC In Software Project Development And They Can Evaluate The Importance Of Software Engineering In PLC.			
3	Familiar With The Different Methods And Techniques Used For Project Management..			
4	Discuss The Parameters Of The Software Project's Success And Failures.			
Unit Number	Contents		Number of Sessions	
1	Concept Of Software, Program V/S Software, Software Characteristics, Software Myths, Software Development Life Cycles. – Waterfall Model, Prototyping Model, Spiral Model, Coding guidelines, Structured Approach To System Design -: Principles of software design, DFD, Data Dictionary, Decision Tree, Decision Table & Structured English, E-R Diagrams		L= 11	
			T= 2	P= 2
2	Software Requirement and Specification, Characteristics of Good User Interface Design, Concept of white box testing and black-box testing. Object-Oriented Project Design, Introduction: Software Project Management, I.T. Stakeholders, Understanding the project, Project Initiation, Product Life Cycle, Skills and Qualities of Software Project Manager		L= 12	
			T= 2	P= 1
3	Project Planning - Work Break Down Structure, CASE Tools, Types of Software maintenance, Defining The Project – Deliverables, Objects And Scope, Project Scheduling, Estimating the project – Period Vs Effort, Contingency, Type of costs, Preparing the Project Budget, Defining And Managing The Risk, Managing Information systems Project Time and Resources		L= 11	
			T= 2	P= 2
4	Implementation Activities – Forming a Project Team, Managing People And Organizing Teams, Managing Client Expectations, Configuration Management, Identifying Information Systems Project Risks, Evaluating Success- Software Quality Factors, Causes of Failure, Project Success, Measure of end-user satisfaction, Closing the project And Business Continuity, Data Disaster, Virus Disasters, Software Disasters, Data Center Disasters		L=11	
			T= 2	P= 2

Note:

1. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.

Learning References		
1	Text Books	1. Fundamentals Of Software Engineering – Roger Pressman 2. Information Technology Project Management – Jack Marchewka – Wiley India Edition
2	Reference books	1. Fundamentals Of Software Engineering - Rajib Mall Ghezzi, Jazayeri Stephen H. Khan 2. Software Requirements And Estimation - Fenton, Ptleeger McGraw Hill 3. Project Management For Software Development - Jaico 4. IT Project Estimation – Paul Coombs. – Cambridge 5. Information System Project Management - John McManus, Trevor Wood- Happer – Pearson. 6. Software Project Management – Bob Hughs , Mike Cotterell – Tata McGrawhill
3	Website	1. www.tutorialspoint.com 2. www.guru99.com 3. www.examupdates.in
4	Journals	1. International Journal of Scientific Computing 2. International Journal of Statistics & Management Systems 3. Chartered Secretary
5	Supplementary Reading	1. Business Line 2. Current affairs in news papers 3. Information system Audit Reports from computer consultancies
6	Practical Component	1. Visit any computer consultant firms and discuss and understand about Software engineering process 2. Case study about Information system Project Planning
7	Reading Resources	1. S. Mukherjee. Project Management for Software Development. Jaicob Publishing House, 2008. 2. Bob Hughes, Mike Cotterell. Software Project Management. McGraw-Hill Education, 2015. 3. Ghezzi, Rajib Mall. Fundamentals of Software Engineering. PHP Learning Pvt Ltd, 2016. 4. Marchewka, JT. Information Technology Project Management. Wiley India Private Limited, 2006. 5. Pressman, Roger. Software Engineering: A Practitioner's Approach,. McGraw Hill Education, 2009.

Semester	IV	Total Credit	4
Course Code	SOB-POM- III	Credit Pattern	L-45, T-7, P-8
Course Title	PROJECT MANAGEMENT		

Course Objectives	
1	To make students understand fundamental concepts and characteristics of project including the basic roles, responsibilities and functions of project manager.
2	To Familiarize the Students with various project financing sources.
3	To introduce students to project evaluation and termination.

Course Outcomes: Students will be able to	
1	Explain basic concept of Project Management including Project Appraisal, Project Risk Management and use of IT in Project Management.
2	Select most appropriate Project from available options to the organization by analyzing all the projects on the basis of capital budgeting techniques.
3	Develop the Project Report of the project undertaken by the organization.
4	Determine Critical Path of project undertaken by organization and estimate project duration.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	OVERVIEW OF PROJECT MANAGEMENT & SELECTION Concept & Definition of Project, Characteristics of Project, Types of Project, Project Identification, Project Selection & Criteria, Project Life Cycle, Concept & Importance of Project Management, Roles and Responsibilities of Project Manager, Work Breakdown Structure.	L= 12	
		T= 1	P= 2
2	PROJECT APPRAISAL & RISK MANAGEMENT. Concept of Project Appraisal, Technical Appraisal, Commercial Appraisal, Economic Appraisal, Financial Appraisal, Management Appraisal, Social Cost- Benefit Analysis, Introduction to Risk Management, Role of Risk Management in Project Management, Steps in Risk Management.	L= 11	
		T= 2	P= 2
3	PROJECT FINANCING & SCHEDULING Estimating Cost of Project, Components of Cost of Project, Sources of Project Financing, Development of Project Network, Time Estimation, Developing The Project Network Using CPM/PERT, Crashing The Network, Project Review. (Numerical Treatment on CPM/PERT)	L= 11	
		T= 2	P= 2
4	PROJECT PLANNING & EVALUATION Project Evaluation: Concept, Purpose, Advantages. Project Audit: Meaning, Objectives, Phases of Project Audit. Project Quality Management, Project Termination, Project Management Information System (PMIS): Need of Project Management Software, Project Report Writing.	L= 11	
		T= 2	P= 2

Learning Resources		
1	Text Books	1. Gray C. , Project Management: The Managerial Process, Sixth Edition, McGraw Hill Education 2. Nagrajan K. “Project Management”, New age international publication. 3. Ramakrishna & Kamaraju, Essentials of Project Management, Prentice Hall India Learning Private Limited
2	Reference books	1. Meredith J. , Samuel J. Mantel Jr. “Project Management- A Managerial Approach” John Wiley and Sons 2. Gray C., Larson E., “Project Management-The Managerial Process” Tata Mcgraw-Hill Publishing Co Ltd 3. Wyzoubi R. & Acgary R., “Effective Project management”, Wiley India Pvt.Ltd.
3	Websites	1. https://www.project-management-knowhow.com/ 2. https://www.tutorialspoint.com/pmp-exams/index.htm 3. https://www.managementstudyguide.com/project-management-articles.htm 4. https://www.projectengineer.net/
4	Journals	1. International Journal of Project Management – Elsevier 2. Project Management Journal PMI 3. Project Management Journal - Wiley Online Library 4. International Journal of Project Management ScienceDirect.com
5	Supplementary Reading	1. Nicholas J. “Project Management For Business And Technology” Prentice Hall Of India Pvt Ltd 2. Lewis J. “Project Planning, Scheduling And Control” Tata Mcgraw-Hill Publishing Co Ltd
6	Practical Component	1. Role play to understand roles & responsibilities of project manager. 2. To identify and visit ongoing projects undertaken by any local business to study project appraisal techniques and risk management. 3. To meet project finance personnel from any financial institution to understand project financing and capital budgeting techniques. 4. Library Exercise on Project Report Preparation by studying project reports prepared by any one company of your choice.

Semester	IV	Total Credit	4
Course Code	SOB-POM- IV	Credit Pattern	L-45, T-7, P-8
Course Title	QUALITY MANAGEMENT		

Course Objectives	
1	To make students understand fundamental concepts and principles of quality management, including the basic concept and functions of service quality management.
2	To make students knowledgeable about theoretical aspects and practical application of statistical quality control techniques.
3	To introduce students to various quality management awards & its framework.

Course Outcomes: Students will be able to	
1	Explain basic terms and concepts related to Quality Management including Quality Assurance, Cost of Quality & Quality Function Deployment.
2	Solve problems on Process Control Charts and Interpret on the process capability.
3	Discuss recent techniques of quality management including Total Quality Management, Six Sigma and Quality Circle.
4	Make use of quality awards framework to qualify the organization for various quality management awards.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	INTRODUCTION TO QUALITY MANAGEMENT Definitions of Quality, Dimensions of Quality, Meaning of Quality Management, Quality Assurance, Quality of Design, Quality of Conformance, Cost of Quality: Cost of Poor Quality. Introduction to Service Quality, The Service Quality GAP Model, Measuring & Improving Service Quality.	L= 12	
		T= 1	P= 2
2	STATISTICAL QUALITY CONTROL Meaning And Significance of Statistical Quality Control, Need of Acceptance Sampling, Types of Sampling Plans, OC Curve, Introduction To Statistical Process Control & Control Charts, Control Charts for Variable, Control Charts for Attribute. (Numerical Treatment on Control Charts)	L= 11	
		T= 2	P= 2
3	QUALITY IMPROVEMENT TOOLS & TECHNIQUES Total Quality Management: Concept of TQM, Principles of TQM, TQM Model, Implementation of TQM (PDCA Cycle). Six Sigma: Introduction to SixSigma, Evolution of Six Sigma, DMAIC Model for Implementing Six Sigma. Quality Circles, Benchmarking, Quality Function Deployment.	L= 11	
		T= 2	P= 2
4	QUALITY MANAGEMENT SYSTEM & AWARDS Quality Audit, Quality System Standards, Bureau of Indian Standards, Introduction to ISO, Importance of ISO Certification, ISO 9001 Structure, Deming Prize, Malcolm Baldrige National Quality Award, Rajiv Gandhi National Quality Award, , Ramkrishna Bajaj National Quality Award.	L= 11	
		T= 2	P= 2

Learning Resources		
1	Text Books	1. Mitra A., Fundamentals of Quality Control and Improvement, Wiley 2. Panneerselvam R. & Sivasankaran P., Quality Management, Prentice Hall India Learning Private Limited 3. Bhat S, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 4. Mahajan M., Statistical Quality Control, Dhanpat Rai & Co.
2	Reference books	1. Bedi K., “Quality Management”, Oxford University Press 2. Hoyle D., Quality Management Essentials, Butterworth-Heinemann
3	Websites	1. https://www.managementstudyguide.com/total-quality-management-articles.htm 2. https://www.managementstudyguide.com/six-sigma-articles.htm
4	Journals	1. International Journal of Productivity and Quality Management (IJPQM) 2. Journal of Quality Management ScienceDirect.com 3. Quality Management Journal – Scimago 4. The TQM Journal information – Emerald
5	Supplementary Reading	1. Dale H. Besterfield et al, Total Quality Management, Third edition, Pearson Education 2. Evans & Lindsay, An Introduction to Six Sigma & Process Improvement, Cengage learning
6	Practical Component	1. To meet quality control manager of any local manufacturing organization to understand application of Quality Control Tools. 2. Identifying and visiting local ISO Certified organization to understand criteria for getting ISO Certification. 3. Visiting any local service sector business to study its Quality Management Framework. 4. Library Exercise on any one of the Quality Management Awards studied and any one award winning company of your choice.

Semester	IV	Total Credit	4
Course Code	SOB-ABM-III	Credit Pattern	L-44, T-8, P-8
Course Title	AGRI PRODUCTION, SUPPLY CHAIN AND LOGISTICS MANAGEMENT		

Course Out Comes: Students will be able to	
1	Understand the importance of farm and its resource management
2	Review various farming systems, land tenure systems, their impact on productivity in agriculture sector
3	Understand the role of Supply chain methods in development of farm and farm allied activities
4	Critique the importance of logistics development in development of farm sector and farmer

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Unit 1: Fundamentals of Farm Management Scope of Modern Agriculture, Special Features of Agricultural and Industrial Production, Difference between Farm and Non-Farm Business Management; Making Small farm more effective, Farm Technology, Gains from Technological Improvements to Producers and Consumers, Mechanization and Automation.	L= 9	
		T= 2	P= 1
2	Unit 2: Theories of Farm Management and Farm Production Systems Farm system Theory: Theory of Farm Management by Objectives, Practices of Farm Management, Farm Production Systems: Peasantry, Proprietorship, Cooperative Farming, Capital Farming, Corporate Farming, Green House Farming, and FPOs, Farm Management Tools, Farm Size and Productivity Debate, Measurement of Farm Efficiency.	L= 9	
		T= 1	P= 2
3	Unit 3: Supply Chain Management in Agribusiness Sector Introduction to SCM and Changing Business environment; Nature of association in supply chain, Evolution of SCM in agriculture, Business Process in the Agribusiness supply chain, Supply Chain categories, Integrated supply chains, Supply Networks: TCSCs, Contract Farming, Factors Determining the Nature of supply chains, Agri-Business Supply Chains in India and Case Studies, Success of supply chains.	L= 9	
		T= 2	P= 1
4	Unit 4: Agri-Business and Logistics Management Logistics Management: History and Evolution of Logistics, Elements of Logistics Management, Distribution Management, Distribution	L= 9	
		T= 1	P= 2

	Strategies: Pool Distribution; Transport Management, Fleet Management, Service Innovation, Warehousing, Order Processing, Material Handling and Packaging for Logistics (Case Studies Discussion), Third – party Logistics (TPL/3PL), GPS technology	T= 2	P= 1
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Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources		
1	Text Books	• Mishra, A., Biswas, D. & Giri, A., (2019), Production Management in Agribusiness. In: H. P. House, AgriBusiness Management. (2019), Himalaya Publishing House, Mumbai (India), pp. 106 -120. • Diwase, S., (2009), Indian Agriculture and Agribusiness Management. 1st Ed., Krishi Resource Management Network, Pune. • Altekar RV. 2006. Supply Chain Management: Concepts and Cases. Prentice Hall of India.
2	Reference books	1. Panigrahy, S. R. et.al., (2020), 3rd Ed., Objective Agribusiness Management, Scientific Publishers, Jodhpur. India 2. Van Fleet, David et.al., (2014), 6th Ed., Agribusiness: Principles of Management. Cengage Learning, USA. 3. Monczka R, Trent R & Handfield R. 2002. Purchasing and Supply Chain Management. Thomson Asia. 4. Van Weele AJ. 2000. Purchasing and Supply Chain Management Analysis, Planning and Practice. Vikas Publ. House
3	Websites	1. www.agriculture.gov.in/ 2. www.manage.gov.in 3. www.ica.coop/ 4. www.apeda.gov.in 5. www.enam.gov.in 6. www.ruralmarketing.in 7. http://indiagovernance.gov.in/docsearch.php?search=Agriculture&from_map=1&type=theme 8. search=Agriculture&from_map=1&type=theme
4	Journals	1. Indian Journal of Agricultural Economics 2. Indian Journal of Agricultural Marketing 3. Journal of Agribusiness 4. Rural Marketing
5	News Papers and Magazines	1. Rural Marketing 2. The Times of India 3. The Economic Times 4. Business Standard 5. Outlook Business 6. The Hindu 7. Frontline 8. Business Today 9. Business India 10. Business World 11. Financial Express

Semester	IV	Total Credits	4
Course Code	SOB-ABM-IV	Credit Pattern	C = 44, P = 8 T = 8
Course Title	AGRICULTURAL MARKETING, COMMODITIES MARKETS AND AGRI-BUSINESS		

Course Out Comes: Students will be able to

1	Identify review the relation between agricultural markets and agriculture development
2	Gain introduction to the necessary skill sets by study of agricultural markets and support systems
3	Review the importance of agricultural commodities markets in farm sector
4	Develop understanding of methods of trading in commodities markets

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Unit 1: Agricultural Marketing in India Agricultural Marketing and its Process, Classification of Agricultural Markets, Methods of Sales, Marketing Agencies and Marketing of Agricultural Products, Classification of Marketing Functions, Performance Analysis of Marketing of Agricultural Inputs – Fertilizers; Seeds; Agrochemicals; Tractors; Farm Equipment, Irrigation Equipment and Animal Feed.	L= 11	
		T= 2	P= 2
2	Unit 2: Commodities Markets and Commodity Exchanges: An Overview Introduction to Commodity Markets, Marketing of Agricultural Commodities, Physical Market Operations, Introduction to Commodity Exchanges Around the World and In India, Electronic Spot Exchange, Regulation of Commodity Markets in India, Understanding Risk, Managing Risk.	L= 11	
		T= 2	P= 2
3	Unit 3: Commodities Derivatives in India Evolution of Commodity Derivatives: Commodity Derivatives in India, Meaning, Derivative Markets and Its Participants, Economic Importance, Designing Commodity Controls, Types and Classification of Derivatives, Agricultural Derivatives in India: Issues and Challenges	L= 11	
		T= 2	P= 2
4	Unit 4: Trading on Clearing and Settlement on Commodity Exchanges: The Exchange platform, Exchange Membership, Commodity Brokerage, trading systems, participants in Commodity Markets, Role of speculators, Trading mechanism – Margin Trading, Mark to Market, Conflict Management; Arbitration and International Legal provisions, Market Positions, Order Types, Access to Commodity Exchanges, Volume and Open Interest, Clearing House	L= 11	
		T= 2	P= 2

	Operations and Risk Management, Procedures, Delivery related issues like delivery centers, Deliverable varieties, Issues related to monitoring and surveillance by exchanges and regulator, Margining Method and the settlement process		
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Note:

1. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
2. Video cases and Documentary Films relating to the syllabus to be exhibited in the class

Learning Resources

1	Text Books	• Mahajan Neeraj And Singh Kavaljit, (2015), “A Beginner’s Guide To Indian Commodity Futures Markets”, Madhyam Book Publications, New Delhi • Dr. Chaitnani Nandini Niti, (2019), “Commodity Markets And Derivatives”, 2Nd Edition, CENGAGE India Publications, • Dr. Chaitnani Nandini Niti, (2009), “Commodity Markets: Operations, Instruments, and Applications”, Tata Mc Grow Hill, India
2	Reference books	1. Helyette Geman (2005) Commodities and Commodity Derivatives: Modeling and Pricing for Agriculturals, Metals and Energy. John Wiley & Sons Ltd. 2. Helyette Geman (2009), —Risk Management in Commodity Markets: From Shipping to Agriculturals and Energyll, J. Wiley & Sons Ltd. 3. Neil C. Schofield (2007), —Commodity Derivatives: Markets and Applicationsll, John Wiley & Sons Ltd. 4. R.W. Kolb and Overdahl J (2007), Futures, Options, and Swaps, 5th Edition, Blackwell Publishers, Malden MA
3	Websites	• www.indiabudget.nic.in • www.commodityonline.com • www.cmegroup.com/company/cbot.html • www.ncdex.com • www.mcxindia.com • www.icexindia.com
4	Journals	1. Rural Marketing 2. Vikalpa 3. The Survey of Indian Agriculture 4. Indian Council of Agriculture Research Journal (www.icar.org.in/icar-journals) 5. Journal of Agricultural Marketing (https://ccsniam.gov.in) 6. The State of Agricultural Commodities Markets, Annual publication of FAO
5	News Papers and Magazines	1. Rural Marketing 2. The Times of India 3. The Economic Times 4. Business Standard 5. Outlook Business 6. The Hindu 7. Frontline 8. Business Today 9. Business India 10. Business World 11. Financial Express