C S I B E R

CHHATRAPATI SHAHU INSTITUTE OF BUSINESSEDUCATION AND RESEARCH, KOLHAPUR-MAHARASHTRA, INDIA

(AN AUTONOMOUS INSTITUTE)

CPE Phase III, NAAC A+

STRUCTURE & SYLLABUS

Under C.B.C.S.
Pattern With Effect
from 2021-2022

MBA Programme

MASTER OF BUSINESS ADMINISTRATION (MBA Analytics)

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS):

Programme Educational Objectives are broad statements that describe what students are expected to attain within few years of completing their graduation. Programme Educational Objectives are based on the needs of the students undergoing the programme.

The PEOs of MBA Program at CSIBER are as follows;

PEO 1:

Our graduates will develop themselves as professionals contributing effectively and efficiently by applying theories in management and demonstrating team work, effective communication, analytical and creative thinking skills for problem-solving.

PEO 2:

Our graduates will be equipped with leadership and entrepreneurial abilities to enable them toestablish themselves as dynamic and innovative business professionals.

PEO 3:

Our graduates will not only be able to adapt to changes in the global environment but also actas change agents in bringing about holistic and sustainable development in the society.

PEO 4:

Our graduates will have highest regard for Personal & Institutional Integrity, Ethical values and Social Responsibility.

GRADUATE ATTRIBUTES for MBA COURSE

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 organizationand society by utilizing their conceptual knowledge.
6. Sustainability:- Graduates will gain ability to take business decisions keeping in mind theneed 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.

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.

In case the term (Semester) is not granted the student has to seek fresh admission in the next year and complete the term and pass the examination. This must be done within **Six** years of his/her 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.

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 is60. One credit is allotted to 15 contacthours. 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.

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
Quiz	10	05
Any Two from given alternatives: 1. Case Study 2. Home assignment 3. Mid-term test 4. Viva voce 5. Library-based assignment 6. Book report 7. Scrap Book 8. Lab. Practical 9. Field-based activity 10. Group Discussion 11. Seminar 12. Group Activity	10 + 10	05 + 05
	40	**20**

Assessment of AEC courses:

AEC courses will be assessed as follows;

i) Internal Marks i.e. Formative evaluation - 20 Marks

ii) External Marks i.e. Summative evaluation - 30 marks

Summative evaluation (out of 30) will be done by panel consisting of one internal and one external member on the basis of viva/ presentation. The Formative evaluation done by the faculty be shown to the students and their signature willbe obtained.

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

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 the paper by Third examiner. The **'nearest'** highest two marks will be considered for determining the average mark of such papers.

4. Once the Student passes in the internal marks (Concurrent evaluation out of 40) and the record is submitted to the examination department, it should be carried forward whenever required and it cannot be improved in any case.

5. Students who fail in the internal marks (Concurrent evaluation out of 40) should reappear for the same, only then the revised marks will be considered for further calculation

Assessment of Lab-Based courses:

1) SEMESTER TWO:
Course name: Advanced Excel
Credits: FOUR

60 marks external- based on practical examination conducted by internal and external faculty.
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.
40 marks internal evaluation will be as per other 4 credit course in the curriculum.

2) SEMESTER TWO:
Course name: Managerial Decisions using Excel
Credits: TWO

30 marks external- based on practical examination conducted by internal and external faculty. The practical examination will be of 2 hours duration. The student will be given a choice of three questions of 15 marks each, will be asked out of which student can solve any two.
20 marks internal evaluation will be as per other 2 credit course in the curriculum.

III. 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 First year (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. Performance Index (SPI) will be as follows:

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

IV. 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 cumulativeperformance 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 Gi is a grade with numerical equivalent as Gi obtained by a student for the course with credit Ci then, SPI for that Semester is calculated using formula.

$$SPI = \frac{\sum_{1} C_i G_i}{\sum_{1} C_i}$$

Where summation is for all the courses registered by a student in that Semester. SPI iscalculated 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.

$$CPI = \frac{\sum_{1} C_i G_i}{\sum_{1} C_i}$$

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.

V. 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 notexceed 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 begiven 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.

MBA (Business Analytics specialization) Programme Structure

Under C.B.C.S. Pattern
with Effect from 2021-22

MBA-I (BA), Semester – I

Nature of Choice	Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
Core Component (CC)	**CC 101**	Perspectives in Management And OB	04	60	40	60	100
	CC 102	Accounting for Business Decisions	04	60	40	60	100
	CC 103	Database Management Systems	04	60	40	60	100
	CC 104	Foundations of Mathematics and Statistics	04	60	40	60	100
	CC 105	Economics for Analysts	04	60	40	60	100
	CC 106	Marketing Management	04	60	40	60	100
Ability Enhancement Course (AECC)	**AECC 101**	Professional Communication Skills	02	30	20	30	50
Discipline Specific Elective (DSE)	**DSE 101 (Any One)**	DSE- 101- (A) Programming fundamentals and R DSE- 101- (B) Programming fundamentals and Python	04	60	40	60	100
		Total	**30**	**450**	**300**	**450**	**750**

MBA-I (BA), Semester – II

Nature of choice	Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
Core Component (CC)	**CC 201**	Advanced Excel(Lab-Based)	04	60	40	60	100
	CC 202	Legal Aspects of Business	02	30	20	30	50
	CC 203	Managing Human Resource	04	30	20	30	50
	CC 204	Research Methodology	02	60	40	60	100
	CC 205	Data Warehousing and Data Mining	04	60	40	60	100
	CC 206	Operations Research	04	60	40	60	100
	CC 207	Operation Management	02	30	20	30	50
Ability Enhancement Course (AEC)	**AEC201 (Any One)**	AEC 201 (A) German AEC 201 (B) Japanese AEC 201 (C) French AEC 201 (D) Selling and Negotiation Skills AEC 201 (G) Digital Marketing AEC 201 (H) Human Values	02	30	20	30	50
Discipline Specific Elective (DSE)	**DSE201**	DSE 201 (C) Data Exploration and Visualization	04	60	40	60	100
Generic Elective (GE)	**GE 201 (Any One)**	GE 201 (A) Environment and Development GE 201 (B) Indian Social Problems and Services GE 201 (C) Office Automation GE 201 (D) Principles of Economics	02	30	40	60	100
		Total	**30**	**450**	**300**	**450**	**750**

MBA-II (BA), Semester – III

Nature of choice	Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
Core Component (CC)	**CC 301**	Strategic Management	04	60	40	60	100
	CC 302	Cloud Computing	04	60	40	60	100
	CC 303	Project report and Viva-voce	04	50days + 30	40	60	100
	CC 304	**CC Specialization Paper-I** **List of Choices for CC-304** CC-304-A International Trade and Finance CC-304-B Employee Relations and Labour Law CC-304-C Buying Behaviour CC-304-D Agri- Business, Entrepreneurship and cooperatives CC-304-E Logistics and Supply Chain Management CC-304-F Knowledge Management Systems and ERP	04	30	20	30	50
	CC 305	**CC Specialization Paper-II** Machine Learning	04	60	40	60	100
	CC 306	Lean Management	02	60	40	60	100
Discipline Specific Elective (DSE)	**DSE 301**	**DSE Specialization Paper I** Business Analytics using R	04	60	40	60	100
	DSE 302	**DSE Specialization Paper- II** **List of Choices for DSE- 302:** DSE-302-A Direct and Indirect Taxes DSE-302-B Strategic and International Human Resource Management DSE-302-C Marketing Sectors DSE-302-D Rural and Agricultural Marketing DSE-302-E Purchasing and Inventory Management DSE-302-F Information SystemControl and Audit	04	60	40	60	100
Ability Enhancement course (AEC)	**AEC- 301**	AEC-301-(A): Entrepreneurial skills and Start up AEC- 301-(B): Health and Wellness AEC-301-(C): Tourism Management AEC-301-(D): Change	02	30	20	30	50

		Management					
Generic Elective (GE)	**GE-301 (Any One)**	GE-301-(A) E Commerce GE-301-(B) Disaster Management GE-301-(C) Corporate Social Responsibility GE- 301 (D) Basics of Indian Economics	02	30	20	30	50
		Total	**34**	**480**	**340**	**510**	**850**

MBA-II (BA), Semester – IV

Nature of choice	Subject Code	Subject	Credits	Contact Hours	Int. Marks	Ext. Marks	Total Marks
Core Component (CC)	**CC 401**	Big Data Analytics	04	60	40	60	100
	CC 402	CC Specialization Paper-I Social Media Analytics	04	60	40	60	100
	CC-Spl-II-402	CC-402- (A) Management Accounting and Control System CC-402- (B) Performance and Compensation Management CC-402- (C) Sales and Distribution Management CC-402- (D) Agri- Production and Supply Chain Management CC-402- (E) Project Management CC-402- (F) Software Engineering and IT Project Management	04	60	40	60	100
Discipline Specific Elective (DSE)	**DSE-Spl-II-401**	DSE Specialization II Analytics in Functional Areas Of Management	04	60	40	60	100
	DSE-Spl-II-401 (Any Two)	DSE-Spl-II-401- (A) Investment And Portfolio Management DSE-Spl-II- 401(B) Talent And Human Capital Management DSE-Spl-II-401-(C) Integrated Marketing Communication DSE-Spl-II-401-(D) Agri Commodity Markets and Agri Business DSE-Spl-II-401-(E) Modern Approaches to Quality Management DSE-Spl-II-401-(F) Applied Data Science and Business Analytics using R	04	60	40	60	100
Ability Enhancement Compulsory course (AECC)	**AECC-401**	Employability Skills	02	30	20	30	50
		Total	**22**	**330**	**220**	**330**	**550**

Component-wise distribution of MBA curriculum
2021-22

Semester / Component	I	II	III	IV	Total	PERCENTAGE
Core Courses	24	22	22	12	**80**	68.9 %
Discipline Specific Elective	4	4	8	8	**24**	20.7 %
Ability Enhancement Compulsory Course	2	-	-	2	**4**	3.5 %
Ability Enhancement Course	-	2	2	-	**4**	3.5%
Generic Elective	-	2	2	-	**4**	3.5 %
Total credits:	**30**	**30**	**34**	**22**	**116**	**100%**

MBA - I

SEMESTER - I

Semester	I	Total Credit	4
Course Code	CC-101	Credit Pattern	L-45, T-8, P-7
Course Title	PERSPECTIVES IN MANAGEMENT AND OB		

Course Objectives	
1	To make students understand fundamental concepts and principles of management, including the basic roles, skills, and functions of management.
2	To study individual and group perspectives of behavior in an organization.
3	To develop skills in understanding and appreciating individual, inter-personal and group process for increased effectiveness, both within and outside organizations
4	To develop theoretical and practical insights for effectively managing people within the organization
Course Outcomes: Students will be able to:	
1	Analyse and attain elementary level of skills in management process and functions: planning, organizing, deciding, directing and controlling
2	Evaluate leadership styles to anticipate the consequences of each leadership styles.
3	Demonstrate a thorough knowledge of organizational behaviour.
4	Apply relevant contemporary theories, concepts and models in order to analyse organisational environment, cases and issues.
5	Develop good team-working skills

Unit Number	Contents	Number of Sessions	
1	Introduction to Management:- Meaning, Functions, Skills and levels of Management. **Planning and Organizing: Planning -** Nature, Process and Importance of Planning, Limitations of Planning, Making Planning Effective. **Organizing -** Meaning, Organization Structure- Types, Departmentalization- on bases of Customer, Geographical area, product, process, function, Span Of Management- Factors considered while deciding span of management, Concept of Responsibility, Authority, Accountability and Delegation.	**L= 11** **T= 2**	**P= 2**
2	**Directing, and Controlling:** **Directing-** Definition, Characteristics and Importance. **Decision Making –** Process, Types of Decisions **Leadership -** Types, Qualities of Leader, Leader vs. Manager **Controlling -** Steps in Control Process – Need – Types of Control Methods – Benefits of controlling.	**L= 12** **T= 2**	**P= 1**
3	Organizational Behaviour – Introduction, **Basic psychological process**:-	**L=11**	

	Perception – Definition, Importance and Factors Influencing Perception, Basic motivational concepts –Importance of Motivation, Theories in Motivation- Maslow, Theory X, Y and Z, Personality – Determinants of personality, Theories of personality- Freud, Erikson; Attitudes – Characteristics, Components, Formation. Values: Types and sources	**T=2**	**P=2**
4	**Group Dynamics:** Concept of Groups, Stages of Group Formation, Factors that Affect Group Behavior. Characteristics of an Effective Team, **Power:** Sources of Power (Interpersonal sources and Structural sources of power), Political Behaviour in Organization: **Political strategies**. Managerial Implications using power effectively.	**L= 11**	
		T= 2	**P= 2**

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. Fred Luthans, Organisational Behavior, McGraw Hill, 11th Edition, 2001. 2. Hellrigal, Slocum and Woodman, Organisational Behavior, Cengage Learning, 11th Edition 2007. 3. L.M. Prasad, Principles of Management,
2	**Reference books**	1. Ivancevich, Konopaske&Maheson, OranisationalBehaviour& Management, 7th edition, Tata McGraw Hill, 2008. 2. Mc Shane & Von Glinov, OrganisationalBehaviour, 4th Edition, Tata McGraw Hill, 2007. 3. Schermerhorn, Hunt and Osborn, Organisational behavior, John Wiley, 9th Edition, 2008. 4. P G Aquinas, OrganisationalBehaviour : concepts, realities, applications and challenges, Excel Books. 5. Koontz And Weinrich, Essentials of Management 6. Dr. KiranNerkar and Dr. Vilas Chopade, Principles of Management 7. L.M. Prasad, Principles of Management, 8. R.M. Srivastava, Principles of Management, 9. Peter Drucker, Essentials of Management 10. Stephen P. Robins, Management, Prentice Hall 11. Sherlekar S.A. Modern Business Administration and Management, Himalaya Publications
3	**Practical Component**	1. Identifying a job profile and list the various types **abilities** required for that job and also **the personality traits/attributes** required for that job. 2. Management games on **Team building** will be conducted 3. Studying organizational structure of any company and classifying it into different types of organizations which are studied and justifying why such structure is chosen by that organization. 4. Preparing the leadership profiles of any 3 business leaders and studying their leadership qualities. 5. Class debate on different basis of departmentalization
4	**Journals**	1. IUP Journal of Organisational Behavior 2. Effective Executive 3. IUP Journal of Management Case Studies.
5	**Websites**	www.managementstudyguide.com/ www.hbr.org
6	**Supplementary Reading**:	Magazines like: Time, Outlook

Semester	I	Total Credit	4
Course Code	CC 102	Credit Pattern	L-45, T-8, P-7
Course Title	ACCOUNTING FOR BUSINESS DECISIONS		
Course Outcomes: The students will able to			
1.	Apply basic accounting principles and concepts for preparation of financial statements		
2.	Asses funds from operation with the help of funds flow statement		
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: (15)** Accounting as an information system, concepts, convention and principles of Accounting, Types of Business Organizations, Legal Regulatory And Tax Framework., Role of accountant in an organization, Accounting Process. Branches of accounting: Financial, Cost and Management Accounting and their inter-relationships, Introduction of Accounting Standards.	**L= 11**	
		T= 2	**P=2**
2	**Financial Statement Analysis: (15)** Preparation and Understanding of Financial Statements, Exposure to format of schedule III of Public Limited, Introduction of IFRS & Introduction of Tally Software Package in Accounting – Creating Companies, journal entries and ledger accounts.	**L= 12**	
		T= 2	**P= 1**
3	**Fund Flow and Cash Flow Statement: (15)** Preparation of Funds Flow Statement and its analysis and Cash Flow Statement: Various cash and non-cash transactions, flow of cash, difference between cash flow and fund flow, preparation of Cash Flow Statement and its analysis. (As per AS-3).	**L= 11**	
		T= 2	**P= 2**
4	**Introduction to Cost Accounting & Techniques: (15)** 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. S N Maheshwari "Introduction to Accountancy" S Chand Publication 2. Prof. V.A. Patil, Dr. P. M. Herekar, "Financial Accounting" Ajab Publication 3. S. C. Gupta, "Advanced Accounts" S Chand Publication. 4. M. G.Patkar, "Book Keeping & Accountancy" 5. G Sekar & B Sarvana Prasath, "CA Inter Padhuka Ready Referencer on Accounting", Padhuka's Publication
2.	**Reference Books**	1. Accountants' Guidebook: A Financial and Managerial Accounting Reference 2. Jae K. Shim, Joel G. Siegel, Nick Dauber CPA, Anique Qureshi; "Accounting handbook" 3. "A Dictionary of Accounting" Oxford Quick Reference Publication
3.	**Websites**	The Institute of Chartered Accountants of India : www.icai.org The Institute of Company Secretaries of India : www.icsi.edu
4.	**Journals**	• The Charted Accountant Journal. • The Charted Secretary Journal. • The Management Accountant Journal, Printer & Publisher, CMA Kaushik Banerjee, **and Editor:** CMA Dr Debaprosanna Nandy, **ISSN:** 09723528. • ICSI Journals • Finance India • Journal of Accounting & Finance
5.	**Supplementary Reading**	• Financial Express • Economics Times • Business Standard
6.	**Practical Component**	• Practical Problems on Schedule III • Practical Problems on Fund Flow and Cash Flow Statements • Practical Problems on Cost Sheet • Practical Problems on Standard Costing and Variance Analysis • Financial statement analysis using Prowess-IQ • Companies Financial Reports & Corporate case studies.

Semester	I	Total Credit	4
Course Code	CC 103	Credit Pattern	L-45, T-8, P-7
Course Title	DATABASE MANAGEMENT SYSTEMS (DBMS)		

Course Objectives	
By the end of the course, students should be able to:	
1	Develop Familiarity with the relational database theory, and be able to write relational algebra expressions for queries.
2	Develop familiarity with the basic issues of transaction processing and concurrency control.
3	Understand query evaluation techniques and query optimization.
4	Comprehend design principles for logical design of databases, including the E-R method and normalization approach

Course Outcomes	
1	To make a study of SQL and relational database design
2	To know about data storage techniques and query processing
3	To impart knowledge in transaction processing, concurrency control techniques and recovery procedures

Unit Number	Contents
1	**Introduction To Databases And Transactions (12 Hours)** Introduction to Databases and Transactions What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management, Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction
2	**Database Design (12 Hours)** Database Design, ER-Diagram and Unified Modeling Language Database design and ER Model: overview, ER-Model, Constraints, ER-Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML Relational database model: Logical view of data, keys, and integrity rules. Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF).
3	**Transaction Management And Concurrency Control (06 Hours)** Transaction management: ACID properties, serializability and concurrency control, Lock based concurrency control (2PL, Deadlocks),Time stamping methods, optimistic methods, database recovery management
4	**Locking techniques (06 Hours)** Characteristics schedule based on serializability. Two phase locking techniques for concurrency control; concurrency control based on timestamp ordering; Database Recovery Techniques: Recovery concepts; Techniques, , database recovery management.
5	**Constraints, And Sql (12 Hours)** What constraints, types is of constrains, Integrity constraints, data definition, aggregate function, Null Values, nested sub queries, Joined relations. Introduction SQL, Components DML, DDL, DCL with queries.

Learning Resources		
1	**Text books**	• An introduction to Database Systems, C J Date, Addition-Wesley • Database System Concepts, Abraham Silberschatz, Henry F. Korth& S. Sudarshan, McGraw Hill fifth Edition • Understanding SQL, Martin Gruber, BPB • SQL- PL/SQL, Ivan bayross

Semester	I	Total Credit	4
Course Code	CC 104	Credit Pattern	L-45, T-8, P-7
Course Title	FOUNDATION IN MATHEMATICS AND STATISTICS		

Course Outcomes	
1	Recognize the importance & value of mathematical and statistical thinking
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
1	**Fundamentals of Mathematics**: Introduction to Set: Sets, Types of sets, Hierarchy of Sets, Venn Diagrams, Set Operations, Some useful and Important Laws, Techniques of Counting: Factorial & Its Notations, **Matrices, Determinants:** Definition of a Matrix, Types of Matrices, Operations on Matrices, Transpose of a Matrix, Trace of a Matrix, Determinant of Square Matrices, Properties of Determinants, Adjoint of Matrix, Inverse of a Matrix, Application of Matrices, Application of determinants.
2	**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, Mean deviation, Standard Deviation -Properties of standard deviation, Coefficient of Variation,
3	**Correlation & Regression**: Introduction, Correlation - Causation and Correlation - Types of Correlation -Measures 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, **Permutation & Combination:** Fundamental Principles of Counting, Permutation, Combination, Selection of Permutation or Combination
4	**Probability & Probability Distribution**: Random experiment, sample space and classification of sample spaces, Classical definition of probability, Properties, Conditional probability, Multiplication law of probability, Baye's theorem, Independence of events, Examples. Random variable, Probability mass function, Cumulative distribution function, Mathematical expectation, Variance, Definition and properties of Binomial, Poisson, Normal distribution-examples,

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. Sancheti D C, Business Mathematics
2	**Reference books**	4. N D Vohra, Business Statistics, Tata McGraw Hill 5. G C Beri, Business Statistics, Tata McGraw Hill 6. Devid M Levine etc, Business Statistics – A First Course, Pearson Publication.
3	**Journals**	1. International Journal of Statistics & Management Systems 2. Calcutta Statistical Association Bulletin 3. Vikalpa: The Journal for Decision Makers
4	**Websites**	1. Www.stattrek.com 2. www.statisticsbyjim.com 3. www.pinkmonkey.com/studyguides/subjects/stats/contents.asp
5	**Supplementary Reading**	1. 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	I	Total Credit	4
Course Code	CC 105	Credit Pattern	L-44, T-8, P-8
Course Title	ECONOMICS FOR ANALYSTS		

Course Outcomes: Students will be able to

1	Describe micro and macroeconomic concepts of business importance
2	Analyze Economic Variables which influence managerial decision-making process
3	Asses micro and macro-economic environment of business decision process

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Managerial Economics and Demand Analysis** Basic Economic Concepts, Nature And Scope Of Managerial Economics, Objectives Of The Firm And Constraints, Business Decision-Making Model, Tools Of Economic Analysis, Introduction to Consumer Behavior and Utility measurement, Demand Analysis- Meaning, Types And Determinants Of Demand, Demand Function And Law Of Demand, Elasticities And Their Utilities In Managerial Decisions, Demand Forecasting- Meaning, Purpose And Methods, Law of Diminishing Marginal Utility, Basics of Ordinal Utility approach.	**L= 11**	
		T= 2	**P= 2**
2	**Production & Cost Analysis for Business Decisions** Production Analysis- Production Schedules, Production Functions-Short Run And Long Run, Returns To Scale Approach, Marginal Productivity Of Inputs, Optimal Input Combination. Cost Concepts, Cost Function, Cost-Output Relationship, Short Run And Long Run Analysis	**L= 12**	
		T= 2	**P= 1**
3	**Market Structure and Pricing Concepts** Introduction to Market Competition and its Nature, Perfect Competition, Monopolistic Competition, Monopoly and Oligopoly etc, Price and Output Determination in different Markets, Pricing practices: Cost plus pricing, incremental pricing, multiple product pricing, product line pricing, specific pricing problems	**L= 11**	
		T= 2	**P= 2**
4	**ational Income and Macro-Economic Policies** Introduction to National income, Basic Concepts, Estimation of NI and Difficulties, Circular Flow Of Aggregate Income and Expenditure, NI as a Measure of Economic Development In Comparison with other Indicators. **Role and function of Money Market:** Composition and instruments. RBI role and functions. Capital Markets: Role and functions, Regulatory role of SEBI. **Objectives and Instruments** of Monetary And Fiscal Policies, Recent Issues In Monetary And Fiscal Policies	**L=11**	
		T= 2	**P= 2**

Note:

1. Case studies on each of the aspects mentioned in the syllabus need to be discussed
2. Necessary Audio and Video case studies must be shown in the class.

Learning Resources		
1	**Text Books**	1. D.N. Dwivedi , Managerial Economics, Vikas Publication House, New Delhi 2. Dominick Salvatore, Managerial Economics, Mcgraw Hill Inc, New York, (2000) 3. Deviga Vengedasalam,Karunagaran Madhavan Principles of Economics (Third Edition) Oxford University Press, 2014 4. Mithani D M (2016)Managerial Economics : Theory And Applications, Himalaya Publishing House

2	**Reference books**	1. Paul Samuelson, Economics, Mcgraw Hill Inc, New Delhi, (2000) 2. Peterson & Lewis, Managerial Economics, Prentice Hall India Ltd, New Delhi, (2001). 3. H.L. Ahuja, 2004, Modern Micro Economics Theory and Practices, Ed.12, S.Chand, New Delhi. 4. Timothy C.G. Fisher, David Prentice and Rober Waschik, Managerial Economics - A Strategic Approach, Routledge, 2010.
3	**Websites**	https://www.rbi.org.in/home.aspx http://finmin.nic.in/ http://nptel.ac.in/courses/110101005/3 http://indiabudget.nic.in/budget.asp https://www.cmie.com/ Economic and Political Weekly
4	**Journals**	Journal of Applied Economics Indian-Economic-Journal International Journal of the Economics of Business Journal-of Indian-School-of-Political-Economy Agricultural-Economic-Research-Review
5	**Supplementary Reading**	Economics Times Daily Business Standard Daily Business Today Daily Latest Monetary Policy Report Latest Fiscal Policy Report
6	**Practical Component**	1. Visit to medium scale vendor at your near point. Collect data on a specific product sales and price. Estimate its elasticity 2. Meet a manufacturer and collect data on production inputs and prepare his short term and long term returns conditions. 3. List out the business as per market structure characteristics. Collect information on their product base 4. Collect data on national income from national income statistics and apply three methods of national income estimation and measure the trends in national income.

Semester	I	Total Credit	4
Course Code	CC 106	Credit Pattern	L-45, T-8, P-7
Course Title	MARKETING MANAGEMENT		PAPER- I

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 - Scanning the Marketing Environment Macro – Demographic, Economic, Social – Cultural –Political –Legal- Technology- Natural and Micro environment. Concept of Market Demand and Demand Measurement, Definition, Need & Benefits	L= 11 T= 2	P= 2
2	**Market Segmentation& Product Mix** Bases for market Segmentation, Segmentation of Consumer goods, Industrial goods and services. Effective segmentation criteria, Evaluating & Selecting Target Markets, differentiation, Positioning. Consumer and Business buying process. Concept of Product, Classification- Levels of Product– Product Life Cycle – New Product Development -Branding, Packaging and Labeling,	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. - Advertising, Sales Promotion, Publicity and Personal Selling, Impact of Technology & Internet on Promotion.	L= 11 T= 2	P= 2
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	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 Philip, "Marketing Management 17th Edition 2015", Prentice Hall of India, New Delhi. 2. Saxena Rajan, "Marketing Management 2nd Edition 2002", Tata McGraw Hill, New Delhi
2	**Reference books**	1. Station W.J. Etzel M.J., "Fundamentals of Marketing – 10th Edition 1994" , Mc Graw Walker B.J., Hill International Editions. 2. Srinivasan R., "Case Studies in Marketing", Prentice Hall, New Delhi, 2000 3. Kaushal H., "Case Study Solutions in Marketing", McMillan India 2001 4. V.S.Ramaswamy and S.Namakumari -Marketing Management – Macmilan Business Books 5. Arunkumar, M Meenakshi- Marketing Management-Vikas Publication 6. Walkar, Boyd, Mullins And Larreche. "Marketing Strategy. A Decision Forced Approach", Tata Mcgraw Hill 4th Edition.
3	**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/) https://www.mrsi.co.in (Market Research Society Of India: MRSI) www.rmai.in/ (Rural Marketing Association of India: RMAI)
4	**Journals**	Indian journal of marketing Journal of digital marketing Journal of Marketing: SAGE Journals
5	**Supplementary Reading**	Economics Times, Brand Equity Business Standard, The Strategist.
6	**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	2
Course Code	AECC-101	Credit Pattern	L-26, T-4
Course Title	Professional Communication Skills		
Course Objectives			
1	To familiarize learners with the mechanics of communication.		
2	To develop students written expression of thought and build connections between content areas		
3	To develop students oral communication skills by a variety of communication activities, from informal discussion to formal presentation		
Unit Number	Contents		
1	**Effective Business Communication: (15)** □ Meaning & Definition, Role of communication in today's business Basic Grammar and how to use in English Communication Personal Introductions, Facing Audience Verbal and Non-Verbal Communication □ Effective communication in Formal and Informal Environment □ Barriers to communication □ Measures to overcome barriers to communication Understand and use JoHari Window for self development □ Non-verbal communication: Nonverbal Cues, Kinesics, Haptic and Proxemics Body language, Facial Expressions How to carry yourself professionally (grooming and dining etiquettes) □ Public Speaking		
2	**Communication Technology: (15)** □ Social Media Communication □ Email Writing & Professional Writing □ Presentations Skills □ Group Discussion □ Critical Thinking		
Practical Components: 1. To be well in Verbal and Non- verbal communication 2. Make students enact and analyze the non-verbal cues 3. Each student to give presentation of 15 minutes (this can be spread throughout the semester) and to be evaluated by the faculty 4. Each Student will give 10 minutes speech on given topic that will be evaluated by the Faculty			
Learning Resources			
1	Recommended Books	1. **1** Business Communication – Lesikar, Flatley, Rentz&Pande, 11/e, TMH, 2010 2. How to win Friends and Influence People by Dale Carnegie 3. Skill with People by Les Giblin 4. The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012	
2	Reference Books	1. Business Communication - Sehgal M. K &Khetrapal V, Excel BOOKS. 2.. Business Communication – Krizan, Merrier, Jones, 8/e, Cengage Learning, 2012.	

Semester	I	Total Credit	4
Course Code	DSE-101-(A)	Credit Pattern	L-45, T-8, P-7
Course Title	PROGRAMMING FUNDAMENTALS AND R		

Course Objectives	
1	To learn programming in R and use R for effective data analysis
2	To understand R environment setup
3	To explore, analyze and visualize data using R
4	To build statistical models and use them to analyze data

Course Outcomes	
After completion of this course the student will be able to:	
1	program in R and use R for effective data analysis
2	install and configure software necessary for data analytics
3	handle practical issues in programming, reading data into R, accessing R packages, writing R functions
4	explore, analyze and visualize data using R
5	build statistical models and use them to analyze data

Unit Number	Contents	Number of Sessions	
1	**Programming Fundamentals and Overview of R** **(15)** Introduction, Algorithm, Flowchart, Programming Languages, History and Overview of R, Basic features of R, R Resources, Limitations of R	**L= 11**	
		T= 2	**P= 2**
2	**Getting started with R** **(15)** R Installation, Getting started with R interface, Basic Syntax, R Data Types, Variables, Objects, Attributes, Vectors, Matrices, Lists, Factors, Operators, Getting data into R, Data Frames, R Environment	**L= 12**	
		T= 2	**P= 1**
3	**Loops and Function** **(15)** Manage Data Frames with R Packages, Decision Making, Control Structures – If Else, Looping Statements – For Loop, While Loop, Functions, Loop Functions, Argument Matching, Develop R Scripts, Dates and Times, Data Interfaces, Removing NA Values	**L=11**	
		T=2	**P=2**
4	**Data Visualization and Statistical Modeling** **(15)** Introduction, Data Visualization using R packages, Visualizing Distributions, Plots for Data Visualization, Basic Statistical Analysis, Model Basics, Primary R Functions, R objects for Statistical modeling, Model building, Visualizing Models	**L= 11**	
		T= 2	**P= 2**

Learning Resources		
1	**Text Books**	• Roger D. Peng, R Programming for Data Science, Lulu.com, 2012 • Garrett Grolemund, Hadley Wickham, R for Data Science, O'Reilly First Edition, 2017
2	**Reference books**	• Michael J. Crawley, The R Book, Wiley, 2nd Edition • Hadley Wickham, Garrett Grolemund, R for Data Science: Import, Tidy, Transform, Visualize, and Model Data, O'Reilly Media; 1 edition • Murray Aitkin, Brian Francis, John Hinde, and Ross Darnell, Statistical Modelling in R, Oxford University Press; 1 edition, 2009 • Brian Everitt and Torsten Hothorn, A Handbook of Statistical Analyses Using R, Chapman and Hall/CRC; 2 edition
3	**Websites**	• https://www.tutorialspoint.com/r/index.htm • https://data-flair.training/blogs/r-programming-language/ • https://www.guru99.com/r-programming-introduction-basics.html
4	**Journals**	• ACM Transactions on Programming Languages and Systems ISSN :0164-0925

		• Science of Computer Programming ISSN: 0167-6423 • The art, science, and engineering of software development: ISSN 0740-7459
5	**Supplementary Reading**	• R Programming, https://www.coursera.org/learn/r-programming • R Programming , https://www.datacamp.com/tracks/r-programming
6	**Practical Components**	• R Installation, R Programs based on Data Types, Loops and Functions, Statistical Modelling

Semester	I	Total Credit	4
Course Code	DSE 101-B	Credit Pattern	L-45, T-8, P-7
Course Title	PROGRAMMING FUNDAMENTALS AND 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
5.	To explain data import from multiple sources

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
5.	Explain data import from multiple sources

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, ndarry 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**	**L=11**	

	Pandas data structures: Series and DataFrames, 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	**T= 2**	**P= 2**

Learning Resources		
1	**Text Books**	• Practical Programming: An introduction to Computer Science Using Python, second edition • Programming collective intelligence, O'Reilly publication
2	**Reference books**	• Python for Informatics: Exploring Information, Charles Severance • Python for Data Analysis, Wes McKinney, O'Reilly publication • Mining the social web, Mattbew A. Russett, O'Reilly publication • Mastering Python for data science, Samir Madhavan, PACKT
3	**Websites**	• https://www.python.org • https://pandas.pydata.org/ • https://matplotlib.org/
4	**Supplementary Reading**	• Python Programming for the Absolute Beginner, 3rd Edition, Michael Damson • Fluent Python: Clear, Concise, and Effective Programming 1st Edition, by Luciano Ramalho, Kindle Edition, O'Reilly publication • DIVE INTO PYTHON 3 by Mark Pilgrim, Apress publication
5	**Practical Components**	• Python installation, developing scripts, working with python packages

MBA - I

SEMESTER II

Semester	II	Total Credit	4
Course Code	CC 201	Credit Pattern	L-45, T-8, P-7
Course Title	ADVANCED MS-EXCEL		

Course Objectives	
1	To taught approaches to the challenges of data analysis from a more holistic perspective
2	To provide more hands-on the relevant ideas of data analysis using advanced features of MS-Excel.
3	To understand the process of Business Data Analysis techniques using Advanced MS-Excel
Course Outcomes: Students will be able to;	
1	Construct formulas, including the use of built-in functions, and relative and absolute references.
2	Apply basic principles of laying out Excel models for decision making
3	Using Excel evaluate the financial profitability and effectiveness of investment projects and amortization

Unit Number	Contents	Number of Sessions	
1	Structure of the function: working with text function, manipulating text, extracting substring, Advanced lookup operations, excel data types, working with list, consolidate data, Formula Errors, If Function, What if Analysis- Goal Seek, Sensitivity Analysis- one and two-way data table, Import a database table	**L= 11**	
		T= 2	**P= 2**
2	using a query to screen external data, Data Mining using Advanced Pivot Table, Introduction to macros, Statistical tolls in excel, Excel Financial tolls- NPV, IRR, Create a macro using visual basic editor, Formula Errors, create a custom function, execute the task, display a message, request user input for a macro, assign macro to menu, run a macro for as a Workbook Open, Excel Modeling	**L= 12**	
		T= 2	**P= 1**
3	An introduction to VBA Macro, Variables in VBA, VBA IF Else Statement, VBA Excel- Cells, Range and Offset, With…End With statement, , Error Handling VBA, Debugging VBA Code, Select Case and LOOPs in VBA, VBA Arrays, VBA Events, VBA dialog box basics, Advanced Find and Replace, Advanced Report Development	**L= 11**	
		T= 2	**P= 2**
4	VBA- User Forms and Controls, Add a form control to a worksheet, customize form controls with macros, create a custom dialog box, and capture input from a custom dialog box, Validate input from a dialog box. Install Excel Add-ins, Advanced Filter, Scenario Manager, Solver, Integration case using Access and Excel, Creating Dashboard.	**L=11**	
		T= 2	**P= 2**

Note:

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

Learning Resources		
1	**Text Books**	1. –Microsoft office 2007 - Schwartz 2. Excel 2007 Step by Step – Microsoft Press PHI 3. Data analysis and decision Making – Albright Winston 4. VBA and Macros Excel 200 – Bill Jelen, Tracy, Syrstad 5. Excel 2010 Bible- Jhon Walkenbeach 6. Pivot Table data crunching - Bill Delen 7. Excel 2010 Formulas - - Jhon Walkenbeach 8.
2	**Reference books**	1. Excel Dashboards and Reports -John Walkenbach and Michael J. Alexander 2. Microsoft Excel 2013 Building Data Models with PowerPivot - Alberto Ferrari and Marco Russo 3. Excel Charts - John Walkenbach
3	**Website**	1. www.tutorialspoint.com 2. https://support.microsoft.com/ www.examupdates.in 3. https://www.educba.com/advanced-excel-formulas-and-functions 4. https://chandoo.org/wp/excel-dashboards
4	**Journals**	1. International Journal of Statistics & Management Systems
6	**Practical Component**	1. Scenario-based particles based on each unit 2. Visiting any firm and understanding the implementation of advanced MS-Excel

Semester	II	Total Credit	2
Course Code	CC 202	Credit Pattern	22L+ 2 T + 6P
Course Title	LEGAL ASPECTS OF BUSINESS		

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 Directions: 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	4
Course Code	CC 203	Credit Pattern	L-45, T-8, P-7
Course Title	MANAGING HUMAN RESOURCE		

Course Objectives:	
1	To develop conceptual foundation about different HR systems.
2	To enhance knowledge about the functions of HRM in an organization.
3	To identify how to gain competitive advantage through managing people in the organization.

Course Outcomes:- Students will be able to:	
1	Describe the different concepts in HRM.
2	Perform the different processes in HRM like procurement, development, compensation and maintenance.
3	Determine the solutions for HR related issues in the organization.
4	Develop job analysis reports and training calendars.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Human Resource Management Concepts (15)** Meaning, Objectives, Scope, Functions, Difference betweenpersonnel Management and Human Resource Management, Job Analysis, Job Description and Job Specification,, Concept of Human Resource Planning and its Process,	**L= 11** **T= 2**	**P= 2**
2	**Employee Procurement and Development (15)** Recruitment: - Definition, Sources Of Recruitment, Employee Selection – Essential and Process. Concept of Placement and Orientation. Mobility of Employees:- Internal and External. Concept of training and development, difference between training and Development, Methods of training and development.	**L= 12** **T= 2**	**P= 1**
3	**Performance and Career Management: (15)** Career Planning- Benefits of Career Planning, Career Anchor, Career stages, Suggestions for effective career development. Basic Concepts In Performance Appraisal, Methods Of Performance Appraisal, Problems And Solution of Performance Appraisals	**L= 11** **T= 2**	**P= 2**
4	**Compensation Management and Maintenance of Human (15)** Compensation Management:- Concept, Factors To Be Considered for Fixing Compensation , Components of compensation. Health, Safety and Welfare Provisions as per Factories Act 1948.	**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. K. Ashwathappa, Human Resource Management. 2. Bohlander And Snell, Managing Human Resources 13th Edition, Thomson – South Western. 3. David A. Decenzo, Stephen P. Robbins, Personnel / HRM (3rd Edition), Prentice Hall Of India, New Delhi. 4. S. C. Srivastava ,Industrial Relations and Labour Laws, Vikas Publishing House
2	**Reference books**	1. Gary Dessler, Human Resource Management Prentice Hall Of India, New Delhi, Tenth Edition. 2. Mathis, Jackson, Tripathy, Human Resource Management: A South-Asian Perspective, Cengage Learning. 3. S. D. Punekar, Labour Welfare, Trade Unions and Industrial Relations By(13thEdition), Himalaya Publishing House. 4. N.D.Kapoor—Commercial Law—Sultan Chand publishers, New Delhi.
3	**Websites**	1. www.citehr.com 2. www.peoplematters.com 3. www.hrmguide.net
4	**Journals**	1. Indian Journal of Training and Development 2. Indian Journal of Human Development 3. Personnel Today 4. Manpower Journal
5	**Supplementary Reading:**	Articles available on topics on : www.hbr.com
6	**Practical Component:**	1. Visit an organization and prepare Job analysis report of any position. 2. Prepare advertisement as part of recruitment for given position. 3. Debate Pros and cons of different training methods

Semester	II	Total Credit	2
Course Code	CC 204	Credit Pattern	22L+8TP
Course Title	RESEARCH METHODOLOGY		

Course Objectives	
1	To expose the students to various methods of research and enable them to understand the Importance of research in management decision-making process.
2	To Equip students with knowledge neededto Interpret The Research Findings.

Course Outcomes: Students will be able to;
Explain fundamental concepts of research methodology
Develop Research Report

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Introduction to Research & Research Design** Meaning, objectives & Motivation in research. Use of research in functional areas of Management. Types of research – Research process, relevance & scope of research in management. Research Design- Features of good Design, Types of Research Design, Sampling Design- Census vs. Sample, Characteristics of good sampling Design. Different types of sample Design. Measurement & scaling techniques- Errors in measurement. Test of sound measurement, scaling &Scale construction techniques for Attitude Measurement.	L= 11 T=4	P=0
2	**Methods of data collection, Analysis of Data & Report writing:** Methods of data collection – Primary data –Collection of secondary data. Data Processing-Editing, Coding and Tabulation of data. Data analysis and Interpretation. Formats of Research Report, Methods and importance of Citation & bibliography in Research, Ethical issues in Research and plagiarism. Use of ICT tools for conducting of research.	L= 11 T= 4	P= 0

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. C.R. Kothari Research Methedology Methods And Techniques, Wiley Eastern. 2. G.C. Beri: Marketing Research Tata Mcgraw Hill Publishing Company Limited, New Delhi, 2000
2	**Reference books**	2. Goode And Hatt : Methods In Social Research, Mc-Graw Hill, Kogakusha Ltd., New York. 3. V.P. Michael: Research Methodology In Management, Himalaya Publishing House, Mumbai, 1985. 4. Kerllnger. Fred N.: Foundations Of Behaviourial Research, New York, Holt, Rinehart And Winston, 1973. 5. Dorald S. Tull, Del I Hawkins: Marketing Research, Prentice Hall Of India, New Delhi, 1996. 6. Hans Raj: Theory And Practice In Social Research, Surjeet Publications, Delhi
3	**Websites**	1. https://www.spss-tutorials.com/basics/ 2. https://www.nielsen.com/in/en/
4	**Journals**	1. The Journal for Decision Makers - Vikalpa 2. Indian journal of marketing
5	**Supplementary Reading**	1. Journal of Business Research – Elsevier 2. https://www.iresearchservices.com 3. Economics Times, 4. Business Standard,
6	**Practical Component**	1. Students will actually conduct research and submit the research report using following guidelines. 2. Identify the research problem of your choice. 3. Formulate it into a Research title. 4. Collect at least five published research paper and conduct the review of that research paper. 5. Identify different variables that can be studied in the stated research problem. 6. Prepare at least five hypotheses on the research problem. 7. Suggest Research design to conduct the research on the problem. (Sampling Design and Data Collection method). 8. Collection, analysis and interpretation of data. 9. Writing a detail research report using citation and bibliography

Semester	II	Total Credit	4
Course Code	CC 205	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 Mining System 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	**L= 12** **T= 1**	**P= 2**

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

Learning Resources		
1	**Text Books**	1. Alex Berson and Stephen J. Smith, ― Data Warehousing, Data Mining & OLAP‖, Tata McGraw – Hill Edition. 2. 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 Knowledge Discovery
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	4
Course Code	CC 206	Credit Pattern	L-45, T-8, P-7
Course Title	OPERATIONS RESEARCH		

Course Outcomes: Students will be able to;

1. Identify operational research models from the verbal description of the real system.
2. Evaluate various managerial decision problems in functional areas of organization.
3. Construct Operation Research models and solving it using special solution algorithms.
4. Solve various managerial decision problems in functional areas of organization.

Unit Number	Contents	
1	**Introduction to Operations Research (OR)** Historical Development, Characteristic features of OR, Models in OR, Methods for solving OR models, Methodology of OR, Opportunities and short comings of OR, Introduction to software's in OR. Linear Programming (LP)-I: Mathematical Formulation, Assumptions of LP, Solution by Graphical Method, Special Cases of LP, Solution by Simplex Method-Maximization Problem with less than or equal to constraints, Primal Dual Relationship. Introduction to concept of Integer Programming, Goal Programming etc.	**L 11, T 2, P 2**
2	**Transportation & Assignment Problem** Mathematical model of TP, Methods to find initial basic feasible solution (Least Cost Method, Vogel's Approximation Method), Finding Optimal Solution by Modified Distribution Method, Unbalanced transportation problem, Maximization Case of TP. Comparison between Assignment & Transportation Problem, Mathematical model of AP, Hungarian Assignment Method, Solving Minimization-Maximization Problem **Queuing:** General structure of a queuing system, Operating characteristics of a queuing system, Kendall's Notations for representing models, Classification of queuing models (M/M/l): (/ FCFS),	**L 12, T1, P 2**
3	**Decision Theory** Decision under certainty, Decision under risk, Expected value criterion, Decision under uncertainty, Laplace criterion, MaxiMax Criterion, MaxiMin Criterion, MiniMax criterion, MiniMax regret criterion, Decision Making Under Expected Value Principle, Expected Payoff of Perfect Information, Expected Value of Perfect Information (EPPI-EMV-EVPI), Decision making under conflict, **Game Theory:** Introduction to game theory-Terminologies, Game with pure strategies, Game with mixed strategies, Dominance properties, Solving Game by Graphical Method.	**L 11, T 2, P 2**
4	**CPM-PERT** Assumptions, Meaning, Usefulness of CPM-PERT, Network Terminology & Analysis, CPM-PERT Networks, Critical Path Method, Calculation of CPM network, Time estimates of PERT, Earliest Expected time, Latest allowable occurrence time and slack, Probability of meeting scheduled date of completion of project. **Simulation:** Definition, Steps in simulation process, Monte Carlo simulation, Simulation of an inventory system, simulation of a queuing system. Advantages and Disadvantages of simulation	**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. Sharma J K, Operations Research 2. Sharma S D, Operations Research
2	Reference books	1. N.D. Vohra: Quantitative Techniques in Management (1990), Tata MacGraw Hill 2. R. Panneerselvam: Operations Research (2002), Prentice Hall of India. 3. J.K. Sharma: Operations Research Problems and Solutions (2004), Macmillan India. 4. J.G. Ecker and Michael Kupferschmid: Introduction to Operations Research (1988), John Wiley & Sons. 5. Hamdy A. Taha: Operations Research (2002), Pearson Education.
3	Journals	1. IUP Journal of Operations Management 2. Journal of Operations & Strategic Planning (New) 3. Vikalpa: The Journal for Decision Makers
4	Websites	1. http://www.pondiuni.edu.in/storage/dde/downloads/mbaii_qt.pdf
5	Supplementary Reading	1. Albright, Winston, Zappe, Decision Making Using Microsoft Excel, Cengage Learning.
6	Practical Component	1. Analyzing various decision situations and finding appropriate model for taking decisions. 2. Analyzing real managerial decision problems through various case studies/problems. 3. Identifying various managerial decision situations related to different business organization.

Semester	II	Total Credit	2
Course Code	CC 207	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 4. K. C. Jain, P. L. Verma, Prabhat Kartikey, Production and Operations Management, Dreamtech Press
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)
5	**Supplementary Reading**	1. Martand Telsang, Industrial Engineering and Production Management, S. Chand
6	**Practical Component**	1. Role play to understand role of operations management department in organization 2. Studying Production process of any local manufacturing organization and classifying it into different types of production. 3. Identifying and visiting any local business to study its Location & Layout Strategies. 4. Library Exercise on Recent Trends in Operations Management undertaken by any one company of your choice.

Semester	II	Total Credit	2
Course Code	AEC 201 (A)	Credit Pattern	L-22, T-4, P-4
Course Title	GERMAN		

Course Objectives	
1	To create an awareness about a foreign language
2	To understand the basic script of the language
3	To understand the culture and tradition of the county
Course Outcomes: Students will be able to;	
1	Use basic words & sentences in German Language
2	Develop basic vocabulary in German Language..

Syllabus:

Unit Number	Contents
1	Introduction (Name, country, living place, languages etc.), Asking the person's information, Greeting German Alphabets, Number (1-100), Giving and asking information related to number (age, telephone number, mobile number etc. Difference between formal and informal, Personal Pronouns, verb conjugation Europa-Countries, capitates and languages Learning about the things in the class room, Definite, indefinite, negative articles Possessive Articles with the reference of all the nouns learnt in the last lecture Watching timing learning
2	Conjugation of strong verbs, Use of separable verbs in the sentences Routine activities, Questions related to time, (use of prepositions am, pm) Eating and drinking (Grocery, fruits, vegetables, beverages), Learning of vocabulary related to eating and drinking, Use of accusative in the sentence Learning the professions, Telling about and asking for the professions Ordinal number Verbs- haben, sein

	Revising the syllabus

Note:

1. There will not be any fixed text book for the above given syllabus
2. The extra notes will be provided to the students to complete the required syllabus.

Semester	II	Total Credit	2
Course Code	AEC 201(B)	Credit Pattern	L-22, T-4, P-4
Course Title	JAPANESE		

Course Objectives	
1	To create an awareness about a foreign language
2	To understand the basic script of the language
3	To understand the culture and tradition of the county
Course Outcomes: Students will be able to;	
1	Use basic words & sentences in Japanese Language
2	Develop basic vocabulary in Japanese Language..

Syllabus:

Unit Number	Contents
1	Introduction to Japan as country and language basics. Hiragana Script, Hiragana Activity, Katakana Script, Katakana Activity, Cultural Ethics and Survival Greetings, Classroom Language (Speaking), Number system, Vocab for Daily Uses, Grammar, Calendar Family Tree, Grammar
2	Self-Introduction, Introduction to Japanese Work-Culture Grammar, Introduction to –Kanji‖, Visit Restaurant'(Speaking), Visit guest's house' (Speaking), Shopping' (Speaking), Farewell

Learning Resources		
1	Reference books	1. Living Language Ultimate Japanese Beginner-Intermediate 2. The Kanji Learner's Dictionary by Jack Halpern 3. Japanese from zero 1 and 2 by George Tromphy 4. Basic Japanese by Eriko Sato 5. Handbook of Japanese verbs by Taeko Kamiya 6. Japanese- English, English- Japanese Dictiomary by Seigo Nakao 7. Modern Japanese vocabulary A Guide for 21st century student by Edward Trimell 8. Minna no Nihongo Series 9. Seiichi Makino Michio Tsutsui Biiks (Dictionary) 10. Genki An Integrated Course in Elementary Japanese 11. Improving your communication skills 12. 12Pod 101 series (audio)

Semester	**II**	**Total Credit**	**2**
Course Code	**AEC 201 (C)**	**Credit Pattern**	**L-22, T-4, P-4**
Course Title	**FRENCH**		

Course Objectives	
1	To create an awareness about a foreign language
2	To understand the basic script of the language
3	To understand the culture and tradition of the county
Course Outcomes: Students will be able to;	
1	Use basic words & sentences in French Language
2	Develop basic vocabulary in French Language..

Syllabus:

Unit Number	Contents
1	Introduction (Name, country, living place, languages etc.), Asking the person's information, Greetings and Salutations, French Alphabets, French Accents, Numbers (1-1000), Giving and asking information related to numbers (age, telephone number, mobile number etc.) Difference between formal and informal, Personal Pronouns, Verb conjugations Countries, nationalities, capitals and languages Articles, Prepositions, Colours Gender, Nouns and Pronouns, Singular Plural Possessive Pronouns, Family Vocabulary Telling Time, Days of the week, Months of the Year, Parts of the Day About France and Francophone Countries, French Culture and Etiquettes, French Monuments
2	Conjugation of ER, IR and RE verbs, Use verbs in the sentences Routine activities, Questions related to time, (use of prepositions am, pm) Eating and drinking (Grocery, fruits, vegetables, beverages), Learning ofvocabulary related to eating and drinking, Use of accusative in the sentence Learning the professions, Telling about and asking for the professions

	Ordinal numbers Negative Sentences, Interrogatives Describing Oneself, Family Simple Letter Writing and Essay Writing Revising the syllabus

Note:

1. There will not be any fixed text book for the above given syllabus
2. The extra notes will be provided to the students to complete the required syllabus.

Learning Resources		
1	Reference books	1. Echo A1 Méthode de Francais – Goyalsaab Publishers 2. Le Flambeau , Méthode de Français –Preeti Bhutani 3. Saison 1 Méthode de français- Alliance française 4. Larousse French Dictionary-W.R.Goyal

Semester	II	Total Credit	2
Course Code	AEC 201 (D)	Credit Pattern	L-22, T-4, P-4
Course Title	SELLING AND NEGOTIATION SKILLS		
Course Objectives			
Course Outcomes: Students will be able to;			
1	Describe new challenges and opportunity in selling and negotiation skills		
2	Apply & analyze different skills in Negotiation Process		

Unit Number	Contents	Number of Session	
1	**Unit-I** **Nature & Role of Selling:** Definition meaning Importance & objectives of Selling. Role in the context of organization – survival and growth. **Types of Selling** – Direct & Indirect selling, Missionary, Sales Team/group selling Merchandising, Telesales, Franchise selling, Consultative selling, factors Influencing on Personal Motivation on selling. **Personal Selling Skills** : Definition & Meaning, Personal Selling Process – Time & Contact management - Understanding buying motives of consumers before & Deal closing - Techniques of taking Follow up (To be supplemented by live exercises on personal selling)	**L= 11** **T= 2**	**P= 2**
2	**Unit-II** **Negotiation Skills and Process of Negotiation**: What is negotiation, What makes a good negotiator, Process of Negotiation, Integrative Vs. Distributive Negotiation, Ground rules of effective Negotiation, BATNA (Best alternative a negotiated agreement).	**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. Karen Mantyla – Consultative Sales Power 2. Virden J.Thornton- Prospecting the Key to Sales Success 3. .Michael R.Carrell & Christina Heavrin- Negotiating Essentials theory, Skills & Practices
2	**Reference books**	1. Kim Tasso – Selling Skills For Professionals – Viva Publication 2. David S. Hames- Negotiation – Sage Publication
4	**Journals**	1. Current Index of Management Marketing 2. Current Contents in Management Marketing.

Semester	III	Total Credit	2
Course Code	AEC 201 (G)	Credit Pattern	L7+T6+P17
Course Title	DIGITAL MARKETING		

Course Objectives	
1	To make students understand the traditional and new communication/marketing approaches to Create competitive advantage in the Digital world.
2	To understand how the emergence of the technology will affect marketing, value creation, and consumer perceptions.
Course Outcomes: Students will be able to;	
1.	Explain emerging trends in digital marketing
2.	Demonstrate usage of digital marketing techniques.

Syllabus:

Unit Number	Contents	Number of Session	
1	**Introduction to digital marketing:** Introduction to digital marketing; Internet Marketing, Digital Marketing Framework; Domains of Digital Marketing, affiliate marketing. Website creation & hosting : Websites – their types and classification; Use of CMS for website creation; Wordpress website creation :- adding posts, pages, making categories, adding menu, Creating commercial /business website, adding contact forms, linking website to social media	L= 4	
		T= 3	P= 8
2	Search Engine Optimization SEO –meaning, process and tools; affiliate marketing. Organic & inorganic search, search engine Marketing (SEM), Email marketing; Google Adds, Social Media marketing (Instagram & Facebook), creating Facebook page & Instagram page	L= 3	
		T= 3	P= 9

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. Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation by Damian Ryan, Calvin Jone. Kogan Page. 2. Fundamentals of Digital Marketing; Puneet Singh Bhatia; Pearson Publication 3. Marketing 2012 by William M. Pride, O. C. Ferrell, Cengage Learning.
2	**Reference books**	1. DigiMarketing: The Essential Guide to New Media and Digital Marketing by Kent Wertime, Ian Fenwick 2. Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity by Avinash Kaushik 3. Social Media Marketing : Tracey L tuten & Michael R Solomon; adapted by Bikramjit Rishi; Sage Publication 4. Digital Transformation Strategies ; Theory & Practice; Srinivas R Pingali, Shankar Prakash & Jyothi R Korem: Sage Publication
3	**Websites**	Digital Marketing MOOC on Swayam. https://www.dmaglobal.com/ (**Digital Marketing Association)**
4	**Journals**	• Digital Marketing - The Marketing Journal • Journal of Digital & Social Media Marketing: Ingenta Connect Publication • Digital Marketing Journal – Medium
5	**Supplementary Reading**	**Digital Marketing Association** Google Digital Garage
6	**Practical Component**	1. Case study discussion on success stories of use of digital marketing mix 2. Assignment on preparing a digital marketing plan for small scale business. 3. Group Activity- Visit any service industry of your choice in Kolhapur And submit a plan on opportunities to use digital marketing technique topromote the business.

Semester	II	Total Credit	2
Course Code	AEC 201 (H)	Credit Pattern	L-22, T-4, P-4
Course Title	HUMAN VALUES		

Objectives

To study all dimensions of human being – thought, behaviour, work and realisation.
• To study all levels of human living – individual, family, society, nature and existence.

Course outcome

1. A student of this course will relate and interpret existence of physical facility, relationship and right understanding.
2. A student of this course relate to the context of life and human being.

Knowing human values:

Unit 1

To know universal values & its connection with human being. Rationality and rational values. Natural & verifiable values. All-encompassing values dimensions & levels. Right Understanding, Relationship and Physical Facility. Understanding the Human Being (As Co-existence of Self and Body). Understanding harmony in family.

Unit 2.

Applying human values

. Self-exploration & aspirations. Understanding harmony in nature & society. Harmony among the four orders, Physical, Bio , Animal ,Human order Understanding Ways of fulfilling them with human values

Instructions

References

Books /websites HUMAN VALUES

1 Naagarazan, R.S.
Textbook On Professional Ethics & Human Values.-- New Delhi: New Age International (P) Ltd,Publisher's New Delhi, 2006. XIV; 137 P.
ISBN : 8122418554.
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2 Modi, Ishwar
Human Values and Social Change (Essays in Honour of Dr. T.K.N. Unnithan).-- Jaipur: Rawat Publications, 2000.
447 P.
ISBN : 817033604X.
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3 Naagarazan, R.S.
Textbook on Professional Ethics and Human Values.-- New Delhi: New Age International Publishers, 2008. ix; 169 P.
ISBN : 9788122419382.

174 NAA.
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4 Tuteja, M.M.
Changing Human Values and Leadership Styles.-- Jaipur: Printwell Publishers Distributors, 1999. 124 P.
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5 Raghavan, M.P.
Professional Ethics and Human Values.-- Chennai: Scitech Publications (India) Pvt, Ltd., 2009. 1.1 to 5.36 P.
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6 Gogate, S.B.
Human Values and Professional Ethics.-- Noida: Vikas Publishing House Pvt, Ltd., 2011. xvi; 326 P.
ISBN : 9788125937135.
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Human Values and Professional Ethics.-- New Delhi: Vayu Education of India, 2010. x; 170 P.
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11 Govindarajan, M.
Professional Ethics and Human Values.-- Delhi: PHI Learning Pvt, Ltd.,, 2013. xii; 132 P.
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12 Tripathi, A.N.
Human Values.-- New Delhi: New Age International (P) Ltd., Publishers, 2012. xii; 327 P.
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Professional Ethics: Includes Human Values.-- New Delhi: Oxford University Press,, 2017. xiv; 457 P.
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15 Shukla, Tanu
Human Values and Professional Ethics.-- New DElhi: Cangage Learning, 2018. xviii; 411 P.
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https://www.youtube.com/watch?v=Ug4JIJxLSmk&ab_channel=Vidya-mitra

https://www.facebook.com/Gurgaon.KIIT/videos/day-4-pt-1-aicte-sponsored-online-sttp-on-human-values-ethics-morals-behavioral-/3650861544773 60/

http://kierandonaghy.com/seven-best-short-films-introduce-values/

https://www.youtube.com/watch?v=Kz qGJmTMY&ab_channel=MindToolsVideos

Semester	II	Total Credit	4
Course Code	DSE 201 (C)	Credit Pattern	L-48, T-06, P-06
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

Syllabus:

Unit Number	Contents	Number of Sessions	
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	L= 12	
		T=1	P= 2
2	**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	L= 12	
		T= 1	P= 2
3	**Data Visualization** Univariate Analysis, Bivariate Analysis, Multivariate Analysis Summary Statistics, Correlation and Regression Analysis, Data Dimensionality, Principal Component Analysis, Cluster Analysis, Clustering Objects	L= 12	
		T= 2	P= 1
4	**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	L=12	
		T= 2	P= 1

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**	• Practicals on Basic Plotting, Data Normalization, Data Visualization, Time Series Analysis and Web Analytics

Semester	II	Total Credit	2
Course Code	GE 201(B)	Credit Pattern	L-23, T-07, P-0
Course Title	ENVIRONMENT AND DEVELOPMENT		

Course Objectives	
1	Understand the basics functional areas of Environment.
2	Define concepts of pollution, pollutants and natural resources
3	Explain historical development of struggle for Environmental protection

Course Outcomes: The students will able to	
1.	Differentiate biotic and abiotic components of ecosystem & able to understand concept of habitat, interactions in between different components & their Interrelationships.
2.	Develop ability of identification of local issues related with natural resources.
3.	Adopt various pollution control techniques.
4.	Able to know various environmental policies as well as National & International Organizations involved.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Ecological concept and Natural Resources :** Introduction to Environmental Science as a multi-disciplinary, its scope and necessity; Concepts of Ecosystem and its Structure and Functions, Principles of Organism-environment relationship; Concept and classification of Natural Resources. Energy Resources, Renewable and Nonrenewable.	**L= 11** **T= 3**	**P=0**
2	**Environmental Pollution and Policy:** Definition, sources and effects of water pollution. Definition, sources of air pollution, Effect of air pollution and acid rain, climate change, ozone depletion. Definition, Sources of noise pollution. Effect of noise pollution on human-beings. Noise control measures. Government policies in the protection and development of environment. National environmental policy. United Nations Environmental Programme (UNEP).	**L= 12** **T= 4**	**P= 0**

Learning Resources		
1	**Text Books**	• A Textbook Of Environmental Studies, Dr D K Asthana, S. Chand Publishers, 2018 • A Text Book Of Environmental Studies by Vijay Tiwari, Himalaya Publishers, 2017 • A Text Book of Environmental Chemistry & Pollution Control, Dara, Chand • A Text Book of Ecology, S K Dubey, Dominant Publication • A Text Book of Ecology, Tyler Miller, Cengage Learning • A Text Book Environmental Studies, Chatawal & Sharma, HPH • A Text Book Environmental Science, Joshi & Joshi, APH • A Text Book of Environmatal Studies, Nambiar, STP
2	**Reference books**	• Fundamentals of Ecology by Odum, E.P. • Desert Ecology by Ishwar Prakash • Ecology of Urban India by Pramod Singh • Ecology of Rural India by Singh • Ecology 2000 by Sir Edmand Hillary • Environmental Protection and the Laws by CN Mehta, 1991 • India's Forests, Myth and Reality by J.B. Lal 1989 • Legal aspects of Environmental Pollution and its Management by Ed. S.M. Ali, 1992 • Man – Nature and Environmental Law by GS Nathawal, S. Shastri and JP Vyyar, 1988 • International Environmental Policy: Emergence and Dimensions by LK Caldwell, 1990 • Lal's Commentaries on Water, Air Pollution Laws along with the Environmental (Protection) Act and Rules, 1986, 3rd Ed., 1992 Law Publisher – India • The Wildlife (Protection) Act, 1972 (with amendment-1991) • Our Common Future – WCED, 1991 • Universal's Environment and Pollution Law Manual by SK Mohanty, 1998. • A Guide to Implementation of the ISO 14000 Series on Environmental Management (Prentice Hall Ptr Environmental Management and Engineering Series) Har/Dskt Edition • Environmental manager's guide to ISO 14000 by Bruce W Perry • Implementing ISO 14000 Hardcover – November 1, 1996 by Tom Tibor (Author), Ira Feldman (Author • Environmental Impact Assessment By: Larry W Canter. McGraw-Hill International Editions, 2nd Edn, New York (1996). • EIA Theory & Practice By: Peter Wathern. Unwin Hyman, London (1990) • Environmental Impact Assessment By: PR Trivedi. APH Publishing Corporation, New Delhi (2004) • EIA Practical Solutions to Recurrent Problems By: David P Lawrence. Wiley Interscience Publication (2003)
3	**Websites**	• https://www.toppr.com/guides/biology/ecosystem/biogeochemical-

		cycle/ • https://nca2014.globalchange.gov/report/sectors/biogeochemical-cycles • https://www.conserve-energy-future.com/what-is-environmental-science-and-its-components.php
4	**Journals**	• Current Science, ISSN No. 0011-3891 • Every Thing About Water • Down to Earth • Resonance, ISSN No. 0971-8044 • Journal of Earth System Science, ISSN No .2253-4126
5	**Supplementary Reading**	• National Geographic • Down to Earth, CSE
6	**Practical Components**	• Field visit to study pond water & forest Ecosystem.

Semester	II	Total Credit	2
Course Code	GE 201(C)	Credit Pattern	L-20, T-5, P-5
Course Title	INDIAN SOCIAL PROBLEMS AND SOCIAL SERVICES		

Course Outcomes: Students will be able to	
1	Implement various social welfare services provided by GO's & NGO's
2	Asses the socio- economic factors and their implications of beneficiaries

Syllabus:

Unit Number	Contents	Number of Session	
1	Genesis and nature of various categories of Social Problems Definition of Social deviance and control, social disorganizationand social problems, study and analysis of specifics social problems in relation to their nature, causative factors, extent and magnitude	L=10	
		T=3	P=2
2	An overview of major social problems, Juvenile delinquency, Crime, Prostitution, Dowry, AIDS, Beggary-Alcoholism and Drug Addition.	L=10	
		T=2	P=3

Learning Resources:		
1	**Text Books**	1. Ahuja R 1993 Indian Social System-Rawat Publication New Delhi. 2. Akbar M.J. 1988 Riot after Tiot; Reports on caste & Communal Violence in India New Delhi: Penguin Books. 3. Bardhan P. 1984 the Political Economy of Development in India Delhi: Oxford Press. 4. Betelle A. 1966 Caste, Class and Power Bombay: Oxford Uni, Press. 5. Black C.E. 1966 The Dynamics of Modernization: A study in Comparative History New York: Harper & Row. 6. Madan G.R. 1985 Indian Social Problems Vol. I and II Allied Pub. Pvt. Ltd. Bombay.
2	**Reference Books**	1. Coser I.A. 1956 the functions of Social Conflict Glencoc Illinois; Free Press. 2. Dahrendorf R. 1957 Class & Class ' Conflicts in an Industrialized Society London Routldge&Kengan Paul. 3. Dandekar V.M. 1977 Nature of Class Conflict in the Indian Society Bom Bharat Foundation. 4. Das A. & Nilkanth V. (Ed.) 1979Agrarian Relations in India Delhi: Manohar.
3	**Website**	https//journals.sagpub.com www.ndpublisher.in www.ukessays.com www.open.edu7.sociology
4	**Journals**	International Journal of Social Science

		Indian Journal of Social Work
5	**Supplementary reading**	Encyclopedia in Social Work Vol-I & II Dictionary of Social Work
6	**Practical Component**	1. Visit to various NGO's 2. Concurrent Field Work 3. Case studies on various social problems 4. Organized Group discussion with problematic 5. Celebrate different days related to Social issues.

Semester	II	Total Credit	2
Course Code	GE 201(D)	Credit Pattern	L-30, T-8, P-7
Course Title	OFFICE AUTOMATION		

Course Objectives	
1	To teach basic concepts about computers and peripheral devices
2	To explain the concept of computer languages and features of operating system
3	To demonstrate use of Word processor for documentations.
4	To explain effective use of presentation technology.
5	To demonstrate use of spreadsheet for analysis of data

Course Outcomes	
After completion of this course the student will be able to:	
1	Understand basic concepts and computer terminology.
2	Use operating system features
3	Prepare proper documents
4	Prepare effective presentation
5	Analyze any data with the help of spreadsheets.

Unit Number	Contents		
1	**Introduction to Computer, Concept of Operating System & Word Processing** Definition of Computer, Characteristics & Limitations of Computer, Generations of Computer, Block Diagram of Computer, Concept of Hardware and Software, **Operating System:** Function of Operating System, Types of O.S., Features of Windows Operating System, Default Icons on Desktop – My Computer, Recycle Bin, My Network Places and Internet Explorer, Important Terms in Windows – Icons, Desktop, Folder, Star Button, Concept of Cut, Copy and Paste operation, Concept of Start Button **MS-Word:** Component of MS-Word window, Page-Setup in MS-Word, How of Print Document, Formatting the Document, Inserting & Formatting table, Inserting various objects in the document, Mail-Merge Utility, Cursor Control Keys,	**L=3**	
		T=1	P=0
2	**Data Analysis Through Excel and Presentation Techniques.** **MS-Excel:** Features Of Excel, Formatting Work Sheet- Formatting cell, conditional formatting, Lookup Functions, IF, SUM, SUMIF, SUMIFS, COUNT, COUNTIF, COUNTIFS, COUNTBLANK Functions, Function For Financial Decision – PV, FV, PMT, PPMT, IPMT Functions, TEXT Functions, Date and Time Functions, Decision Making Using – GoalSeek, Scenario Manager, Basic Data Analysis – Sorting, Summarizing, Filtering, Validating Data, Summarizing Data With Chart, Describe Data Using Pivot Table, **MS-PowerPoint:** Factors To Be Considered Before Creating A Presentation, Creating and	**L=3**	
		T=1	P=0

	setting Presentations With PowerPoint, Applying Animation Effects,Slide Transition Effects, Views In PowerPoint, Use of Text, Images,ClipArt's, Hyperlinks, Video and Audio and Action Buttons In Presentation,			
Learning Resources				
1	Text books	1. Computer Fundamentals by P. K. Sinha&PritiSinha, 5th edition, BPB pub. 2. Computer Fundamentals by Balguruswami 3. Microsoft Office 2013 All-In-One For Dummies By Peter Weverka, Wiley India Pvt Ltd, ISBN 10: 812654175X 4. Microsoft Office 2010 Digital Classroom by AGI Creative Team John Wiley & Sons; Pap/Psc edition (1 March 2011) ISBN-10: 0470577770 5. Operating System Concepts: International Student Version By Silberschatz Wiley; Eighth edition (20 April 2009) ISBN-10: 8126520515		
2	References	1. Microsoft Office 2010 Bible By John Walkenbach Wiley India Private Limited (28 September 2010) ISBN-10: 8126528397 2. Microsoft Windows Operating System Essentials By Tom CarpenterJohn Wiley & Sons (9 February 2012) ISBN-10: 1118195523 3. Microsoft Windows Operating System Essentials ByTom CarpenterISBN: 978-1-118-19552-9 4. Fundamentals Of Computers 5Ed By V. RajaramanPublisher: Phi Learning Pvt Ltd ISBN 10: 8120340114 5.		

Semester	II	Total Credit	2
Course Code	GE 201(E)	Credit Pattern	L-22, T-04, P-04
Course Title	PRINCIPLES OF ECONOMICS		

Course Outcomes: Students will be able to	
1	Understand the micro variables and approach for microeconomic issues
2	Identify the macro variables in any economy

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Unit 1: Demand & Supply Analysis** Basic Economic Concepts, Definitions of Economics, Branches or approaches to economics, Basic Economic Problems or the Central problems of a Society, Law of Diminishing Marginal Utility, Demand curve derivation and its properties, Elasticity of Demand Supply Analysis- Meaning, Types and Determinants of Supply, Supply Function and Law of Supply, Elasticities of Supply and Their Utilities.	**L= 11**	
		T= 2	**P= 2**
2	**Unit 2. Market Theory & N.I** Types of Markets, Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly: Features and price determination Basic Concepts of NI, GDP, GNP, etc, Estimation of NI and Difficulties, Circular Flow of Aggregate Income and Expenditure	**L= 11**	
		T= 2	**P= 2**

Learning Resources		
1	**Text Books**	• Paul Samuelson(2000), Economics, McGraw Hill Inc, New Delhi, Ahuja H.L, Modern Micro Economics, S Chand& Co., New Delhi, • Koutsyanis (2015), Micro Economics. • Jhingan M.L., Microeconomics, Vrinda Publications, New Delhi. • C.Rangarajan and Dholokia B.H, Principles of Macro Economics, Tata Mcgraw-Hill, New Delhi, (1998). • Blanchard, Olivier (2000), *Macroeconomics*, Prentice Hall.
2	**Reference books**	• Robert S Pindyck and Daniel L Rubinfeld(2017), Microeconomics, Pearson Education Ltd., UP • Mankwin Gregory N(2016), Principles of Microeconomics, Cengage Learning India Pvt. Ltd. • Hal R Varian(2015), Microeconomic analysis, Viva Books Pvt. Ltd., New Delhi • Mankiw Gregory (2002), Macroeconomics, 5th Edition, Worth Publishers • Ahuja H L(2015), Macroeconomics Theory And Policy, 19th Edition, SCHAND

		• Gupta G S(2011), Keynesian and Post Keynesian
3	**Websites**	www.rbi.org.in www.mygov.gov.in www.cmie.com
4	**Journals**	Arth Samwad Economic and Political Weekly Indian-Economic-Journal Journal-of Indian-School-of-Political-Economy
5	**Supplementary Reading**	Economics Survey Union Budget of India
6	**Practical Component**	1. Conduct consumer survey and identify consumer utility for various consumer goods 2. Review reference books on economics, and prepare a report on liner, cubic and quadratic production functions 3. Visit various service vendors and prepare a report on price determining factors and challenges for their products in the market

MBA - II

SEMESTER - III

Semester	**III**	**Total Credit**	**4**
Course Code	**CC 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	scuss various concepts and theories in the field of strategic management.
2	rmulate various types of strategies for a given industry.
3	aluate an industry using various tools and techniques for strategic choice.
4	itique strategies implemented.
5	vise strategic approaches to managing a business successfully in a global context

Unit Number	Contents	Number of Sessions	
1	**Introduction to Strategic Management & Environment (15)** Introduction to Concept of Strategy and Strategic management; Importance of Strategy, Levels of Strategy, Strategic Management Process – Different Phases; Strategic Intent - Mission, Vision, Objectives. Formulation of strategic intent, methods of Goal Setting – MBO, Balance scorecard approach, Critical success Factors and Key Performance Indicators. Concept and Characteristics of environment, Components of external environment/ External Analysis, PESTEL Framework,	**L=11**	**T=2** **P=2**
2	**Internal Analysis & Corporate Strategies (15)** Industry Analysis – Porter's Five Forces Model, Internal Analysis – Resource Based view VIRO analysis, Approaches to internal analysis – SWOT Analysis, Value Chain Analysis, Financial Analysis Corporate strategies - stability strategy, expansion strategy, retrenchment strategy, combination strategy. Mergers and Acquisitions, Strategic alliances & Joint ventures – concept, reasons, Entry strategies for global market	**L=12**	**T=2** **P=1**
3	**Business Strategies & strategic Analysis (15)**	**L=11**	

	Business level strategy - cost leadership, Focus strategy Differentiation – Types – Advantages and Disadvantages – +`Blue, Red & Purple Ocean Strategy. Strategic choice process, corporate portfolio analysis, BCG Matrix, TOWS Matrix, GE nine cell, strategic choice at business level – Industry analysis, Competitor analysis. Strategic CSR.	**T=2**	**P=2**
4	**Strategic Issues, (15)** Strategic implementation issues - McKinsey's 7s framework approaches to resource allocation, structural issues – functional, product/ divisional, SBU structure, matrix, network, free form, behavioural issues- Strategic leadership, Corporate strategic communication. Strategic evaluation-importance, participant's barriers and requirements. Types of strategic control-operational control-Strategic process of Evaluation, techniques of strategic evaluation and control. Sustainability & strategic management- concept of TBL, Environmental & Social Impacts on Society Contemporary issues in strategic management.	**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. Azahar Kazmi, "Strategic Management & Business Policy"- Fourth Edition, The Mc-graw Hill Edition. 2. P.Subba Roa, "Business Policy & Strategic Management", Himalaya Publication
2	**Reference books**	1. Hoskisson, Hitt, Ireland & Manikutty, "Strategic Management"- A south Asian Perspective Cengage Learning, 9th Edition. 2. Thomas wheelen, J David Hunger, Alan N Hofman & Charles E Banford, "Concepts in Strategic Management and Business Policy" Pearson Publication , 2018 3. Pradip Kumar Sinha, "Mergers, Acquisitions and Corporate Restructuring," Himalaya Publishing House, 2019. 4. R M Shrivasta, "Management Policy and Strategic Management" Himalaya Publishing House,2014. 5. Fred R David & Forest R David, Strategic Management ",Pearson Publication , 16th Edition, 2017
3	**Websites**	www.mckinsey.com/in
4	**Journals**	1. The Indian Journal of Indian Management & strategy 2. IUP Journal of Business strategy.

5	**Supplementary reading**	Business Standard : The Strategist supplement Economic Times
6	**Practical component**	Case studies and assignments on real life situations

Semester	III	Total Credit	4
Course Code	CC -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, Berstein 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
6	**Practical Components**	----------

Semester	**III**	**Total Credit**	**4**
Course Code	**CCSpl-I-304 (A)**	**Credit Pattern**	**L-45, T-6, P-9**
Course Title	**INTERNATIONAL TRADE AND FINANCE**		

Course Outcomes: The students will able to learn:	
1	Assess foreign exchange rates and develop export trade document.
2	Apply international finance terms in trade.
3	Evaluate foreign direct investment design.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Introduction to International Finance:** concept and Principals of International Trade – Theories of International Trade – Comparative Advantage – Absolute Advantage – Hecksher Ohlin Theory – Imitation Gap Theory- Barriers to International Trade –Indian EXIM Policy. Concepts of DTAA and International Taxation.	**L=11**	
		T=2	**P=2**
2	**Export and Import Finance:** Special need for Finance in International Trade –Terms used in International Trade (FOB, CIF, etc.,) – Payment Terms – Letters of Credit and its types – Pre Shipment and Post Shipment Finance – Forfaiting –Deferred Payment Terms – EXIM Bank – ECGC and its schemes – Import Licensing – Financing methods for import of Capital goods.	**L=12**	
		T=1	**P=2**
3	**Foreign Exchange Markets:** Spot Prices and Forward Prices – Factors influencing Exchange rates – The effects of Exchange rates in Foreign Trade – Tools for hedging against Exchange rate variations –Forward, Futures and Currency options -Determination of Foreign 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**
4	**Determination and Forecasting of Exchange Rates:** Currency risk management – Measuring and Managing Transaction – Translation and Economic Exposure. International Cash Management – Cost Of Capital for Foreign Direct Investment – Designing Global Capital Structure. Foreign Direct Investment – Cost and Benefits. Derivatives in International Trade Important Export trade documents, like Proforma, commercial, legalized, invoice, packaging list, bills of leading, airway bill, insurance policy, export incentive, duty exemptions, export house.	**L=11**	
		T=2	**P=2**

Note: Practical Problems to be covered on

1. Calculation Of Foreign Exchange Rates – Forward Rates, Premium Discounts on forward rates
2. Simple problems on pay off from Derivatives
3. Arbitrage

Learning Resources		
1	**Text Books**	1. Kapil Sheeba, “Financial Management" Pearson Publication House. 2. Jonathan Berk, Peter, "Financial Management" Pearson Publication House. 3. Sharan Vyuptakesh, “Fundamentals of Financial Management" Pearson Publication. 4. James C Van harne, “Financial Management & Policy" Pearson Publication House. 5. ICSI: Handbook on Mergers Amalgamations and takeovers.
2	**Reference Books**	1. Jeevanandam .C, INTERNATIONAL BUSINESS, M/s Sultan & Chand, Delhi, 2008 2. Sumathi Varma, INTERNATIONAL BUSINESS, *Ane, Delhi, 2010* 3. P.G. Apte – “Global Business Finance” – Tata McGraw Hills. 4. P.G. Apte – “International Finance Management” – Tata McGraw Hill 5. V.K. Bhalla – “International Financial Management” – Prentice Hall 6. Khan & Jain, “Financial Management”, Tata Mcgraw Hill, 6th edition. 7. R.P.Rustagi, “Financial Management”, PHI,10th edition.
3	**Websites**	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**	• Prabhandan: Indian Journal of Management • IUP Journals • ICSI Journals • Finance India • Indian Journal of Finance (New Sub.) • Journal of Accounting & Finance etc.
5	**Supplementary Reading**	• Financial Express • Economics Times • Business Standard • Times of India • Indian Express.
6	**Practical Component**	• Calculation Of Foreign Exchange Rates – Forward Rates, Premium Discounts on forward rates • Simple problems on pay off from Derivatives • Problems on arbitrage • Financial statement analysis using Provess-IQ • Companies Financial Reports & Corporate case studies.

Semester	III	Total Credit	4
Course Code	CC Spl-I-304 (B)	Credit Pattern	L-45, T-8, P-7
Course Title	EMPLOYEE RELATIONS AND LABOUR LAW		
Course Outcomes : Students will be able to			
1	scuss the concepts and theories to manage Industrial Relations and Labor Laws		
2	pply the concept of industrial relations, legal issues to the system in which it operates.		
3	lve industrial Related legal issues used in the resolution of conflict.		

4	itically evaluate emerging trends in employment law
5	sign the collective bargaining process, including preparation, negotiation, and settlement.

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. Mamoria C.B, Dynamics of Industrial relations, Himalaya Publishing House 2. A.M.Sarma, Industrial Relations, Himalaya Publishing House

2	**Reference books**	1. ArunMonappa, Industrial Relations, Tata McGraw Hill Publishing Company Ltd. 2. Dhyani S.N., Industrial Relations Systems, Printwell Publishers 3. John Fossum, Labour Relations, Development, Structure, Process, McGraw Hill Education 4. Michael R Carrell and Christina Heavrin, Labour Relations and Collective Bargaining- Private and Public Sectors, Merrill 5. PromodVerma, Management of Industrial relations, Reading and Cases, Oxford and IBH Publications 6. Singh B.D., Industrial Relations –Emerging Paradigms, Excel Books 7. Srivastava S.C., Industrial Relations and Labour Laws, Vikas Publishing House Pvt. Ltd.,
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

Semester	**III**	**Total Credit**	**4**
Course Code	**CC Spl-I-304 (C)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**BUYING BEHAVIOUR**		**PAPER-I**
Course Objectives			
1	Students will understand concepts related to buying behavior.		
2	Students will become familiar with marketing and CRM strategies.		
Course Outcomes: Students will be able to;			
1	Explain the conceptual aspects of buying behaviour		
2	Analyse factors influencing on buying behaviour		
3	Design Marketing and CRM strategies.		

4	Evaluate marketing situations

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Unit I** **Consumer Behaviour I** Meaning, Nature, scope, concepts. Buying Process, Models of consumer Behaviour, Organisational buying behaviour. Values & Lifestyle marketing.	**L=11**	
		T=2	**P=2**
2	**Unit II** **Consumer Behaviour II** Influences of consumer behaviour on individual, group. Perception, Motivation & Involvement. Attitude & change learning, memory. Personality & self-concept reference group influence, dynamics. Family Life cycle & its influence. Cultural influences.	**L=12**	
		T=2	**P=1**
3	**Unit III** **Strategic Marketing -** Strategic marketing management concept & overview, process, formulation & implementation, sustainable competitive advantages. Types of competitive strategies adopted by goods & services in market environment. Strategies for declining markets	**L=11**	
		T=2	**P=2**
4	**Unit IV** **Customer Relationship Management** Customer relationship management importance, process, framework, customer relationship marketing, Creating value for customers, customer loyalty, Customer life time Value, use of technology in CRM.	**L=11**	
		T=2	**P=2**

Learning Resources		
1	**Text Books**	1. **Kotler Philip**, "Marketing Management 17th Edition 2015", Prentice Hall of India, New Delhi. 2 .**Saxena Rajan,** "Marketing Management 2nd Edition 2002", Tata McGraw Hill, New Delhi

2	**Reference books**	1. **V.S.Ramaswamy and S.Namakumari** -Marketing Management –Macmillan Business Books 2.**Arunkumar, M Meenakshi**- Marketing Management-Vikas Publication 3. **Walkar, Boyd, Mullins And Larreche**. "Marketing Strategy. A Decision Forced Approach", Tata Mcgraw Hill 4th Edition. 4. **Kaushal H.,** "Case Study Solutions in Marketing", McMillan India 2001 5.**Baker, M. (2000**) Marketing Management and Strategy, 3rd edition, Macmillan Business 6 **S.A. Chunawalla ''**Commentary on Consumer behaviour'' 7. **Nair Suja**- R Consumer Behaviour Text & Cases 8. **Consumer Protection Law & practices** Niraj Kumar & Nair suja 4th Edition
4	**Journals**	1. Indian Journal of Marketing 2. IUP Journal of Business Strategy 3. Current Contents In Management Marketing
5	**Supplementary Reading**	1.The Economic Times 2. Business Standard
6	**Practical Component**	1. Group Activity based on all units 2. Conduct different business games relevant to subject 3. Take Case discussion on all units 4. Show videos of subject related concepts to the students 5. Library assignment on all units

Semester	**III**	**Total Credit**	**4**
Course Code	**CC Spl-I-304 (D)**	**Credit Pattern**	**L-44, T-8, P-8**
Course Title	**AGRI-BUSINESS, ENTREPRENEURSHIP AND COOPERATIVES**		

Course Out Comes: Students will be able to	
1	Explain the concepts of Agribusiness, Entrepreneurship and Cooperatives
2	Make use of conceptual framework for the development of cooperatives and agribusiness sector
3	Evaluate the role of national and international institutions in agribusiness sector

Syllabus:

Unit Number	**Contents**	**Number of Sessions**	
1	**Agri Business, Agro Based Industries and Issues: S**alient features of Rural Economy, The concept of Agri-business, Historical Review, Scope, Nature of Successful Agri-business, Specific Areas of Agri	**L=11**	
		T=2	**P=2**

	Business, **Agro Based Industries and Issues:** New paradigms in Horticulture, Floriculture and Food Processing sectors, Indian Exports and Agriculture Sector: Export oriented Agribusiness, **Technology and Agri-Business:** Role and Importance, Bio-Technology and Agri-business, Socioeconomic and Environmental Impact of agribusiness		
2	**International Organizations and Agri-Business:** WTO and FAO: Functions and Role in Agriculture, Trade liberalization and World Trade Agreements relating to Agriculture Trade, Agreement on Agriculture (AOA), Import and Export Procedures for agri products, Strategies of Exports for agro based industries, Services under Agri-business, Recent trends in Agri Business Management	**L=11**	
		T=2	**P=2**
3	**Introduction to Agripreneurship:** Concepts of Rural Entrepreneurship, Endowment Of Skill Sets And Natural Resources In Rural India, Aims Of Rural Entrepreneurship, Barriers To Entrepreneurship In Rural India, Process Of Entrepreneurship, Rural Applicability, Skills Requires To Succeed, Government Training Programs And Public Private Partnership, ICT and Rural Entrepreneurship	**L=11**	
		T=2	**P=2**
4	**Co-Operation and Agri Business (6)** Introduction to Cooperatives: Definition, Evolution, Principles and Benefits Of Co-Operatives, Cooperatives and Other forms of Business Enterprises, Co-and their Economic And Legal Differences, The organizational structure of Co-Operatives: Functions, Role, Powers And Responsibilities of entities, Outline Of Good Co-Operative Management, Co-Operative Structure and Development in Farming: Credit, Marketing, Dairy Etc. - Problems and Prospects, Development of Sugar and Dairy Co-Operatives in Maharashtra	**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. Smitha Diwase, Agri-Business Management, 2. Subhash W. Bhave: "Agri Business Management in India" 1997. 3. B.S. Harsha: "Agri Business" 2003. 4. B.S. Mathur: "Co-Operation". Sahitya Bhavan, Agra, 1999. 5. V. Sharda: 'The Theory of Co-Operation". Himalaya Publishing, 1999.
2	**Reference books**	1. RD. Bedi: 'Theory, History and Practice of Co-Operation". Loyal Books Depot, 1997.

		2. R Rajagopalan (Ed), "Rediscovering Co-Operation Vol I,ll And III", Irma, Anand, 1996. 3. P.R Dubhashi, "Principles and Philosophy of Co-Operation". VMNICM, Pune, 1970. 4 4. B.P. Sinha: "Co-Operation: Instrument for Socio .Economic Justice". Himalaya Publishing House, New Delhi, 1992. 5. Divakar Jha: "A Perspective on Co-Operative Marketing" Vikas Publishing House, New Delhi, 1997.
3	**Websites**	• www.agriculture.gov.in/ • www.manage.gov.in • www.ica.coop/ • www.apeda.gov.in
4	**Journals**	• Journal of Agribusiness • Vikalpa • Journal of Cooperative • Sugar cooperatives
5	**Supplementary Reading**	Kurukshetra journal MANAGE study material
6	**Practical Component**	• Prepare report on agriculture sector development in the country in the recent times by visiting to Ministry of Agriculture and Forestry department website and recent Economic Survey of the country • Visit any agro-based unit nearby, have an implant training for one year and submit a 3 page report • Interact with any one Farming Cooperative society and make a SWOT analysis for it • Make a video case study of an agripreneur of your area

Semester	III	Total Credit	4
Course Code	CC-Spl-I-304 (E)	Credit Pattern	L-44, T-8, P-8
Course Title	LOGISTICS & 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	Describe the concepts of Logistics and Supply Chain Management
2	Apply appropriate Logistics and Supply Chain Distribution Strategies in the organization
3	Analyze Supply Chain Planning and Coordination strategies
4	Evaluate the recent developments in Logistics and Supply Chain Management.

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. Need of Collaborative Relationship & Alliance, Principles, Advantages, Disadvantages. Logistics Outsourcing Activities: 3PL+4PL=7PL, Risk of Outsourcing.	**L=11**	
		T=2	**P=2**

2	**ESSENTIALS OF SUPPLY CHAIN MANAGEMENT** Concept & Definition of Supply Chain Flows in SCM, Drivers of SCM, Push/Pull SCM, SC Network Decisions. Distribution Strategies: Milk Runs, Hub & Spoke System, Cross Docking, Pool Distribution, Direct Shipping. Bullwhip Effect, Measuring Performance of SCM, Recent Trends In Supply Chain: Agile Supply Chain, Green Supply Chain, Lean Supply Chain, E-Supply Chain, E-Commerce Supply Chain.	**L=11**	
		T=2	**P=2**
3	**SUPPLY CHAIN PLANNING & COORDINATION** Demand Planning & Forecasting, Characteristics of Forecasting, Forecasting Methods, Time Series Forecasting, Moving Averages, Forecasting Errors, Collaborative Planning Forecasting Replenishment (CPFR). Mass Customization: Drivers, Characteristics, Methods, Advantages, Disadvantages. (Numerical Treatment on Forecasting).	**L=11**	
		T=2	**P=2**
4	**GLOBAL SUPPLY CHAIN OPERATIONS** Global SCM, International Transportation: Sea, Air, Land, Multi-Modal Transportation. Containerization, International Documentation for Import/Export, Customs Clearance Formalities, Packaging for Export, International Logistics Infrastructure, Electronic Data Interchange (EDI). Supply Chain IT Framework: Barcoding & Scanning, RFID, EPOS, Image Processing, GPRS.	**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. Janat Shah, Supply Chain Management 2/e: Text and Cases, Pearson Education India 2. S. L. Ganapathi & Nandi, Logistics Management, Oxford University Press 3. Sunil Chopra, Peter Meindl& D. V. Karla, Supply Chain Management, Sixth edition by Pearson Education India 4. Satish C Ailawadi&Rakesh P Singh, Logistics Management, Prentice Hall India Learning Private Limited
2	**Reference books**	1. David Simchi-Levi, Philip Kaminsky, Designing and Managing the Supply Chain 3rd Edition, McGraw Hill Education 2. Donald J. Bowerox, Tata Mcgrawhill Edition "Supply Chain Logistic Management" 3. N. Chandrasekaran, 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 - Emerald Insight 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. Ram Singh, 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	CC-Spl-I-304 (F)	Credit Pattern	L-45, T-8, P-7
Course Title	KNOWLEDGE MANAGEMENT AND ERP SYSTEM		

Course Objectives	
1	To understand the concept and importance of Knowledge Management.
2	To know to enumerate knowledge management systems in the organization.
3	To make sense of the technical aspects of ERP systems

urse Outcomes: Students will be able to;	
1	scribe the Knowledge management strategies.
2	scuss KM, learning organizations, intellectual capital, and related terminologies in clear terms and understand the role of knowledge management in organizations.
3	itate the different technologies used in ERP.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction and KM: Knowledge management. Types of Knowledge, Importance of KM, KM Roles and responsibilities, KM in Information Technology, KM In Indian Software organization, KM In Banking Sector, KM Life Cycle, The Zack KM Life Cycle, The Bukowitz, and Williams KM Cycle, The Wiig KM Cycle, major theoretical KM models: Von Krog and ROS, Nonaka, and Takeuchi, Choo sense-making KM model, Wig model,	L= 11	T= 2 P= 2
2	Knowledge Capture and codification: Tacit Knowledge Capture at individual and group level Explicit Knowledge codification, Knowledge Transfer, in the e-World, KM Tools and Knowledge Portals-Brain Storming, Learning and idea capture, peer Assist, Storytelling, Taxonomy, knowledge Base, Voice and VOIP, Knowledge Portal, Managing Knowledge Worker, Knowledge audit, KM team	L= 12	T= 2 P= 1
3	ERP Meaning and Nature: Concept and benefits of ERP, Characteristics of ERP, Requirements for effective ERP implementation, ERP Implementation methodology, ERP Related technologies-BPR, Supply Chain Management; Role of Suppliers, Consultants, and users; Contact with Vendors, Consultants, and Employees, ERP implementation life, ERP Market Place- SAP AG, people Soft, Baan Company	L= 11	T= 2 P= 2

4	Business Modules of ERP: ERP Softwares-e-CRM,e-HRM,e-Logistics, e-Documents, Manufacturing Module, Finance Module, HR module, Material Management, Sales and distribution Quality Management Module. Future directions in ERP, evaluation of ERP	**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. Knowledge Leadership – Steven Cavaleri and Sharon 2. Seivert with Lee W. 3. Knowledge management – SheldaDebowski, Wiley India, 2007
2	**Reference books**	1. Knowledge Management in Theory and Practice- KimizDalkir – 2. Butterworth- Heinemann 2011
3	**Website**	1. http://www.providersedge.com/docs/km_articles 2. /km_and_corporate_culture.pdf www.rdocumentation.org 3. https://www.bitpipe.com/tlist/Knowledge-Management.html. 4. https://www.kmslh.com/blog/knowledge-management-portal-best-tool-for-knowledge-management
4	**Journals**	1. Journal of knowledge management 2. International Journal of Knowledge Management Studies 3. Knowledge Management Research & Practice

Semester	**III**	**Total Credit**	**4**
Course Code	**CC-Spl-II-305**	**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, overfitting, 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-	**L=11**	

	layer perceptron, multi-layer neural nets, backpropagation algorithm, feed-forward networks, network training, radial basis function networks, recurrent neural networks.	**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**	Implementation of supervised and unsupervised machine learning algorithms using python

Semester	**III**	**Total Credit**	**2**
Course Code	**CC 306**	**Credit Pattern**	**L-22, T-4, P-4**

Course Title	LEAN MANAGEMENT

Course Objectives:	
1	To make students knowledgeable of historical development, theoretical aspects and practical applications of Lean Management.
2	To introduce students to tools and techniques of Lean Management

Course Outcomes: Students will be able to;	
1	Discuss basic terms and concepts related to Lean Management.
2	Explain tools and techniques in Lean Management.
3	Maximize the productivity of the organization by minimizing the waste.
4	Propose Lean Implementation plan for any organization.

Unit Number	Contents
1	**INTRODUCTION TO LEAN MANAGEMENT** Meaning & Definition of Lean Management, Evolution of Lean Management, Types of Wastes, Objectives of Lean Management, Lean Principles & Philosophies, Hurdles in Lean Implementation
2	**TECHNIQUES FOR LEAN IMPLEMENTATION** 5S, Visual Controls, Root Cause Analysis, Poka-Yoke, Quick Changeover, Theory of Constraints, Value Stream Mapping.

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. Lonnie Wilson, "How to Implement Lean Manufacturing", Mc-Graw Hill Publications" 2.Lean Manufacturing: Principles, Tools and Methods, Bosch Rexroth Corporation, 2009
2	Practical Component	1.Role play to understand concept of lean management & it's importance in Organization. 2.To identify and visit any local organization to study potential of lean Implementation. 3.Identify and visiting any local business for implementing one of the lean tools. 4.Library Exercise on lean management tools undertaken by any one company of your choice.

Semester	**III**	**Total Credit**	**4**
Course Code	**DSE-Spl-I-301**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**BUSINESS ANALYTICS USING R**		

Course Objectives	
1	To enable a student to use analytics to solve business problems
2	To make use of a language R for Data Analysis.
3	To Apply BI tools for problem-solving
urse Outcomes: Students will be able to;	
1	ntify and describe complex business problems in terms of analytical models.
2	ply appropriate analytical methods to find solutions to business problems that achieve stated objectives.
3	ply the knowledge of R gained to data Analytics for real-life applications

Unit Number	Contents	Number of Sessions	
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	**L= 11**	
		T= 2	**P= 2**
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,	**L= 12**	
		T= 2	**P= 1**
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	**L= 11**	
		T= 2	**P= 2**
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	**L=11**	
		T= 2	**P= 2**

Note:

1. A paper evaluation is based on a Practical exam only. No Theory Exam will be conducted
2. Students Will Have To Complete All Practical
3. Students will have to complete all tutorials, assignments, and lab sessions for internal credits.

Learning Resources		
1	**Text Books**	4. Laursen&Thorlund, Business analytics for managers. 5. BalramKrishnan , Business analytics: concepts and theories. 6. R N Prasad and SeemaAcharya , Fundamentals of business analytics
2	**Reference books**	3. Business Analytics A Practitioner's Guides: Saxena, Rahul, Srinivasan, Anand

		4. Business Analytics Principles, Concepts, and Applications - Marc J. Schniederjans Dara G. Schniederjans Christopher M. Starkey. 5. Management Science and Decision Technology – Camm, Evans 6. R for Everyone Advanced Analytics and graphics – Lander 7. Data Mining and Business Analytics with R Book by Johannes Ledolter 8. Data Mining with R: Learning with Case studies – Luis Torgo 9. Business Intelligence tools for Excel Analysts – Michael Alexandere, jared Decker, Bernard Wehbe. 10. Data Mining In Excel: Galit Shmueli Nitin R. Patel Peter C. Bruce 11. Data mining for Business Intelligence: Concept, Techniques, and Application in Microsoft Office Excel with XLMine - Galit Shmueli (, Nitin R. Patel, Peter C. Bruce 12. R for Data Science by Hadley Wickham & Garrett Grolemud (SPD) 13.
3	**Website**	5. www.r-project.org 6. www.rdocumentation.org
4	**Journals**	1. The R Journal 2. R and the journal of the statistic software
5	**Supplementary Reading**	1. Current affairs from newspapers (economic times, Times of India, and newsletters 2. Beyond the MBA – Sameer Kamat
6	**Practical Component**	Hands-on experience through practical based on Rstudio Seminar and presentation on a given topic

Semester	**III**	**Total Credit**	**4**
Course Code	**DSE Spl-II- 302(A)**	**Credit Pattern**	**L-45, T-6, P-9**
Course Title	**DIRECT & INDIRECT TAXES**		
Course Outcomes: The students will able to learn			
1	Assess applicability of GST liability		
2	Analyze deductions from gross total income		
3	Evaluate the income under different heads and taxability		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Direct Tax Basics: I**mportant definitions, incomes exempt under section 10, deductions from gross total income under chapter VI A, Statutory duties covered upon the assesses regarding payment of taxes, Filling of income tax, Maintenance of accounts and audit of accounts, acceptance and repayment of deposits, 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 , Presumptive Taxation	**L=12**	
		T=1	**P=2**
3	**Introduction to GST:** Existing Indirect Tax Structure in India, need of Constitutional Ammendment, Important Definitions under GST and Concept of Supply, Interstate and Intrastate Supply, Levy of GST.	**L=11**	
		T=1	**P=3**
4	**GST Time and Place of Supply and Concept of Input Tax Credit (ITC):**Time and Value of Supply, Place of Supply, Concept of Input Tax Credit, Blocked Credit, Input Tax Credit Rules, Transitional Provision.	**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**	1. Kapil Sheeba, “Financial Management" Pearson Publication House. 2. Jonathan Berk, Peter, "Financial Management" Pearson Publication House. 3. Sharan Vyuptakesh, “Fundamentals of Financial Management" Pearson Publication. 4. James C Van harne, “Financial Management & Policy" Pearson Publication House. 5. ICSI : Handbook on Mergers Amalgamations and takeovers.
2	**Reference Books**	1. Vinodkumar Singhania - Students Guide to Income Tax 2. Prasad Bhagawati – Incom Tax Law & Practice 3. Mehotra H.C. – Income Tax Law 4. Dinkar Pagare – Income Tax Law and Practice 5. Ahuja & Gupta – Systemetice Approach to Income Tax
3	**Websites**	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**	• Prabhandan: Indian Journal of Management • IUP Journals • ICSI Journals • Finance India • Indian Journal of Finance (New Sub.) • Journal of Accounting & Finance etc.
5	**Supplementary Reading**	• Financial Express • Economics Times • Business Standard • Times of India • Indian Express.
6	**Practical Component**	• Practical Problems on income tax efilling • Practical Problems on income from salaries • Practical Problems on TDS • Practical Problems on e-filling of GST • Financial statement analysis using Provess-IQ • Companies Financial Reports & Corporate case studies.

Semester	**III**	**Total Credit**	**4**
Course Code	**DSE Spl-II-302(B)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**STRATEGIC AND INTERNATIONAL HUMAN RESOURCE MANAGEMENT**		
Course Objectives			
1	To provide theoretical foundations of Strategic HRM to students and understand the role of HR as Strategic Partner.		
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	scribe the different concepts in Strategic and International HRM.
2	erpret the implications of culture on HR Practices
3	aluate different HR interventions in cross-border mergers and acquisitions.
4.	lapt HR management practices in changing International scenario.

Unit Number	Contents	Number of Sessions	
1	Meaning, Scope, definition of SHRM, Difference between SHRM and HRM, 5 P Model of SHRM, Linking HR Strategy with Business Strategy. Globalization: Drivers of Globalization, Effects of Globalization on HRM, Model of International HRM, Differences and similarities between DHRM and IHRM.	**L=11**	
		T=2	**P=2**
2	Multi-culturalism, Cultural pre-dispositions- Ethno-centralism – 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.	**L=11**	
		T=2	**P=2**
4	Compensation Management: Objectives, Components of International compensation package. Cross-border Mergers and Acquisitions: Motives, HR Interventions in cross border Mergers and acquisitions. Repatriation: Reasons, Process, benefits from returnees, Challenges of re-entry, Tips for successful repatriation.	**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. Michael Armstrong, Angela Baron, Strategic HRM: The Key to Improved Business Performance 2. Charles Greer, Strategic HRM- Pearson Education. 3. Monir H. Tayeb, International Human Resource Management - Oxford University Press, 2005.
2	**Reference books**	1. Anne-Wil Harzing, Ashly Pennington, International HRMSage South Asia Edition.

		2. Julia Connell, Stephen Teo, Strategic HRM: Contemporary Issues in the Asia Pacific Region. 3. A. Ghanekar, Strategic HRM, Everest Publishing House.
3	**Websites**	www. shrm.com www.hbr.com www.citehr.com
4	**Journals**	1. The Journal of Indian Management and Strategy 2. Human Capital 3. Manpower Journal 4. AIMS Journal of Management
5	**Supplementary Reading**	1. online.wsj.com 2. Magazines like Outlook, Time, India today
6	**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". 3. Case based on Recruitment strategy will be discussed and students will be asked to design and present the recruitment strategy for a given company.

Semester	**III**	**Total Credit**	**4**
Course Code	**DSE Spl-II-302(C)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**MARKETING SECTORS**		**MM II**

Course Objectives:	
1	Students will become familiar with various aspects of marketing sectors
2	Students will understand and implement concepts in marketing across different sectors.
3	Students will understand the process of formulating marketing plans for various sectors.

Course Outcomes: Students will be able to;	
1	Describe conceptual aspects of sectorial markets.
2	Apply concepts for marketing of services & products across sectors
3	Design marketing plans across various marketing sectors

Syllabus:

Unit Number	**Contents**	**Number of Sessions**

1	**Unit I** **Industrial Marketing** Introduction to concepts & history of Industrial marketing. Difference between consumer and industrial /business marketing. Organisational Markets & Marketing. STP & Marketing Mix for Industrial marketing. Blurring between B2B & B2C.Competitive tendering, bidding. Non tendering purchase, Solution selling. Advancing internet & marketing.	**L=11**	
		T=2	**P=2**
2	**Unit II** **Services Marketing** Concepts**,** Meaning, characteristics of services. Difference between service & product. Marketing of professional services. Marketing Mix, Service quality concept & model. Capacity & demand Management. Retaining customers. 7 Ps of services marketing. Sectorial application collectively & specifically to top ten sectors in India including health, education, financial services.	**L=12**	
		T=2	**P=1**
3	**Unit III** **International Marketing** Nature, scope, challenges in international markets. Concepts & theories overview. Trade distortions & market Barriers in world market environment. Financial environment & decisions. Current trends in import & export in international marketing. Process, procedure, opportunities from Indian & Asian perspectives. Global fact sheet for marketer	**L=11**	
		T=2	**P=2**
4	**Unit IV** **Retail Management** Introduction to retail markets & marketing overview. Retail evolution in India. Retail formats, marketing mix decisions. Franchising, Retail merchandise, objectives, process & factors affecting store layout & marketing mix decisions. Visual merchandising. Merchandising mix decision. Display, lighting, exhibition. Store location its evaluation. Build Lease or Buy decision.	**L=11**	
		T=2	**P=2**

Learning Resources		
1	**Text Books**	1.Industrial Marketing – Hill, Alexander, Cross 2.Industrial Marketing – P K Ghosh 3.Industrial Marketing-Krishna K. Havaldar Tata McGraw-Hill

		4 .Strategic marketing: Text and Cases Paperback - **S Shajahan**
2	**Reference Books**	1.**Services Marketing People, Technology, Strategy** – C. Lovelock, Jwirtz, J. chattarjee – Pearson Education 2.**Services Marketing** – Integrating Customer Focus Across The Firm – V. Ieithaml, D DGremler, M J Bitner, A Pandit – Tata McGraw Hill 3.**Services Marketing** – Dr. S. Shajahan – Himalaya Publishing House 4"**Services Marketing The Indian Experience**"- Ravi Shankar 5 " **Business To Business Marketing**" – Analysis And Practice In A Dynamic Environment - Thomson South Western- Vitale Giglierano 6.Strategic Marketing – Michel Porter 7.Strategic Marketing- 8th Edition -Tata Mcgraw Hill 8.**Strategic Market Management:** Global Perspectives, Damien Mcloughlin David A. Aaker 9.**MR Czinkota and I A Rankainen** - International Marketing - Cengage Learning 10.**U.C. Mathur- International Marketing Management** : Text and Cases- Sage Publication 11.**Francis Cherunilam** - International Marketing- Text and Cases – Himalaya Publishing House 12.**Ramaswam and Namakumari** - Marketing Management –- Macmillan Publication 13. **B K Chaterji** - Marketing Management : A Finance Emphasis– A Jaico Book
3	**Journals**	1.Indian Journal of Marketing 2.IUP Journal of Business Strategy 3.Current Contents In Management Marketing
5	**Supplementary Reading**	1.The Economic Times 2.Business Standard
6	**Practical Component**	1. Group Activity based on all the units 2. Case study discussion on all units relevant concept of the subject 3. Take other activities i.e. - Business Games etc. 4. Library assignment on all units

Semester	III	Total Credit	4
Course Code	DSE Spl-II-302 (D)	Credit Pattern	L-44, T-8, P-8
Course Title	RURAL AND AGRICULTURAL MARKETING		

Course Out Comes: Students will be able to	
1	Discuss the features of rural and urban markets for consumer goods and non-consumer goods
2	Apply rural marketing research techniques to understand the rural consumer behavior
3	Adapt marketing strategies suitable to rural markets and agricultural inputs

Syllabus:

Unit Number	Contents	Number of Sessions	
man1	**Introduction To Rural Marketing:** Definition, Classification And Characteristics Of Rural Markets; Problems And Constraints In Rural Marketing, Marketing Functions and Services: Marketing Institutions And Marketing Support Services, Rural Consumer: Classification and profile;	L=11	
		T=2	P=2
2	**Rural Consumer Behavior and Rural Marketing Research:** Rural Consumer Buying Behavior – Major Forces Influencing Rural Consumer Behavior, Rural Segmentation, Market Targeting and Positioning and Procedures for Rural Markets In India; **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,	L=11	
		T=2	P=2

	challenges in rural marketing research		
3	**Rural Marketing Planning And Strategy Development:** 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**
4	**Agricultural Marketing In India:** Marketing Of Agricultural Products, Agricultural Marketing Process - Markets And Classification Of Markets – Methods Of Sales – Marketing Agencies, Introduction to Krishi Mandis and New FMCG Act, Marketing of Agricultural Inputs – Fertilizers; Seeds; Agrochemicals; Tractors; Farm Equipment; Irrigation Equipment and Animal Feed	**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
3.

Learning Resources		
1	**Text Books**	1. Ramkishan Y. (2004): New Perspectives In Rural And Agricultural Marketing, Jaico Publishing House, 2nd Edition 2. Pradip Kashyap, Rural Marketing, Pearson Publications 3. Badi and Badi: Rural and Agricultural Marketing, Himalya Publications
2	**Reference books**	1. Sarwade W.K. (2006) : Agricultural Marketing – Vatsala Baliram Prakashan Kendra, Mumbai 2. Abbott J.C.; Makcham J.P. (1992): Agricultural Economics and Marketing in the Tropics. Elbs with Longman, 2nd Edition. 3. Singh G.N.; Singh D.S., Singh R.I: Agricultural Marketing in India, Analysis Planning and Development. Chugh Publications, Allahabad 4. Rajagopal (1993): Indian Rural Marketing, Rawat Publication. 5. Kamat M.; Krishnamurty R. (2003): Rural Marketing, Himalaya 6. Habeeb-ur-Rahman K.S. (2003), Rural Marketing In India; Himalaya 7. Gopalswamy T.P. (2006): Rural Marketing: Environment Problems and Strategies, Vikas 8. Verma S.B; Jiloka S.K. (2006): Rural Agricultural and Marketing, Deep and Deep
3	**Websites**	www.agriculture.gov.in/ www.manage.gov.in www.ica.coop/ www.apeda.gov.in

4	**Journals**	Rural Marketing Indian Journal of Marketing Vikalpa
5	**Supplementary Reading**	www.martrural .com www.ibef.org http://www.ruralrdc.com.au/
6	**Practical Component**	• Make a visit to any one of the marketing service agency identify their activities • Organize PRA Activity at your/ any village and identify the marketing opportunities for various product categories • Prepare a questionnaire and conduct rural market research for various product categories and submit analysis in report format

Semester	**IV**	**Total Credit**	**4**
Course Code	**DSE-Spl-II-302-(E)**	**Credit Pattern**	**L-44, T-8, 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	Describe the concepts of Purchasing and Inventory Management.
2	Apply Purchasing and Inventory Management Techniques at Manufacturing and Service Sector.
3	Analyze issues involved in Purchasing and Inventory Management.
4	Evaluate Purchasing and Inventory Management strategies.

Unit Number	Contents	Number of Sessions
1	**PURCHASING MANAGEMENT**	**L=11**

	Introduction, to Materials Management, Purchasing Principles &Procedure, Practices& Policies of Purchasing, 5R of Purchasing, Objectives, Scope, Responsibilities & Limitations of Purchasing Management, Methods of Buying, Centralised & Decentralised Purchasing, Sources of Supply & Supplier Selection, Legal Aspects of Purchasing.	**T=2**	**P=2**
2	**STORES MANAGEMENT** Meaning of Store Management, Functions of Scientific Store Management, Benefits of Scientific Store Keeping, Types of Stores, Stores Procedure, Store Location & Layout, Centralised& Decentralised Store, Preservation of Stores, 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 TimePeriod (P Model). (Numerical Treatment on Inventory Models)	**L=11** **T=2**	**P=2**
4	**STRATEGIC MATERIALS MANAGEMENT** BoM, MPS, MRP I, MRP II, CRP, Vendor-Vendee Relations, Vendor Development, Vendor Evaluation & Rating Methods, Negotiations, 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**

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. K. K. Ahuja, Material Management ,CBS Publishers & Distributors 2. A.K. Datta, "Materials Management", Procedure, Text & Cases, Prentice-hallof India Pvt. ltd, New Delhi. 3. K. S. Menon, Sarika Kulkarni, Purchasing and Inventory Management, SPD Publications 4. Dr. K. C. Jain and Jeet Patidar, Purchasing and Materials Management, S. Chand
2	**Reference books**	1. Max Müller, "Essentials of Inventory Management"Amacom,2003. 2. Richard J. Tersine, "Principles of Inventory and Materials Management" North-Holland, 2007.
3	**Websites**	1. www.materialsmanagement.info/defscope/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. P. Gopalakrishnan and M. Sundaresan, Material Management: An Integrated Approach, Prentice-Hall of India Pvt.Ltd 2. Robert M. Monczka 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	**DSE Spl-II-302 (F)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**INFORMATION SYSTEM CONTROL AND AUDIT**		

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
urse Outcomes: Students will be able to;	
1	assify the concepts of computer security, computer security threats, and the corresponding remedies.
2	scribe the trend of computer security threats
3	velop an audit plan to achieve the IT audit objectives.

Syllabus:

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	Techniques for testing unauthorized program modification; 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	**L=11**	
		T= 2	**P= 2**

	And Business Continuity, Data Disaster, Virus Disasters, Software Disasters, Data Center Disasters, Core Banking Solution		

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

Learning Resources		
1	**Text Books**	1. Information System Control And Audit, - Ron Weber Person Edition
2	**Reference books**	1. Information System Auditing And Assurance – James A. Hall – South Western. 2. Auditor's Guide to Information Systems Auditing- Richard Cascarino
3	**Website**	1. https://www.isaca.org/ www.rdocumentation.org 2. https://www.britannica.com/topic/information-system/Information-systems-audit 3. https://www.researchgate.net/publication/ 327312550_Information_Technology_Control_and_Audit
4	**Journals**	1. ISACA Journal | Information Technology & Systems ResourcesR and the joirnal of the statistic softwares
5	**Supplementary Reading**	1. Inormation System Audit Reports From Banks

Semester	III	Total Credits	2
Course Code	AEC 301-A	Credit Pattern	L-22, T-2, P-6
Course Title	ENTREPRENEURSHIP SKILLS AND START UP		

Course Outcomes: Students will be able to:

1.	Describe the concept and types of Start ups.
2.	Explore the start up ideas and start up India scheme.
3.	Identify various funding options for start ups
4.	Create a start up on the campus.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Understanding Start ups: (15)** Understanding the concept of start up and its economic rationale. The difference between a startup and a small Business, Types of Start Ups: Life style start ups, Small business start ups, Scalable startups (Silicon Valley entrepreneurs), Buyable startups, social start ups, Technology Startups. Various Business Models adopted by startups worldwide. Startup idea, Innovations, IPRs. Startup Ecosystems with examples. Indian Start ups in the last ten years. Government policy for MSME and start up India Scheme.	**L=11**	
		T=2	**P=2**
2	**Funding Methods for Startups:** Stages of Start up Financing, Types of Investors for Startups 1) Friends & Family. 2) Banks & Government Agencies. 3) Angel Investors 4) Boot strapping 5) Accelerators & Incubators 6) Family Offerings 7) Venture Capital Firms. 8) Corporate Investors. Funding for startups through government agencies India. Problems and Challenges of startups: Lack of legitimate mentors for Startups, Competition from big players, stringent norms of financers, marketing problems, human resource management problems, funding problems, delays and project cost escalation. Sustaining and growing the startup.	**L=11**	
		T=2	**P=1**

Learning Resources		
1	**Text Books**	1. Mohanty – Fundamentals of Entrepreneurship, Prentice Hall of India 2. Entrepreneurship: creating and leading an entrepreneurial organization. By Kumar Arya, Pearson India.

		3. Zimmerer & Scarborough – Essentials of Entrepreneurship & Small Business Management, Prentice Hall of India 4. Allen, K. (2003) Launching New Venture, Cengage Learning
2	**Reference books**	1. Hisrich Peters, Irwin:' Entrepreneurship: Starting, Developing and Managing a New Enterprise. PHP 2. Raghu Nandan :'Unlashing your entrepreneurial Potential' Sage Publication 3. M.lall, 'Entrepreneurship, Excel books 4. Peters, michael P and shephered Dean, Hisrich, robert, Sage Publication Tata Mcgraw-hill; sixth edition, 2007 5. Mathew J Manimala :- Entrepreneurship at the Crossroads – Biztantra Pub. 6. Eric Ries,'The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses: Published By Currency available only on Amazon
3	**Websites**	https://inc42.com/startups/ file:///E:/introduction%20to%20startup.pdf file:///C:/Users/student/Downloads/rebo_use_dp_2016_1613%20(1).pdf https://fi.co/insight/the-most-comprehensive-guide-to-the-silicon-valley-startup-ecosystem-ever-created
4	**Journals**	Journal of Entrepreneurship Development - SEDME Entrepreneurship in the New Millennium: Hyderabad, NISIET IDBI Annual Report
5	**Supplementary Reading**	Economic Times Business Standard Online reading of Harvard Business Review, Journal of Business Venturing
6	**Practical Component**	Case Study on Start Up Business Models and presentation. Visit to Incubations Interaction with Startup entrepreneurs

Semester	III	Total Credit	2
Course Code	AEC 301 (B)	Credit Pattern	22L + 8 TP
Course Title	HEALTH AND WELLNESS		

Unit Number	Contents
1	Introduction to Human Health, The Wellness Profession, Changes across the Lifespan, Workplace Wellness Program Management. Health Literacy Worksite Health Environment, Physical Activity and Nutrition for Wellness Managers. Understanding and Effecting Health Behaviour Change.
2	Marketing and Communication. Survey of Information Technology in Wellness Population Health, Leadership and Change Management in Health. Assessment and Evaluation Employee Health and Well-Being. Health Coaching, Fieldwork, Health and Wellness Management Capstone..
Instructions	This course is to be conducted with open approach to reflect more on student's part for learning. If necessary experts can be called for workshops or guest sessions.

Learning Resources		
1	Reference Books	Wellness Management for Educators and Entrepreneurs oosung J. Lee Jungeun Kim Division of Interdisciplinary Wellness Studies Asan, Chungnam, Korea Series: Management Science – Theory and Applications.BISAC: BUS041000 Best Health and Wellness Books of the Last Decade TARA LOSINSKI | JANUARY 10TH, 2020 Lifespan: Why We Age—and Why We Don't Have To Hardcover – Sept. 10 2019 by David A. Sinclair PhD (Author), Matthew D. LaPlante (Author) Wellness Management - A Lifestyle Approach for Health, Fitness and Energy (English, Paperback, Venkata Rajasekhar Kali) Notion Press Genre: Health & Fitness ISBN: 9789352067428, 9789352067428 Pages: 276 What to Eat Paperback – April 17, 2007 by Marion Nestle (Author)

		ISBN-10 9780865477384 Williams' Essentials of Nutrition and Diet Therapy Paperback – 23 December 2014 by Eleanor Schlenker PhD RD (Author), Joyce Ann Gilbert (Author) ISBN-13 978-0323185806
2	Reference Website	. The Real Food Dietitians Website: 1.https://therealfoodrds.com/ 2. MyFitnessPal Website: https://www.myfitnesspal.com/ 3. Livestrong Website: https://www.livestrong.com/ 4. Healthline Website: https://www.healthline.com/ 5. Avocadu Website: https://avocadu.com/

Semester	**III**	**Total Credit**	**2**
Course Code	**AEC 301 (C)**	**Credit Pattern**	**22L, 8TP**
Course Title	**TOURISM MANAGEMENT**		
Course Objectives			
1	To enable students to get acquainted with concepts in Tourism Management.		

2	To enable students to know the elements of Tourism marketing and its practical Approach to Tourism Management
Course Outcomes: Students will be able to;	
1.	Explain the concepts of travel and tourism,
2.	Develop a tourism plan

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Unit 1: TOURISM PHENOMENON** Understanding Tourism Historical Evolution and Development Understanding Tourists And Hosts Profiling Foreign Tourists Profiling Domestic Tourists Guest – Host Relationship Sociology, Anthropology and Tourism Informal Services in Tourism, Dance and Music :Cuisines, Customs, Festivals and Fairs	**L=11** **T=4**	**P=0**
2	**Unit 2: TOURIST SITES: PRODUCTS AND OPERATIONS** Adventure and Sports Beach and Island Resorts: Hill Stations of India Wild Life: Use of History, Monuments and Museums Living Culture and Performing Arts, Religions of India Tourism Marketing – 1: Relevance, Product Design, Market Research. Tourism Marketing – 2: Promotional Events, Advertising Publicity, Selling, Role of Media, Writing for Tourism Personality Development and Communicating Skills	**L=11** **T=4**	**P=0**

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. P.M. Seth, Successful Tourism Management: 2. J.K. Sharma , Tourism Planning & Development:
2	**Reference books**	1. Chuck Y. Gee , Travel industry: 2. R Gartner, Tourism Development: Tourism System: Mill R.C & Morrison 3. Cooper C, Fletcher J, and Gilbert D & Wahill S. Tourism; Principles & Practices
3	**Websites**	1. http://tourism.gov.in/organisation 2. www.wti.org.in (Wildlife Organisation in India) 3. www.indiaculture.gov.in
4	**Journals**	1. Journal of Tourism and Hospitality Management (JTHM) 2. KITTS - Indian Journal of Tourism and Hospitality
5	**Supplementary Reading**	1. Tourism Policy in 2018 2. Year End Review: Ministry of Tourism
6	**Practical Component**	1. Each Student will to select one State and prepare a seminar on Culture, Festival, Food habits, Dance, rituals etc. of the State. 2. Each student will identify the tourism spots from the selected State and present its Unique Selling Proposition with tourism perspective. 3. Preparation of a detail tourism plan to visit a particular tourism destination.

Semester	**III**	**Total Credit**	**2**
Course Code	**AEC 301(D)**	**Credit Pattern**	**L-22, T-4, P-4**
Course Title	**CHANGE MANAGEMENT**		

Course Objectives

1	To help the students to gain knowledge about the concepts of change management and to acquire the skills required to manage any change effectively.
2	To understand the various components and constraints involved in Change management.
3	To equip students with ways of dealing with resistance to change.
Course Outcome	
1. Apply Change Management Model to business situations 2. Evaluate and organizational changes and its management.	

Unit Number	Contents	Number of Sessions	
1	**Individual Change:** Need for Individual Change, Personality and Change, Learning and Individual Change, Approaches to Individual Change, Implications of Change in Individuals. **Culture and Change:** Introduction, Concept of Organizational Culture Dimensions of Culture, Type of Culture, Assessing Organizational Culture, Role of Culture in Managing Change. Change Management in Organizations: Understanding Organizational Transformation, Strategies, Process, Nature, Perspectives of Organizational Change. Models of Organizational Change:	**L=11**	
		T=2	**P=2**
2	Communicating & Implementing Change: Need, Factors, Forms of Resistance, Reactions to Change, Resistance to Organizational Change Initiatives, Overcoming the Resistance to Change, Technique: Implementation of Change, Developing an Implementation Plan, Gaining Support and Involvement of Key People, Strategies for Implementation: Types of Change Management Strategies, Factors Affecting the Choice, Formulating and Facilitating Change, Facilitating Change, Implementing Change,. Leading Changes: Visionary Leadership, Role of Leaders in the Phases of Organizational Change. Evaluation, Measurement and Methods of Evaluation, Feedback Process, Continuous Incremental Change.	**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.
3. Filed visits will be compulsory and a group report to be generated for exam in the presence of an external examiner at mid-term.
4. This is necessary to know implemented change and or change in process around. In manufacturing, service, commercial challenging sectors.

Learning Resources		
1	**Text Books**	No particular text book is available however following can be correlated and used as text book The Power Of HABIT,Charles Duhigg, Replica Press Pvt.Ltd. ISBN 9781847946249
2	**Reference books**	1. James McCalman, Professor Robert A Paton, Sabina Siebert, Change Management: A Guide to Effective Implementation, SAGE Publications. 2. Beam, Change Management Revised Edition, Routledge- Taylor and Francis Group. 3. Jeff Hiatt, Timothy J. Creasey, Change Management: The People Side of Change 4. Radha S. Sharma, Change Management. Tata McGrawHill.
3	**Websites**	https://www.change-management-institute.com/ https://www.changefirst.com/
4	**Journals**	Journal of Organizational Change Management Issue(s) available: 176 – From Volume: 1 Issue: 1, to Volume: 32 Issue: 2 Category: Organization Studies https://www.emerald.com/insight/publication/issn/0953-4814
5	**Supplementary Reading**	Managing Transitions, 25th anniversary edition: Making the Most of Change Paperback – January 10, 2017 by William Bridges (Author), Susan Bridges (Author)
6	**Practical Component**	1. Debate in the classroom on Change related topic 2. Organization change questionnaire data collection and analysis. 3. Group Presentation on Change management in various sectors like Health care, Education, PSU, Retail, Manufacturing Industries. 4. Design a role play event for students, so that they will play it out to mobilize support for a change implementation programme**.**

Semester	III	Total Credit	2
Course Code	GE-301(B)	Credit Pattern	L-24, T-06, P-00
Course Title	E-COMMERCE		

Course Objectives	
1	To explain the nature and different models of E-commerce
2	To explain the technologies required to make e-Commerce viable.
3	To discuss the current drivers and inhibitors facing the business world in adopting and using e-commerce and
4	To discuss the trends in e-Commerce and the use of the Internet.
5	To discuss e-commerce from an enterprise point of view.
6	To demonstrate the concepts of security in e-commerce applications.
Course Outcomes	
After completion of this course the student will be able to:	
1	Recognize the business impact and potential of e-commerce
2	Develop a holistic perspective on the role of IT in organizations.
3	Identify target market based on numerous parameters.
4	Select appropriate e-commerce models for any organization.
5	Follow security measures while dealing with e-commerce applications.

Unit Number	Contents	Number of Sessions
1	History of e-commerce and Indian business context, www, advantages and disadvantages of e-commerce, e-commerce in India, various Indian	**L=12**

	case studies. Business models for e-commerce, different type of e-commerce, brokerage model, aggregator model, info-mediary model, community model, value chain model, manufacturer model, advertising model, subscription model, affiliate model.	**T=03**	**P=00**
2	Technologies of the www & e-security, internet client-server applications, networks and internets, URL, software agents, internet service providers, html, java script and xml, e-security, security on the internet, hacking, various security risks, e-business risk management issues, firewall. E-marketing, identifying web presence goals, the browsing behavior model, online marketing, e-advertising, internet marketing trends, target markets, e-branding, marketing strategies. Legal and ethical issues, IT Law, phishing, copy right.	**L=12**	
		T=03	**P=00**

References		
1	**Text books**	a. E-commerce - An Indian Perspective by P.T. Joseph, S.J , PHI publication
2	**Reference books**	1. The unofficial guide to starting an e-commerce business by Jason R.Rich, IDG books India. 2. E-Commerce (Pearson Custom Business Resources) by Kenneth C. Laudon 3. Electronic Commerce by Gary P. Schneider
3	**Websites**	1. http://notes4learners.blogspot.com 2. https://www.academia.edu/8099032/e_commerce_notes 3. https://examupdates.in/e-commerce-full-notes/ 4. https://www.javatpoint.com/html-tutorial 5. http://www.echoecho.com/html.htm
4	**Journals**	1. "Electronic Commerce Research", ISSN: 1389-5753 (Print) 1572-9362 (Online), https://link.springer.com/journal/10660 2. "E - Commerce for future & Trends", eISSN: 2454–9347, http://stmjournals.com/E-Commerce-for-future-and-Trends.html 3. "Journal of Web Development and Web Designing", http://matjournals.com/Journal-of-Web-Development-and-Web-Designing.html

5	**Supplementary Reading**	1. geeksforgeeks 2. tutorialspoint 3. w3Schools
6	**Practical Components**	----------
1	**Text books**	b. E-commerce - An Indian Perspective by P.T. Joseph, S.J , PHI publication
2	**Reference books**	4. The unofficial guide to starting an e-commerce business by Jason R.Rich, IDG books India. 5. E-Commerce (Pearson Custom Business Resources) by Kenneth C. Laudon 6. Electronic Commerce by Gary P. Schneider

Semester	**III**	**Total Credit**	**2**
Course Code	**GE 301 (C)**	**Credit Pattern**	**L-23, T-07, P-0**
Course Title	**DISASTER MANAGEMENT**		

Course Objectives	
1	Understand the concept and impact of disasters.
2	Describe the causes, effects and control measures of disasters.

Course Outcomes: After completion of this course students will have capacity to	
1.	Recognize the various global and regional environmental concerns/hazards due to natural causes and/or human activities, and the impact of these on various forms of life .
2.	Obtain and communicate information on risks, relief needs and lessons learned from earlier disasters in order to formulate strategies for mitigation in future scenarios
3.	Describe and evaluate the environmental, social, economic, legal and organizational aspects influencing vulnerabilities and capacities to face disasters.
4.	Relate theoretically and practically in the processes of disaster management (disaster risk reduction, response, and recovery)

Syllabus:

Unit Number	**Contents**	**Number of Sessions**	
1	**Introduction to Disaster Management :** Hazard and Disaster, Classification of Disasters. Hydrological Disasters - Flood, Drought, Geological Disasters- Earthquakes, Landslides, Volcanic Eruptions. Wind Related Disasters- Cyclone Biological Disasters : Man Made Disasters : Fire – Industrial, Domestic and wild fire Technological Disasters- Bhopal Gas Tragedy, Chernobyl and	**L= 11** **T= 4**	**P= 0**

	Fukushima. Marine and Social Disasters		
2	**Disaster Management :** Risk assessment, Disaster Management Act 2005, National Disaster Management Framework, Role of various organisations- National Disaster Management Authority (NDMA), State Disaster Management Authority (SDMA), District Disaster Management Authority (DDMA), Financial Arrangements for Disaster Management, Disaster management cycle, NDRF. Non-Governmental Organisations, community participation, Education, training for public in emergency preparedness plan, Rescue & rehabilitation programmes.	**L= 12** **T= 3**	**P= 0**

Learning Resources		
1	**Text Books**	• Textbook Of Environmental Science And Technology by REDDY, BSP publishers, 2019 • A Textbook Of Environmental Studies, Dr D K Asthana, S. Chand Publishers, 2018 • A Text Book Of Environmental Studies by Vijay Tiwari, Himalaya Publishers, 2017 • A Text Book of Ecology, Tyler Miller, Cengage Learning • A Text Book Environmental Studies, Chatawal & Sharma, HPH • A Text Book Environmental Science, Joshi & Joshi, APH • A Text Book of Environmatal Studies, Nambiar, STP
2	**Reference books**	• Nuclear Accidents (Man Made Disasters) Mark Mayell Publisher: Lucent Books • Management of Man-made Disasters, S. L. Goel, Motilal Banarsidass Publishers Private Limited, New Delhi, ISBN: 8176297151 • Handbook of Pollution Control Processes By: Robert Noyes. Jaico Publishing House, Mumbai (2003) • Fire & Explosion Hazards Handbook of Industrial Chemicals By: TA Davletshina & NP Cheremisinhoff, Noyes Publications, Mumbai (2003) • Environmental Geology by K. Valdiya, Tata McGraw Hill Publishing Co. • Perspectives on Environment by I.R. Manners, M.W. Micksell • Our Planet, Our Health by WHO (1992) • Report of the Panel on Industry by WHO (1992) • Natural Disasters, Author: Claire Watts / Trevor DayPublisher: Dk Publishing, ISBN: 9781465438096 • Environmental Biology by K.C. Agarwal • Resource Book on Chemical (Industrial) Disaster Management, http://nidm.gov.in/PDF/pubs/chemical_mdc.pdf • Directory of Institutions and Resource Persons for Landslide Management In India

		• http://nidm.gov.in/PDF/pubs/directory%20landslide.pdf
3	**Websites**	• Directory of Institutions and Resource Persons for Landslide Management In India • http://nidm.gov.in/PDF/pubs/directory%20landslide.pdf • https://www.ifrc.org/en/what-we-do/disaster-management/about-disaster-management/ • https://en.wikipedia.org/wiki/Disaster_management_in_India
4	**Journals**	• Current Science, ISSN No. 0011-3891 • Down to Earth • Journal of Biosciences, ISSN No. 0250-5991 • Journal of Environmental Biology, ISSN No. 0254-8704 • Resonance, ISSN No. 0971-8044 • Journal of Earth System Science, ISSN No .2253-4126 • Industrial Safety Chronicle • International Journal of Environmental Engineering Science, ISSN No .2229-3094
5	**Supplementary Reading**	• Demonstration of Fire & Water Safety.
6	**Practical Components**	• Mock drill for various disaster • Disaster Management Action Plan

Semester	III	Total Credit	2
Course Code	GE 301(D)	Credit Pattern	L-20, T-5, P-5
Course Title	CORPORATE SOCIAL RESPONSIBILITY		

Course Objectives	
1	understand the scope and complexity of corporate social responsibility.
2	gain knowledge of the impact of CSR implementation on societies
3	acquire skills to frame and design CSR policies and practices appropriate to the Indian workplace.

Course Outcomes: Students will be able to	
1	Know the Corporate Social Responsibility of different sector.
2	Use the acquired skill for proper sustainable Corporate Social responsibility.

Syllabus:

Unit Number	Contents	Number of Sessions	
1	Introduction to CSR: Meaning & Definition of CSR, History & evolution of CSR. International framework for corporate social Responsibility, Millennium Development goals, Sustainable development goals, Relationship between CSR and MDGs.United Nations (UN) Global Compact 2011. UN guiding principles on business and human rights.– Globalization and CSR.	L= 10	
		T= 3	P= 2
2	Indian perspectives and approaches: Models of CSR in India,. Initiatives in India. Corporate Governance and CSR , CSR Policy and guidelines , Legal frame work, rules and regulations, Company Act 2013 - relevant provisions of CSR. Role of Government and NGO in CSR. Business Benefits of CSR.	L=10	
		T=2	P=3

Learning Resources		
1	**Text Books**	1. Benn & Bolton, (2011). Key concepts in corporate social responsibility. Australia: Sage Publications Ltd. 2. Bradshaw, T. and D. Vogel. (1981). Corporations and their critics: Issues and answers to the problems of corporate social responsibility. New York: McGraw Hill Book Company 3. Brummer, J.J. (1991). Corporate Responsibility and Legitimacy: An interdisciplinary analysis. Westport, CT: Greenwood Press. 4. Cannon, T. (1992). Corporate responsibility (1st ed.) London: Pitman Publishing. 5. Crane, A. et al., (2008). The Oxford handbook of corporate social responsibility. New York: Oxford University Press Inc.
2	**Reference books**	1. Lourdes Poobala Rayen- Corporate Social responsibility. 2. Ellington. J. (1998).Cannibals with forks: The triple bottom line of 21st century business. New Society Publishers 3. Baxi C.V and Ajit P, Corporate Social Responsibility, Concept & Cases: "The Indian Experience, Excel Books. 4. Reddy S and Stefan S (2004). Corporate Social Responsibility: Sustainable Supply Chains. Hyderabad: ICFAI University Press. 5. Werther, W. B. & Chandler, D. (2011). Strategic corporate social responsibility. Thousand Oaks, CA: Sage
3	**Websites**	www.forbes.com www.referenceforbusiness.com www.justmeans.com www.corporatesocialresponsibility.org
4	**Journals**	International Journal of Corporate Social Responsibility | Home https://jcsr.springeropen.com Sustainability Accounting, Management and Policy Journal, Emerald, 2010- -World Review of Entrepreneurship, Management and Sustainable Development, Inderscience Publishers, 2005-
5	**Supplementary Reading**	1. http://www.diegdi.de/CMSHomepage/openwebcms3.nsf/%28ynDK_contentByKey%29/ENTR- 7BMDUB/$FILE/Studies%2026.pdf 2. Modi P.K., Corporate Social Capital Liability. Arise Publishers & Distributors. First editions - 2009 3. Sharma, J.P., Corporate Governance, Business Ethics & CSR, Ane Books Pvt Ltd, New Delhi.

6	**Practical Component**	Visit to industries to study and record various CSR activities and discuss the same with students and teachers to know the merits and demerits od CSR.

Semester	**III**	**Total Credit**	**2**
Course Code	**GE 301(E)**	**Credit Pattern**	**L-22, T- 04, P-04**
Course Title	**BASICS OF INDIAN ECONOMY**		

Course Outcomes: Students will be able to	
1	Identify the main issues in Indian economic development
2	Critically analyse the Indian economic policy environment

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**UNIT-1: Indian Economic Environment:** Meaning of underdevelopment, Basic characteristics of India as a developing economy, Major issues of development: Poverty, Unemployment and Inequality, National Income of India: Trends, Growth and Structure. Features and importance, Green Revolution, Low productivity of agriculture and government measures Role of Industrialization, Industries and Five-year plans, Industrial Policy(1991), Services sector Role & Importance	**L= 11**	
		T= 2	**P= 2**
		T=2	**P=2**
2	**UNIT-2: Indian Economic Planning and Reforms:** Objectives of Economic Planning, Redefining the role of the State, Brief review of Five-Year Plans, New Economic Reforms: Liberalization, Privatization and Globalization, NITI Ayog, Balanced Regional Development.	**L= 11**	
		T= 2	**P= 2**

Learning Resources		
1	**Text Books**	• Agarwal A N (2016), Indian Economy, Vikas Publishing House Pvt. Ltd., New Delhi • Gaurav Datt& Ashwini Mahajan (2016), Indian Economy, S. Chand and Company Pvt. Ltd., New Delhi • Misra and Puri (2013), Indian Economy, Himalaya Publishing House Pvt. Ltd., New Delhi.
2	**Reference books**	• Deepashree (2011), Indian Economy, Ane Books Ovt. Ltd., New Delhi • Uma Kapila (2017), Indian Economy: Performance and Policies, Academic Foundation, New Delhi

3	**Websites**	• www.rbi.org.in • www.mygov.gov.in • www.cmie.com
4	**Journals**	• Arth Samwad • Economic and Political Weekly • Indian-Economic-Journal • Journal-of Indian-School-of-Political-Economy • Southern Economist • The Economist • Journal of Applied Economics • Indian-Economic-Journal • International Journal of the Economics of Business • Journal-of Indian-School-of-Political-Economy • Agricultural-Economic-Research-Review
5	**Supplementary Reading**	• Economics Survey • Union Budget of India • Niti Ayog Reports • Economics Times Daily • Business Standard Daily • Business Today Daily • Latest Monetary Policy • Latest Fiscal Policy
6	**Practical Component**	• Collect Economic Survey of India of last five years and prepare a report on trends in major macro-economic variables of the country • Establish the relationship between sectoral growth patterns and business environment by collecting data on three major sectors of the economy

MBA - II

Semester - IV

Semester	IV	Total Credit	4
Course Code	CC 401	Credit Pattern	L-48, T-08, P-04
Course Title	BIG DATA ANALYTICS		

Course Objectives	
1	To master the concepts of HDFS and MapReduce framework
2	To introduce Hadoop 2.x Architecture
	To understand concept of LFS and HDFS
3	To introduce data loading techniques using Sqoop and Flume
4	To introduce data flow technique using Apache Pig,Hive
5	To Userstand HBase and MapReduce 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 Sqoop 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-	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 Stoppingthe Nodes. HDFS basic file operations.HDFS commands. The new multi-platform analytical ecosystem. Beyond the data warehouse – Hadoop, NoSQL and analytical RDBMSs, NoSQL	L=12	
		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, orderby operator, limit operator, Modes of Execution, Introduction to SQOOP, Connect to mySql database, SQOOP import and export commands and Joins in SQOOP, Export to MySQL and	L=12	
		T=02	P=02
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 Configurationsof HBASE, Fundamentals of HBase, HBaseDataModel, Table and Row, Column Family and Column Qualifier, Cell and its Versioning, Categories of NoSQL Data Bases, KeyValue 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, ZooKeeperDistributed 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	**CC Spl I 402**	**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,	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 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	L=12	
		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	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**	6. https://www.socialbakers.com/blog/social-media-analytics-the-complete-guide 7. https://www.talkwalker.com/blog/social-media-analytics-guide 8. https://www.javatpoint.com/social-media-data-mining 9. https://searchbusinessanalytics.techtarget.com/definition/social-media-analytics
4	**Journals**	4. Journal of Digital and Social Media Marketing, COUNTRY: United Kingdom, PUBLISHER: Henry Stewart Publications, ISSN: 20500076, 20500084 5. Social Networks: An International Journal of Structural Analysis, ISSN: 0378-8733, Copyright © 2022 Elsevier B.V. All rights reserved 6. International Journal of Social Media and Online Communities (IJSMOC), ISSN: 2642-2247|EISSN: 2642-2255|DOI: 10.4018/IJSMOC
5	**Supplementary Reading**	4. geeksforgeeks 5. javapoint
6	**Practical Components**	1. Visualization of Social Media Data, Machine Learning model for information retrieval

Semester	**IV**	**Total Credit**	**4**
Course Code	**CC-Spl-II-402-(A)**	**Credit Pattern**	**L-45, T-6, P-9**
Course Title	**MANAGEMENT ACCOUNTING AND CONTROL SYSTEM**		
Course Outcomes : The students will able to learn			
1.	Apply concept of marginal costing for decision making		
2.	Analyze various operating and financial leverages to design capital structure		
3.	Evaluate various types of budgets for managerial decision making		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Introduction to Management Accounting**: Meaning and Scope of Management Accounting In the Context of Changing Business Environment, Human Resource Accounting and Inflation Accounting. Strategic Management Accounting, Introduction of Accounting Information for Transfer Pricing. Methods of Transfer Pricing.	**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 Costand Decision-	**L=12**	
		T=1	**P=2**

	Making		
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 Centers, 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 cash budget and flexible budget.
2. Case Studies on Each of the Aspects Mentioned in the Syllabus need to be discussed.
3. Video cases and Documentary Films relating to the syllabus to be exhibited in the class.

Learning Resources		
1	**Text Books**	1. Kapil Sheeba, "Financial Management" Pearson Publication House. 2. Jonathan Berk, Peter, "Financial Management" Pearson Publication House. 3. Sharan Vyuptakesh, "Fundamentals of Financial Management" Pearson Publication. 4. James C Van harne, "Financial Management & Policy" Pearson Publication House. 5. ICSI : Handbook on Mergers Amalgamations and takeovers.
2	**Reference Books**	1. V.K. Saxena And C.D. Vashisth: "Advanced Cost And Management Accounting", Sultan Chand And Sons, 6th Edition 2. M.Y. Khan And P.K. Jain, "Cost Accounting", Tata McGraw Hill, Edition 2000 3. Dr. M.K. Kole, "Human Resource Accounting, Institute Of Cost And Works, Accountants Of India", Edition 2000 4. N.K. Prasad, "Cost Accounting" 5. R.P.Rustagi, "Financial Management", PHI,10th edition. 6. Garrison, Managerial Accounting, Tata McGraw 7. Maheshwari, Financial Accounting, Vikas Publishing 8. Khan and Jain, Management Accounting, Tata McGraw 9. Ramchandran, Financial Accounting for Management, Tata McGraw 10. JawaharLal, Accounting For Management, Himalaya Publishing

		11. J.Madegowda, Accounting For Managers, Himalaya Publishing 12. M.N.Arora, "Cost and Management Accounting", Himalaya Publishing
3	**Websites**	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**	• Prabhandan: Indian Journal of Management • IUP Journals • ICSI Journals • Finance India • Indian Journal of Finance (New Sub.) • Journal of Accounting & Finance etc.
5	**Supplementary Reading**	• Financial Express • Economics Times • Business Standard • Times of India • Indian Express.
6	**Practical Component**	• Practical Problems on marginal costing and decision making • Practical Problems on leverages • Practical Problems on flexible budget and functional budgets • Financial statement analysis using Provess-IQ • Companies Financial Reports & Corporate case studies.

Semester	IV	Total Credit	4
Course Code	CC-Spl-II-402-(B)	Credit Pattern	L-45, T-6, P-9
Course Title	PERFORMANCE AND COMPENSATION MANAGEMENT		

Course Outcomes: Students will be able to;	
1.	Gain insights of various conceptual aspects of Compensation, Performance Management and competencies and related law to achieve organizational goals.
2.	Determine the performance/competency based compensation system for business excellence and solve various cases.
3	Designing the 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 Strategic Planning. 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= 4	P= 0
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= 4	P= 0
3	Compensation Management: Wage and Salary Administration: Calculation of Wage, Salary, Prerequisites, Compensation Packages, Cost of Living Index and Dearness Allowance, Designing and operating incentives, fringe and non- financial Benefits,. Job Evaluation:- Major	L	

	Decisions in Job Evaluation, Job Evaluation Methods, Laws related to wages and salaries:- Minimum Wages, Payment of Wages, Payment of Bonus.		
4	Employee Contributions: Pay For Performance (PFP): Competency Based Pay, Skill based Pay, Team based pay, Gain and Profit sharing Designing PFP Plans, Merit Pay/Variable Pay, Compensation Strategies for Special Groups. Executive compensation, cafeteria compensation,		

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 cla

Learning Resources		
1	Text Books	• Strategic Compensation, Joseph J. Martocchio, 3rd Edition, Prentice Hall, 2004. • Compensation Management in Knowledge based world, Richard I. Anderson, 10th edition, Pearson Education. • Compensation Management, ErSoniShyam Singh, Excel Books.
2	Reference books	• Compensation & Reward Management, BD Singh, 2ndedition, Excel books, 2012. • Compensation, Milkovich& Newman, 9th edition, 2017, Irwin/McGraw-Hill. • Compensation and Benefit Design, Bashker D. Biswas, FTPress, 2012. • An Introduction to Executive Compensation, Steven Balsam, Academic Press, 2002. • Industrial Relations and Labour Laws, Srivastava S.C., Vikas Publishing House Pvt. Ltd.,
3	Websites	4. www.ILO.org 5. www.labour.nic.in 6. www.labourstat.org
4	Journals	IOSR *Journal* of Humanities And Social Science 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.namanhr.com/services/competency-mapping/
6	Practical Component	• Students must prepare a comprehensive compensation plan to be offered to Executives.

		• 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	**CC-Spl-II-402-(C)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**SALES & DISTRIBUTION MANAGEMENT PAPER-IV**		

Course Objectives	
1	Students will conceptually understand concepts related to sales and distribution.
2	Students will learn strategies required for selling and distribution
3	Students will become aware of financial aspects of marketing.

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Course Outcomes: Students will be able to;	
1	Evaluate concepts related to sales & distribution.
2	Apply selling & distribution concepts & strategies for marketing.
3	Apply financial aspects of marketing.

Syllabus:

Unit Number	**Contents**	**Number of Sessions**	
1	**Unit I** **Sales management -** Meaning, Evaluation, Importance, Personal Selling, Qualities and responsibilities of sales manager. Types of sales organizations.Sales force management, recruitment, selection & training, structure, size, productivity. Motivation & compensation of salespeople	**L=11** **T=2**	**P=2**
	Unit II	**L=12**	

2	**Selling Process and Strategies -**Overview of selling process. Selling and buying Styles, selling skills, situations, selling process, sales presentation, Handling customer objections, Follow-u action. Sales territory, meaning, size, designing, sales quota, procedure for sales quota. Types of sales quota, Methods of setting quota.	**T=2**	**P=1**
3	**Unit III-** **Distribution Management -** Introduction-Concept of channel flows, Managing a channel design, Basics of warehouse/inventory/ transportation planning, Intermediaries: Channel Formats, Managing channel partner, channel conflict, Channel information systems, International Trends in Sales and Distribution, Distribution as a function of marketing. Strategies. Mass, selective, exclusive distribution. Push v/s pull approaches. Channel design mix decisions.	**L=11** **T=2**	**P=2**
4	**Unit IV** **Marketing Finance** Performance of Salesforce, work load method, forecasting, and product line accounting, Life cycle costing, Dropping product line, Return On Promotion, Selection of media, Launching, Profitability & Variance.	**L=11** **T=2**	**P=2**

Learning Resources		
1	**Text Books**	1.**Cherunallium & Francis -** *Industrial Marketing* 2.***Chunwalla S.A*** - Sales & Distribution Management
2	**Reference books**	1.**Keskar & Abhayankar** - Sales Management & personal selling 2.**Aaker David A** – Building Strong Brands – The Free Press, New York 3.**Keller K**. - Strategic Brand Management- Prentice - Hall India Kapferer Jean Noel – Strategic Brand Management – KoganPage London 4. **Keller, Parameswaran, Jacod**- Strategic Brand Managemnt- Pearson 5. **Chunawalla and Sethia** – Foundation of Advertising Theory and Practice- HP Publication 6. **Clow Baack** - Integrated Advertising, Promotion and Marketing Communication –Pearson Education 7.**Still and Cundiff** - Sales Management – 8.S A Chunawalla -Sales and distribution Management –Himalaya Publication 9.**Charles Futrell** - ABC ‘s of Selling 10.**Ramaswam and Namakumari** - Marketing Management –- Macmillan Publication

		11.**Services & Sales Marketing** - Zha S.M., Himalaya Publishing House 12.**Strategic Retail Management**- Indian Text Edition-Srini R.Srinivasan 13."**Retail Marketing Management"** – Person Education Ltd. – Ist Reprint India- David Gilbert 14.**Retailing Management**-Text and Cases-Swapna Pradhan The McGraw Hill Companies
5	**Supplementary Reading**	1.The Economic Times 2.Business Standard 3.Business TIMES
6	**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	CC-Spl-II-402-(D)	Credit Pattern	L-44, T-8, P-8
Course Title	AGRI-PRODUCTION AND SUPPLY CHAIN MANAGEMENT		

Course Out Comes: Students will be able to	
1	Analyze the factors influencing agricultural production and their supply chain
2	Adapt traditional and modern practices of farm management
3	Develop skills for agricultural supply-chain and logistics infrastructure management

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Fundamentals and Theories of Farm Management:** Scope Of Modern Agriculture, Special Features Of Agricultural And Industrial Production. Difference between Farm and Non-Farm Business Management; Farm system Theory, Theory of Farm Management by Objectives, Practices of Farm Management, Making Small farm more effective	L=11	
		T=2	P=2
2	**Farm Production Systems And Management Functions:** Peasants, Proprietorship, Cooperative Farming, Capital Farming, Corporate Farming, Land Tenure Systems And Agricultural Production Management, Farm Management Tools	L=11	
		T=2	P=2
3	**Farm Technology and Issues in Farm Management:** effects of New Technology, Management And Technology Change, Gains From Technological Improvements to Producers And Consumers, Mechanization And Automation, Green Houses; Size-Productivity Debate, Measurement Of Farm Efficiency, Irrigation Management, Production Planning-Specialization And Diversification.	L=11	
		T=2	P=2
4	**Introduction to Supply Chain and Logistics Management in Agri Business::** changing Business environment, SCM; Present need In agriculture, Conceptual model of SCM and Evolution of SCM, Approaches of SCM: Traditional and Modern, Elements in SCM, **Logistics Management**: History and Evolution of Logistics, elements of logistics: management, distribution management, distribution strategies, pool distribution; transport management, fleet management, service innovation, warehousing, packaging for logistics, third – party logistics(TPL/3PL), GPS technology	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. Robertson C.A. – An Introduction To Agricultural Production Economics And Farm Management – Tata Mcgraw Hill 2. Heady, Earl. O And Jensen Herald R. – Farm Management Economics – Prentice Hall 3. Barnard C.S. And Nix J.S. – Fam Planning And Control 4. Altekar RV, 2006, Supply Chain Management: concepts and cases, Prentice Hall of India
2	**Reference books**	1. Blake C.D. – Fundamentals Of Modern Agriculture 2. Sadhu And Singh – Fundamentals Of Agriculture 3. Agrawal A.N. – Indian Agriculture 4. Sharma A.N. And Sharma V.K. – Elements Of Farm Management 5. Reji D Nair – "Farm Management: Theory and Practice" – Concept Publishing Company Pvt. Ltd., 6. Warren G. F. – "Farm Management" – Arise Publishers and Distributors 7. Kahlan A. S. and Karan Singh – "Farm Management in India: Theory and Practice" – allied Publishers Pvt. Ltd., 8. Dhaka J.M. – "Economics of Agri Production and Farm Management" – Avishakar Publishers and Distributors
3	**Websites**	www.agriculture.gov.in/ www.manage.gov.in www.ica.coop/ www.apeda.gov.in www.fao.org/home/en/ www.worldbank.org http://indiagovernance.gov.in/docsearch.php?search=Agriculture&from_map=1&type=theme
4	**Journals**	Indian Journal of Agricultural Economics Indian Journal of Agricultural Marketing Journal of Agribusiness Rural Marketing
5	**Supplementary Reading**	http://www.nwccindia.com/agriculture-logistics/ agriculture and production management: Union Budget
6	**Practical Component**	• Make a field visit of a greenhouse farm to understand modern management activities on farm • Identify one successful/progressive farmer and conduct an interview to know various decisions taken by him/her to make successful

		farming • Visit various farm input selling centers and find out latest equipment and their benefits • Interact with various agro based and consumer goods producing companies and prepare report on their logistics issues while reaching rural urban markets

Semester	**IV**	**Total Credit**	**4**
Course Code	**CC Spl-II 402 E**	**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 Techniques of project financing and capital budgeting.
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. (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 Management Information System (PMIS): Need of Project Management Software, Project Report Writing.	**L= 11**	
		T= 2	**P= 2**

Learning Resources		
1	**Text Books**	1. Clifford F. Gray,Project Management: The Managerial Process, Sixth Edition, McGraw Hill Education 2. K. Nagrajan "Project Management", New age international publication. 3. Ramakrishna &Kamaraju, Essentials of Project Management, Prentice Hall India Learning Private Limited

2	**Reference books**	1. Jack Meredith, Samuel J. Mantel Jr. "Project Management- A Managerial Approach" John Wiley and Sons 2. Clifford F Gray, Erik W Larson, "Project Management-The Managerial Process" Tata Mcgraw-Hill Publishing Co Ltd 3. Robert K Wyzoubi& Rudd Acgary , "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. John M Nicholas "Project Management For Business And Technology" Prentice Hall Of India Pvt Ltd 2. James P Lewis "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	**CC-Spl-II-402-(F)**	**Credit Pattern**	**L-44, T-8, P-8**
Course Title	**SOFTWARE ENGINEERING AND IT PROJECT MANAGEMENT**		
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

urse Outcomes: Students Will Be Able To;	
1	plain Needs For Software Specifications Also They Can Classify Different Types Of Software Requirements And Their Gathering Techniques
2	stify The Role Of SDLC In Software Project Development And They Can Evaluate The Importance Of Software Engineering In PLC.
3	miliar With The Different Methods And Techniques Used For Project Management..
4	scuss 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-Orianted 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 Resources		
1	**Text Books**	2. Fundamentals Of Software Engineering – Roger Pressman 3. Information Technology Project Management – Jack Marchewka – Wiley India Edition

2	**Reference books**	3. Fundamentals Of Software Engineering - Rajib Mall Ghezzi, Jazayeri Stephen H. Khan 4. Software Requirements And Estimation - Fenton, Ptleeger McGraw Hill 5. Project Management For Software Development - Jaico 6. IT Project Estimation – Paul Coombs. – Cambridge 7. Information System Project Management - John McManus, Trevor Wood- Happer – Pearson. 8. 6. Software Project Management – Bob Hughs , Mike Cotterell – Tata McGrawhill
3	**Website**	4. www.tutorialspoint.com 5. www.guru99.com 6. www.examupdates.in
4	**Journals**	2. International Journal of Scientific Computing 3. International Journal of Statistics & Management Systems 4. Chartered Secretary
5	**Supplementary Reading**	2. Business Line 3. Current affairs in news papers 4. 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

Semester	**IV**	**Total Credit**	**4**
Course Code	**DSE Spl II 401**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**ANALYTICS IN FUNCTIONAL AREAS OF MANAGEMENT (LAB BASED PAPER)**		
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**	**Number of Sessions**

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.	**L=5**	
		T= 5	**P= 5**
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.	**L= 3**	
		T= 2	**P= 10**
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	**L= 3**	
		T= 2	**P= 10**
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.	**L= 3**	
		T= 2	**P= 10**

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

	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 Credit**	**4**
Course Code	**DSE Spl-II-402(A)**	**Credit Pattern**	**L-45, T-6, P-9**
Course Title	**INVESTMENT AND PORTFOLIO MANAGEMENT**		
Course Outcomes: The students will able to learn			
1	Analyze the relationship between security analysis and market portfolio		
2	Evaluate the performance of portfolios		
3	Design various investment avenues as a small and corporate investor.		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Introduction to Investment:** Investment – Basics of Investment – Investment, Speculation and Gambling – Investment Categories – Investment avenues – Non marketable Financial Assets – Money Market Instruments – Bond/Debentures – Equity Shares – Schemes of LIC – Mutual Funds (History and Types)– Financial Derivatives(Derivative Market, Instruments in derivative market, Calculation of pay offs from	**L= 11**	
		T= 2	**P= 1**

	options) – Real Assets – Real Estate – Art – antiques and others. **Introduction to Stock Market:** Primary and secondary market, regulation of Stock Market- Companies Act, SEBI, Securities contract regulation Act		
2	**Fundamental Security Analysis:**EIC And CIE Approach. Technical Analysis – Technical Tools - The Dow Theory – Primary Trend – The secondary Trend – Minor Trends –Charts. Efficient Market Theory – Basic Concepts – Random-Walk Theory – Weak Form of EMH – Semi-strong Form – Strong Form – The Essence of the Theory – Market Inefficiencies.	**L= 11**	
		T= 1	**P= 3**
3	**Portfolio Management:** Meaning of Portfolio, Steps of Portfolio Management. Code of Conduct for portfolio Manager. Portfolio Analysis – Portfolio and Single asset Returns and Risk – Mean Variance Criterion – covariance – Beta (simple problems) – Portfolio Markowitz Model – simple Diversification – Risk and Return with Different correlation. Portfolio Risk and return.	**L= 12**	
		T= 2	**P= 3**
4	**Portfolio Evaluation:**Asset Pricing Model Portfolio Evaluation – Capital Asset Pricing Model (CAPM) – Security Market Line – Assumptions – Arbitrage Pricing Model (APT) – Portfolio Performance Models – Sharpe's Performance Index – Treynor's Performance Index – Jensen's Performance Index. Bond, terminologies used in Bond, Valuation and Immunization of Bond	**L= 11**	
		T= 1	**P= 2**

Note:

1. Portfolio Risk and return with two and three securities
2. Bond Valuation, Duration and Immunization
3. Mutual fund rankings with Sharpe and treynor
4. Problems of Pay off on option (Derivative)

Learning Resources		
1.	**Text Books**	1. Kapil Sheeba, "Financial Management" Pearson Publication House. 2. Jonathan Berk, Peter, "Financial Management" Pearson Publication House. 3. Sharan Vyuptakesh, "Fundamentals of Financial Management" Pearson Publication. 4. James C Van harne, "Financial Management & Policy" Pearson Publication House. 5. ICSI: Handbook on Mergers Amalgamations and takeovers.
2.	**Reference Books**	1. **Punithavathy Pandian,** SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**,** Vikas Publications Pvt. Ltd, New Delhi. 2001. 2. **Kevin .S**, SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT, PHI, Delhi, 2011

		3. **Yogesh Maheswari,** INVESTMENT MANAGEMENT, PHI, Delhi, 2011 4. **Bhalla V K,** INVESTMENT MANAGEMENT: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**,** S Chand, New Delhi, 2009 5. **Prasanna Chandra**, PORTFOLIO MANAGEMET, Tata McGraw Hill, New Delhi, 2008. 6. R.P.Rustagi, "Financial Management", PHI,10th edition.
3.	**Websites**	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**	• Prabhandan: Indian Journal of Management • IUP Journals • ICSI Journals • Finance India • Indian Journal of Finance (New Sub.) • Journal of Accounting & Finance etc.
5.	**Supplementary Reading**	• Financial Express • Economics Times • Business Standard • Times of India • Indian Express.
6.	**Practical Component**	• Practical Problems on Portfolio Risk and return with two and three securities • Practical Problems on Bond Valuation, Duration and Immunization • Practical Problems on Mutual fund rankings with Sharpe and treynor • Practical Problems on Problems of Pay off on option (Derivative) • Financial statement analysis using Provess-IQ • Companies Financial Reports & Corporate case studies.

Semester	IV	Total Credit	4
Course Code	DSE Spl-II-402(B)	Credit Pattern	L-45, T-8, P-7
Course Title	TALENT AND HUMAN CAPITAL MANAGEMENT		

Course Objectives	
1	To develop **understanding** of contemporary issues in Human Capital Management.
2	To increase **awareness** about Talent and Human Capital Management and ability to work both independently and collaboratively.
3	To enable students to **critique** human resource management issues across levels and recommend managerial interventions to solve organizational problems.

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	Summarize Cafeteria Approach in Compensation
4	Critically evaluate emerging trends in Talent and Human Capital Management.

Syllabus:

Unit Number	Contents	Number of Sessions
1	Talent Management: Acquiring talent, Retaining talent, Nurturing talent, Developing and Recognizing talent. Competency Management: Iceberg Model of Competencies, Types of competencies, Objectives of Competency Mapping, Benefits of Competency approach, Competency Mapping Methodology. 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	Cafeteria Approach in Compensation, Concept of HR Balanced Scorecard. Employee empowerment- concept, objectives, Pre-requisites, types, Process, benefits, limitations. 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	Learning Organization- Concept, Learning culture, HRD in Learning Organization, Role of HRM in Learning organization. Quality circle- constitution and process, Quality of Worklife- objectives, importance, determinants of QWL.	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 Aguinis, Performance Management - Pearson Education,2007. **4.** Lance A. Berger &DorothyR. 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	**DSE Spl-II-402(C)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**INTEGRATED MARKETING COMMUNICATION PAPER-IV**		

Course Objectives	
1	Students will become familiar with concepts, theories of IMC.
2	Students will understand techniques in IMC.
3	Students will be able to utilize various tools for IMC strategies.
Course Outcomes: Students will be able to;	
1	Explain various integrated marketing communication tools & techniques processes
2	Design marketing communication plans
3	Evaluate cost elements of marketing communication
4	Apply social media for marketing communication

Syllabus:

Unit Number	**Contents**	**Number of Sessions**	
1	**Unit I** **IMC & Brand Management –** Conceptual overview of IMC, Introduction to IMC tools – Advertising, sales promotion, publicity, public relations, and event sponsorship; Brand Management- Meaning and Definition – Brand Identity System – Types of Branding - Branding Decisions - Brand Extension – Multi- Brand Portfolios - Branding and Positioning– Concept of Brand Equity. Measuring Brand Equity.	**L=11** **T=2**	**P=2**
2	**Unit II** **Media Management-** Elements of the Communications Mix - Media Mix - Types of Media- Media Selection- Planning and Buying –Scheduling media objectives, Media channel strategy, audience research, tactics and the media schedule, Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation adoption model, information processing model, The standard learning Hierarchy, Attribution Hierarchy, The Elaboration Likelihood (ELM)	**L=12** **T=2**	**P=1**

	model, The Foote, Cone and Belding (FCB) Model Strategy - Cost and Ability – Matching Media and Market - Media Ad. Effectiveness.		
3	**Unit III** **Advertising Management-** Meaning and Definition – The Five of Advertising Advertising's role in the promotional mix, Theories of advertising effects, Advertising campaign planning, Function of Advertising Agencies – Advertising effectiveness - DAGMAR Approach in Advertising Push vs pull strategy, advertising budgets- Measuring advertising effectiveness(Pre-testing, Copy testing,), Tracking, Advertising return on investment (ROI),Careers, Advertising for special markets or products,	**L=11** **T=2**	**P=2**
4	**Unit IV** **Digital Media & Advertising**: Digital Media, Evolution of Technology, Convergence of Digital Media, E- Commerce and Digital Media, Advertising on Digital Media, Social Media, Mobile Advertising, Electronic-PR, Advertising Laws & Ethics:, Intellectual Property Rights,.	**L=11** **T=2**	**P=2**

Learning Resources		
1	**Text Books**	1.Kotler, Kelller, – Marketing Management: A South Asian Perspective – Peasrson Pentice Hall
2	**Reference books**	1Aaker David A – Building Strong Brands – The Free Press, New York 2.**Keller K**. - Strategic Brand Management- Prentice - Hall India 3. **Kapferer Jean Noel** – Strategic Brand Management – Kogan Page London4**Keller, Parameswaran, Jacod- Strategic Brand Managemnt- Pearson** 4.**Chunawalla and Sethia** – Foundation of Advertising Theory and Practice- HP Publication 5.**Clow Baack** - Integrated Advertising, Promotion and Marketing Communication –Pearson Education 6.**Kenneth E.C. , Donald Baack** - Integrated Advertising, Promotion and Marketing Communications 7.**George Belch and Michel Belch** - Advertising and Promotion- Tata McGraw-Hill edition 8.**Bly the Jim** – Marketing Communication – Prentice Hall

		9. **U C Mathur** - Advertising Management- - New Age International 10. **Arunkumar, M Meenakshi**- Marketing Management-Vikas Publication
4	**Journals**	1.Indian Journal of Marketing 2.IUP Journal of Business Strategy 3.Current Contents In Management Marketing
5	**Supplementary Reading**	The Economic Times Business Standard
6	**Practical Components**	1.Conduct Group activity based on all units 2. Case discussion on subject related contents 3. Take different situational activities e.g. - Business Games to the students. 4.Library assignments based on all units

Semester	**IV**	**Total Credits:**	**4**
Course Code	**DSE Spl-II-402-(D)**	**Credit Pattern**	**C – 44, P = 2 T = 2**
Course Title	**AGRI-COMMODITY MARKETS AND AGRI-BUSINESS**		
Course Out Comes: Students will be able to			
1	Discuss commodity markets for various agricultural produce		
2	Analyze commodity trading practices in India and other countries		
3	Appraise the Agri-commodities Markets and Agribusiness		

Syllabus:

Unit Number	Contents	Number of Sessions	
1	**Commodity Markets and Commodity Risk: An Overview:** Introduction Commodity markets, marketing of agricultural commodities, physical market operations, Understanding risk, managing risk, evolution of commodity derivatives, evolution of commodity derivatives in India	**L= 11**	
		T= 2	**P= 2**
2	**Commodity Derivatives:** Meaning, Types and classification, pricing derivatives, derivative markets and its participants, economic importance	**L= 11**	
		T= 2	**P= 2**
3	**Commodity Exchanges:** Introduction, commodity exchanges around the world and in India, Electronic Spot exchange, regulation of commodity markets	**L= 11**	
		T= 2	**P= 2**
4	**Variety in commodity Markets:** designing commodity controls, weather derivatives, freight derivatives, electricity derivatives, catastrophe derivatives, carbon derivatives, currency derivatives and property derivatives	**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**	• Purcell WD, 1991, Agricultural Futures and Options: Principles and Strategies, Macmillan Publications
2	**Reference books**	1. Kaufman PJ, 1986, The Concise Handbook of Futures Markets, John Willy and Sons, 2. Wasendorf RR and Mc Cafferty, 1993, All About Commodities from the Inside Out, Mc Grow hill
3	**Websites**	www.indiabudget.nic.in www.commodityonline.com
4	**Journals**	Indian Journal of Agricultural Economics Indian Journal of Agricultural Marketing Journal of Agribusiness Indian Journal of Finance Rural Marketing Vikalpa
5	**Supplementary Reading**	e-NAM website www.mcxindia.com
6	**Practical Component**	• Identify the various countries standards of commodity trading and prepare a report • Collect commodity data and analyze product wise trend and forecaste • Visit nearby commodity trading agency and conduct an interview with trading executive and submit report

Semester	IV	Total Credit	4
Course Code	DSE-Spl-II-401-(E)	Credit Pattern	L-44, T-8, P-8
Course Title	MODERN APPROACHES TO 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	Describe different concepts related to Quality Management.
2	Apply relevant practices of Quality Management in the organization.
3	Analyze issues involved in Quality Management.
4	Evaluate the recent developments in Quality Management

Unit Number	Contents	Number of Sessions	
1	**INTRODUCTION TO QUALITY MANAGEMENT** Definitions of Quality, Dimensions of Quality, Meaning of Quality Management, Evolution of Quality Management, Quality Assurance, Quality of Design, Quality of Conformance, Cost of Quality: Cost of Poor Quality, Cost of Internal & External Failure, Appraisal Cost, Prevention Cost. Quality Function Deployment.	**L=11**	
		T=2	**P=2**
2	**STATISTICAL QUALITY CONTROL** Meaning And Significance of Statistical Quality Control, Need of Accepting 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	**TOTAL QUALITY MANAGEMENT& SIX SIGMA** Total Quality Management: Concept of TQM, Evolution of TQM, Principles of TQM, TQM Model, Implementation of TQM (PDCA Cycle), Training for Quality Management. Six Sigma: Introduction to Six Sigma, Evolution of Six Sigma, DMAIC Model for Implementing Six Sigma, Six Sigma Impact Measurement. Quality Circles.	**L=11**	
		T=2	**P=2**

4	**SERVICE QUALITY MANAGEMENT& QUALITY MANAGEMENT AWARDS** Introduction to Service Quality, The Service Quality GAP Model, Measuring& Improving Service Quality, Quality System Standards, Bureau of Indian Standards, International Organization of Standardization, ISO 9000-2000, Deming Prize, Malcolm Baldrige National Quality Award, Rajiv Gandhi National Quality Award, The Golden Peacock National Quality Award.	**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. Amitva Mitra, Fundamentals of Quality Control and Improvement, Wiley 2. R. Panneerselvam & P. Sivasankaran, Quality Management, Prentice Hall India Learning Private Limited 3. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 4. M. Mahajan, Statistical Quality Control, Dhanpat Rai& Co.
2	**Reference books**	1. Kanishka Bwdi ,"Quality Management", Oxford University Press 2. David Hoyle, 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, Cenage 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	**DSE-Spl-II-402(F)**	**Credit Pattern**	**L-45, T-8, P-7**
Course Title	**APPLIED DATA SCIENCE AND BUSINESS ANALYTICS USING R**		

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
urse Outcomes: Students will be able to;	
1	plain needs for software specifications also they can classify different types of software requirements and their gathering techniques
2	stify the role of SDLC in Software Project Development and they can evaluate the importance of Software Engineering in PLC.
3	miliar with the different methods and techniques used for project management..
4	scuss the parameters of the software project's success and failures.

Unit Number	Contents	Number of Sessions	
1	Introduction to Data Science – Data Science Process, Concept of Big Data, Business Intelligence, Concept of Data mining, uses of data mining, Concept of data warehousing, OLAP, OLTP, A Process Model for Data Mining, Analytics for managers, Modules and Model Building, hard coding and soft coding in excel	**L= 11**	
		T= 2	**P= 2**
2	Introduction to Business Analytics, Prerequisites for effective business analytics, Applications of Business Analytics, ETL Process, Role of statistics in Analytics, Types of Digital Data, ETL Process, Introduction to R and its environments, Installing R, The R community, The R environment, Installing R, Variables in R, Working with R, R Packages	**L= 12**	
		T= 2	**P= 1**
3	Single-mode Data Structure-Create, Attributes, subscripting, Multi-mode data structure- Create, Attributes, subscripting, Decision making Structures, Predictive analytics, Emergence of Predictive Analytics, Applications of Predictive Analytics	**L= 11**	
		T= 2	**P= 2**
4	Basic Visualization-Pie Chart, Bar Chart, Line Chart, Q-Q Plot, Box-and-Whisker plot, Bubble plot, Role of statistics in Analytics, Basic Statistics using R, Time-series Models, Decision Tree, Clustering using R, Machine learning for text data, Building web applications with Shiny project	**L=11**	
		T= 2	**P= 2**

Note:

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

Learning Resources		
1	**Text Books**	4. Fundamentals Of Software Engineering – Roger Pressman 5. Information Technology Project Management – Jack Marchewka – Wiley India Edition

2	**Reference books**	9. Fundamentals Of Software Engineering - Rajib Mall Ghezzi, Jazayeri Stephen H. Khan 10. Software Requirements And Estimation - Fenton, Ptleeger McGraw Hill 11. Project Management For Software Development - Jaico 12. IT Project Estimation – Paul Coombs. – Cambridge 13. Information System Project Management - John McManus, Trevor Wood- Happer – Pearson. 14. Software Project Management – Bob Hughs, Mike Cotterell – Tata McGraw-Hill
3	**Website**	7. www.tutorialspoint.com 8. www.guru99.com 9. www.examupdates.in
4	**Journals**	5. International Journal of Scientific Computing 6. International Journal of Statistics & Management Systems 7. Chartered Secretary
5	**Supplementary Reading**	5. Business Line 6. Current affairs in newspapers 7. Information system Audit Reports from computer consultancies
6	**Practical Component**	3. Visit any computer consultant firms and discuss and understand about Software engineering process 4. Case study about Information system Project Planning

Semester	**IV**	**Total Credit**	**2**
Course Code	**AECC-401**	**Credit Pattern**	**L-22, T-8**
Course Title	**Employability Skills**		

Course Objectives	
1	Develop effective communication skills
3	Develop broad career plans

Course Outcomes	
After completion of this course the student will be able to:	
1	Match the job requirements and skill sets.
3	Evaluate the employment market.

Unit Number	**Contents**
1	**Personality**, **Interpersonal and employability skills and Emotional Intelligence: (15)** Basic Interaction Skills –Within family, Society. Interpersonal and intrapersonal skills. Types of skills; Decision Making, Articulation Skills, Emotional Intelligence Human relations examples through role – play and cases
2	**Leadership Skills, Team work, Conflict Management ,Interview Skills, Time Management and Stress Management: (15)** **Leadership skills** – Leadership in groups, coaching, strategic management **Team work & Team building** - Characteristics of an effective team, Essentials of an effective team, Evolution Team. Activities – Team trust, team shape up. **Conflict Management** – Types of conflicts, how to cope with them Small cases including role – plays will be used as teaching methodology. **Interview skills –** Preparation pre-during and post interview Resume writing, self grooming for the interviews. Introduction, Types of interviews, process of interview, Preparation of the candidate, preparation of the interviewer, common interview questions. **Time Management –** Importance, Prioritizing tasks, Personal Goal Setting – SMART goals, delegation, Time management in meetings, barriers to time management, identifying and handling time consuming tasks. Activity – Games, role-play, case studies. **Stress Management** – Understanding stress, Types of stress, symptoms, causes of stress. Managing stress, Techniques of managing stress. Activity – questionnaire to find out the level of stress.

Learning Resources		
1	Reference Books	Business Communication – UrmilaRai& S M. Rai, 12/e, Himalaya Publishing House, 2010. Enhancing Soft Skills – Prof.Dipali Biswas, 1/e, Shroff Publishers & Distributors Pvt. Ltd., 2009. The ACE of Soft Skills – Gopalaswamy Ramesh &Mahadevan Ramesh, 3/e, Pearson Eductaion, 2012.Successful Career, Soft Skills and Business English – Varanasi Bhaskara Rao & Y. Kameswari, 1/e, BS Publications, 2010. Perrsonality Development and Soft Skills - Barun K. Mitra Emotional Intelligence by Daniel Goleman