

**E.M.G. YADAVA WOMEN'S COLLEGE, MADURAI – 625 014.**

*(An Autonomous Institution – Affiliated to Madurai Kamaraj University)*

Re-accredited (**3<sup>rd</sup> Cycle**) with Grade **A+** & **CGPA 3.51** by NAAC

## **DEPARTMENT OF COMMERCE**



**TANSICHE-CBCS with OBE**

**MASTER OF COMMERCE  
(Computer Applications)**

**PROGRAMME CODE - PC**

**COURSE STRUCTURE**

(w.e.f. 2023 – 2024 Batch onwards)

## **E.M.G.YADAVA WOMEN'S COLLEGE, MADURAI-14**

(An Autonomous Institution – Affiliated to Madurai Kamaraj University)

Re-accredited (3<sup>rd</sup> Cycle) with Grade A<sup>+</sup> with CGPA 3.51by NAAC

**TANSICHE CBCS with OBE**

### **DEPARTMENT OF COMMERCE M.Com with Computer Applications (w.e.f. 2023- 2024 onwards)**

#### **VISION**

1. To empower the students with the knowledge and problem solving skills and make them to realize their potential and assure them to cope with the competitiveness globally.
2. To envision the Department of Commerce as an ICMA Centre with excellence and create more Chartered Accountants.

#### **MISSION**

1. To empower the students to become innovative entrepreneurs, to contribute to the success of business and betterment to the society.
2. To prepare students for higher education in Commerce, Management and Business studies.
3. To inculcate the use of information and communication technology in the Teaching Learning Process.
4. To establish internship with industry, business, professionals and government so as to enhance the experience and gain knowledge of the students.
5. To develop the students to become socially responsible and globally employable through our Course Structure.

#### **Programme Educational Objectives (PEOs) M.Com (CA)**

S.No	On completion of the Programme, the student will be able to
PEO1	To become experts in Accounting Methodology and enhance Professionalism through innovative practices to be tactful to face unforeseen demand and change situational roles in industry and academics.
PEO2	Stimulate the student's capabilities towards innovation and creativity in problem solving skills in business modeling with societal impact.
PEO3	To adopt innovative opportunities, latest technologies and develop new businesses. Educate and to deal with the complex issues of the business community in particular and society at large.
PEO4	Communicate effectively by reading with insight, writing effective reports, speaking independently, listening to give effective response, and comprehending & designing in documentation.
PEO5	Uphold and improve the students technical and managerial competencies through career and professional learning Viz., Chartered Accountants(CA), Cost & Management Accountants (CMA), Company Secretary (CS) and advanced degree programmes in the field of Commerce.

**Programme Outcomes (POs) with Graduate Attributes**

Sl.No	Graduate Attributes	On completion of the Programme, the student will be able to
PO1	<b>Problem Solving Skill &amp; Decision Making Skill</b>	Apply knowledge of Management Theories and Human Resource Practices to solve business problems through research in global context. Foster analytical and critical thinking abilities to enable decision-making based on data
PO2	<b>Employability Skill &amp; Entrepreneurial Skill</b>	Develop business acumen to enhance employability skills in the competitive environment. Equip with skills and competencies to become an entrepreneur
PO3	<b>Contribution to Society</b>	Succeed in career endeavours and contribute significantly to society.
PO4	<b>Communication Skill</b>	Develop communication, managerial and interpersonal skills.
PO5	<b>Individual and Team Leadership Skill</b>	Lead oneself and the team to achieve organizational goals.
PO6	<b>Lifelong learning</b>	Acquire knowledge and skills, including “learning how to learn”

**Programme Specific Outcomes (PSOs) with Graduate Attributes**

Sl.No	Graduate Attributes	On completion of the Programme, the student will be able to
PSO1	<b>Entrepreneurship</b>	Exhibit entrepreneurial ability by enhancing critical thinking, problem solving, decision making and leadership skills that will facilitate startups and high potential organisations.
PSO2	<b>Research and Development</b>	Design and implement accounting, marketing, finance and HR systems and practices grounded in research that comply with mercantile laws, leading the organisation towards growth and development.
PSO3	<b>Contribution to the Society</b>	Contribution to the Society
PSO4	<b>Placement</b>	Demonstrate respectful engagement with others’ ideas, behaviors, beliefs and apply in diverse frames of decisions and actions.
PSO5	<b>Contribution to Business World</b>	Facilitate production of employable, ethical and innovative professionals to sustain in the dynamic business world.

**Eligibility for Admission:** Pass in B.Com.,

**Duration of the Course:**

The students shall undergo prescribed courses of study for the period of two academic years under CBCS semester pattern with Outcome Based Education.

**Medium of Instruction:** English

**System:**TANSICHE - Choice Based Credit System with Outcome Based Education.

### Nature of the Course

Courses are classified according to the following nature

1. Knowledge & Skill
2. Employability Oriented
3. Entrepreneurship Oriented

### Outcome Based Education (OBE) & Assessment

Students understanding must be built on and assessed for wide range of learning activities, which includes different approaches and are classified along several bases, such as

#### 1. Based on purpose:

- Formative (Internal tests, Assignment, Seminar, Quiz, Documentation, Case lets, ICT based Assignment, Mini Projects administered during the learning process)
- Summative (Evaluation of students learning at the end of instructional unit)

#### 2. Based on Domain knowledge: (Post Graduate Up to K5 Levels)

- Assessment through K1, K2,K3, K4 & K5

#### Evaluation

Continuous Internal Assessment Test (CIA) : 25 Marks

Summative Examination : 75 Marks

Total : 100 Marks

#### CIA-Continuous Internal Assessment: 25 Marks

Components	Marks
Test (Average of two tests) (Conduct for 120 marks and converted into 12 marks)	12
Creative Assignment	3
Assignment	5
Seminar	5
<b>Total</b>	<b>25</b>

- Centralized system of Internal Assessment Tests
- There will be a two Internal Assessment Tests
- Duration of Internal Assessment Test I and II will be 2 1/2 hours.

- Students shall write retest on the genuine grounds if they are absent in either Test I & Test II with the approval of Head of the Department.

### Question Paper Pattern for Continuous Internal Assessment Test I and Test II

Section	Marks
A – Multiple Choice Questions (8x1Mark)	8
B – Short Answer (6 x 2 Marks)	12
C – Either Or type (4/8 x 5 Marks)	20
D – Open Choice type (2/4 x 10 Marks)	20
<b>Total</b>	<b>60</b>

Conducted for 120 marks and converted into 15 marks

### Question Paper Pattern for Summative Examination

Section	Marks
A – Multiple Choice Questions without choice (10x 1Mark)	10
B – Short Answer Questions without choice (5 x 2 Marks)	10
C – Either Or type (5/10 X 5Marks)	25
D – Open Choice type(3out of 5 X 10Marks)	30
<b>Total</b>	<b>75</b>

- In respect of external examinations passing minimum is **45%** for Post Graduate Courses and in total, aggregate of **50%**.
- Latest amendments and revisions as per UGC and TANSCHÉ Norms are taken into consideration in curriculum preparation.

**Distribution of Marks in % with K levels CIAI, II & External Assessment**

Blooms Taxonomy	Internal Assessment		External Assessment
	I	II	
Knowledge (K1)	8 %	8 %	5 %
Understanding (K2)	8 %	8 %	14 %
Apply (K3)	24 %	24 %	27%
Analyze (K4)	30 %	30 %	27%
Evaluate (K5)	30%	30%	27%

**BLUE PRINT FOR INTERNAL ASSESSMENT-I**  
**Articulation Mapping –K Levels with Course Learning Outcomes(CLOs)**

Sl.No	CLOs	K-Level	Section A		Section B		Section C (Either orType)	Section D (Open Choice)	Total
			MCQs (NoChoice)		Short Answers (NoChoice)				
			No. of Questions	K-Level	No. of Questions	K-Level			
1	CLO1	Upto K5	1	K1	1	K	1(K3) 1(K5)	1(K4)	
			2	K2	1	1 K 3			
2	CLO2	Upto K5	2	K1	1	K	1(K3) (Each set of questions must be in the samelevel )	1(K4) 1(K5)	
			1	K2	1	1 K 2			
3.	CLO3	Upto K5	1	K1	1	K	1(K4)	1(K5)	
			1	K2	1	2 K 3			
No. of Questions to be asked			8		6		8	4	26
No.of Questions to Beanswered			8		6		4	2	20
Marks for each question			1		2		5	10	
Total Marks for each section			8		12		40	40	100

**BLUE PRINT FOR INTERNAL ASSESSMENT– II**  
**Articulation Mapping –K Levels with Course Learning Outcomes (CLOs)**

S	CLO	K-Level	Section A		Section B		Section C (Either or Type)	Section D (Open Choice)	T
			MCQs (No Choice)		Short Answers (No Choice)				
			No. of Questions	K-Level	No. of Questions	K-Level			
1	CLO3	Upto K5	1 2	K 1 K 2	1 1	K 1 K 3	1(K3) 1(K5)	1(K4)	
2	CLO4	Upto K5	2 1	K 1 K 2	1 1	K 1 K 2	1(K3) (Each set of questions must be in The same level)	1(K4) 1(K5)	
3.	CLO5	Upto K5	1 1	K1 K2	1 1	K 2 K 3	1(K4)	1(K5)	
No. of Questions to be asked			8		6		8	4	26
No. of Questions to Be answered			8		6		4	2	20
Marks for each question			1		2		5	10	
Total Marks for each section			8		1 2		40	40	100

Distribution of Marks with choice K Levels CIA I – CIA and II-CIA

CIA	K Levels	Section-AMCQ (No choice)	Section –B (Short Answer (No choice)	Section- C (Either orType)	Section-D (OpenChoice)	Total Marks	% of Marks
I	K1	4	4			8	8
	K2	4	4			8	12
	K3		4	20		24	40
	K4			10	20	30	40
	K5			10	20	30	20
	<b>Marks</b>	<b>8</b>	<b>12</b>	<b>40</b>	<b>40</b>	<b>100</b>	<b>100</b>
II	K1	4	4			8	8
	K2	4	4			8	12
	K3		4	20		24	40
	K4			10	20	30	40
	K5			10	20	30	20
	<b>Marks</b>	<b>8</b>	<b>12</b>	<b>40</b>	<b>40</b>	<b>100</b>	<b>100</b>

Articulation Mapping –K Levels with Course Learning Outcomes (CLOs) for Internal Assessment (SEC)

SL.No	CLOs	K-Level	Section A		Section B		Section C	Section D	Total
			MCQs (No choice)		Short Answers (No choice)		(Either/or Type)	(open choice)	
			No. of Questions	K-Level	No. of Questions	K-Level			
1	CLO1	Upto K4	2	K1			2(K3&K3)	1(K3)	
2	CLO2	Upto K4	2	K1			2(K3&K3)	1(K4)	
3	CLO3	Upto K4			2	K2	2(K4&K4)	1(K4)	
4	CLO4	Upto K5			2	K2	2(K5&K5)	1(K5)	
5	CLO5	Upto K5			2	K2		1(K5)	
No. of Questions to beasked			4		3		8	5	20
No. of Questions to be answered			4		3		4	2	13
Marks for each question			1		2		5	10	
Total Marks for each section			4		6		20	20	50 (Marks)



**Distribution of Section-wise Marks with K Levels for Internal Assessment (SEC)**

K Levels	Section A (MCQ'S) (No choice)	Section B (Short Answer) (No choice)	Section C (Either or Type)	Section D (Open choice)	Total Marks	% of Marks
K1	4				4	4
K2		6			6	6
K3			2 0	10	30	30
K4			1 0	20	30	30
K5			1 0	20	30	30
<b>Total Marks</b>	<b>4</b>	<b>6</b>	<b>40</b>	<b>50</b>	<b>100</b>	

K1–Remembering and recalling facts with specific answers.

K2- Basic understanding effects and stating main ideas with general answers.

K3-Application oriented Solving Problems, Justifying the statement and deriving inferences

K4- Examining, analyzing, presentation and make inferences with evidences.

K5-Evaluating, making Judgments based on criteria

**Articulation Mapping –K Levels with Course Learning Outcomes(CLOs) for External Assessment**

SLN	CLO	K-Level	Section A		Section B		Section C (Either/or Type)	Section D (open choice)	Total
			MCQs (No choice)		Short Answers (No choice)				
			No. of Questi ons	K- Level	No. of Questi ons	K- Level			
1	CLO1	Upto K4	2	K1&K 2	1	K1	2(K2&K2)	1(K3)	
2	CLO2	Upto K4	2	K1&K 2	1	K2	2(K3&K3)	1(K4)	
3	CLO3	Upto K4	2	K1&K 2	1	K3	2(K3&K3)	1(K4)	
4	CLO4	Upto K5	2	K1&K 2	1	K4	2(K4 &K4)	1(K5)	
5	CLO5	Upto K5	2	K1&K 2	1	K5	2(K5 &K5)	1(K5)	
No. of Questions to be asked			10		5		1 0	5	30
No. of Questions to be answered			10		5		5	3	23
Marks for each question			1		2		5	10	
Total Marks for eachsection			10		10		2 5	30	75 (Marks)

**Distribution of Section-wise Marks with K Levels for External Assessment**

<b>K Levels</b>	<b>Section A (MCQ'S) (No choice)</b>	<b>Section B (Short Answer) (No choice)</b>	<b>Section C (Either or Type)</b>	<b>Section D (Open Choice)</b>	<b>Total Marks</b>	<b>% of Marks</b>
K1	5	2	-	-	7	5
K2	5	2	1 0	-	17	14
K3	-	2	2 0	10	32	27
K4	-	2	1 0	20	32	27
K5	-	2	1 0	20	32	27
<b>Total Marks</b>	<b>10</b>	<b>10</b>	<b>50</b>	<b>50</b>	<b>120</b>	<b>100</b>

K1-Remembering and recalling facts with specific answers.

K2- Basic understanding of facts and stating main ideas with general answers.

K3-Application oriented Solving Problems Justifying the statement and deriving inferences

K4- Examining, analyzing, presentation and make inferences with evidences.

K5-Evaluating, making Judgments based on criteria

**E.M.G.YADAVA WOMEN'S COLLEGE, MADURAI-14**  
 (An Autonomous Institution – Affiliated to Madurai Kamaraj University)  
 Re-accredited (3<sup>rd</sup> Cycle) with Grade A<sup>+</sup> with CGPA 3.51 by NAAC

**DEPARTMENT OF COMMERCE – M.Com (CA)**  
**TANSCHÉ-CBCS with OBE**  
**COURSE STRUCTURE – SEMESTER WISE**  
 (w.e.f. 2023 – 2024 Batch onwards)

Semester	PART	COURSE CODE	COURSE TITLE	HOURS	EXAMINATION (HRS)	MAX.MARKS			CREDITS
						CIA	EXT	Total	
III	III	23OPCCA31	Core VII - Taxation	6	3	25	75	100	5
		23OPCCA32	Core VIII - Research Methodology	6	3	25	75	100	5
		23OPCCA3P	Core IX - Computers in Business- Lab	6	3	40	60	100	5
		23OPCCA34	Core X - International Business	6	3	25	75	100	4
		<b>DSEC-V</b>	3	3	25	75	100	3	
	IV	23OPCCASEC3P	<b>SEC- II</b> Python Lab	3	3	40	60	100	2
		23OPCCAIN3	Internship/Industrial Activity	-	-	-	-	-	2
		<b>Total</b>	<b>30</b>					<b>26</b>	
IV	III	23OPCCA41	Core XI- Corporate and Economic Laws	6	3	25	75	100	5
		23OPCCA42	Core XII- Human Resource Analytics	6	3	25	75	100	5
		23OPCCAPR4	Project with Viva	10	3	20	80	100	7
		<b>DSEC - VI</b>	4	3	25	75	100	3	
	IV	23OPCCASEC4P	<b>SEC-III</b> Web Designing Lab	4	3	40	60	100	2
	V	23OP5EA4	Extension Activity	-	-	-	-	-	1
		<b>Total</b>	<b>30</b>					<b>23</b>	

DSEC – Discipline Specific Elective Course  
 SEC – Skill Enhancement Course

**Semester III:**

**DSEC–V (Choose any one)**

1. Applied Data Analytics and Machine Learning - 23OPCCADSE3A
2. Python and R for Data Analytics - 23OPCCADSE3B

**Semester IV:**

**DSEC–VI (Choose any one)**

1. Cyber and Data Security - 23OPCCADSE4A
2. E-Commerce - 23OPCCADSE4B

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Core-VII	23OPCCA31	Taxation	5	6	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To identify deductions from gross total income and computation of income for different classes of assesses
2. To understand the procedure for filing of returns and tax planning
3. To analyse the structure on international business taxation
4. To assess Goods and Services Tax and filing GST returns
5. To compute customs duty as per Customs Act

**Course Content:****UNIT : I - Assessment of persons**

Tax Exemptions for Agricultural Income - Deductions to be made in computing total income (80G, 80GGB & 80GGC, 80IA, 80IAB, 80IAC, 80IB, 80IBA, 80ID, 80IE, 80JJA, 80JJAA, 80LA, 80M, 80P, 80PA) – Assessment of Firms, AOP, BOI, Company and Co-operative society.

**UNIT : II - Tax Returns and Tax planning**

Return of income: Statutory obligation, Return Forms, Time for filing of return, Revised return, Modified return–Assessment -Tax Deducted at Source - Advance payment of Tax: Persons liable to pay, Due date, Computation - Payment in pursuance of order of Assessing Officer, Consequences on non-payment. – Tax planning, Tax avoidance and Tax evasion - Tax planning and specific management decisions: Make or buy, Own or lease, Retain or replace, Shut down or continue.

**UNIT : III - International business taxation**

International business taxation - Taxation of Non-resident - Double taxation relief - Transfer pricing and other anti-avoidance measure - Application and interpretation of tax treaties - (Double taxation avoidance agreement - DTAA) - Equalization levy.

**UNIT : IV - Goods and Services Tax**

Goods and Services Tax: GST Act, 2017 - Registration – Procedure for registration under Schedule III – Amendment of registration – Rates of Tax of IGST, CGST, SGST/UGTST- Assessment of GST- Self-assessment – Provisional assessment – Scrutiny of returns – Assessment of non filers of returns – Assessment of unregistered persons – Assessment in certain special cases – Tax Invoice – Credit

and Debit Notes – Payment of Tax – Input Tax Credit - Anti profiteering -- Filing of Returns- Penalties – Prosecution – Appeal and Revision.

### UNIT : V - Customs Act, 1962

Customs Act, 1962: Important Definitions – Basics – Importance of Customs Duty – Constitutional authority for levy of Customs Duty – Types of Customs Duty – Prohibition of Importation and Exportation of goods – Valuation of goods for Customs Duty – Transaction Value – Assessable Value – Computation of Assessable Value and Customs Duty.

#### Books for study:

1. VinodSinghania and KapilSinghania, Direct Taxes Law & Practice Professional Edition, Taxmann Publications, New Delhi
2. Mehrotra H.C. and Goyal S.P, Income Tax including Tax Planning & Management, SahityaBhawan Publications, Agra
3. Sekar G, “Direct Taxes” - A Ready Refresher, Sitaraman C.& Co Pvt.Ltd., Chennai.
4. Balachandran V, (2021) Textbook of GST and Customs Law, Sultan Chand and Sons, New Delhi
5. VandanaBangar andYogendraBangar, “Comprehensive Guide to Taxation”(Vol.I and II),AadhyaPrakashan, Prayagraj(UP).

#### Books for reference:

1. Sha R. G. and Usha Devi N.,(2022) “Income Tax” (Direct and Indirect Tax), HimalayaPublishing House,Mumbai.
2. GirishAhuja and Ravi Gupta, “Practical Approach to Direct and Indirect Taxes: Containing Income Tax and GST”, Wolters Kluwer India Private Limited
3. Swetha Jain, GST Law & Practice, Taxmann Publishers Pvt.Ltd, Chennai.
4. Daty V.S., “GST - Input Tax Credit”,Taxmann Publishers, Chennai.
5. AnuragPandy,“Law & Practices of GST and Service Tax”- Sumedha Publication House, New Delhi.

#### Web references:

1. [https://www.icsi.edu/media/webmodules/16112021\\_Advance\\_Tax\\_Laws.pdf](https://www.icsi.edu/media/webmodules/16112021_Advance_Tax_Laws.pdf)
2. [https://www.icsi.edu/media/webmodules/Final\\_Direct\\_Tax\\_Law\\_17\\_12\\_2020.pdf](https://www.icsi.edu/media/webmodules/Final_Direct_Tax_Law_17_12_2020.pdf)
3. [https://www.icsi.edu/media/webmodules/TL\\_Final\\_pdf\\_25102021.pdf](https://www.icsi.edu/media/webmodules/TL_Final_pdf_25102021.pdf)

**Pedagogy:**Chalk and Talk, Seminar, Quiz, Assignment, Workshop

**Rationale for nature of Course:** Students Gain a better knowledge on the important provisions of GST .

**Activities to be given**

1. To provide an insight into practical aspects and apply the provision of GST law to various situation.
2. To Appreciate the registration procedure relating to GST

**Question pattern: Theory: 40 %; Problems: 60 %**

**Course Learning Outcomes(CLO)**

**On completion of the course, behind the students will be able to:**

	Course Outcomes	Knowledge Level
CLO1	Estimate taxable income	Upto K4
CLO2	File returns and plan taxes	Upto K4
CLO3	Illustrate the nuances of international business taxation	Upto K4
CLO4	Apply the provisions of GST	Upto K5
CLO5	Assess the provisions of Customs Act	Upto K5

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented – Solving Problems

K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	3	1	3	3	3
CLO2	3	3	2	3	3	3
CLO3	2	2	1	2	2	2
CLO4	2	2	1	2	2	2
CLO5	3	1	2	3	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 105 hrs**

UNI TS	DESCRIPTION	No. of Hours	Mode of Teaching
I	Tax Exemptions for Agricultural Income - Deductions to be made in computing total income (80G, 80GGB & 80GGC, 80IA, 80IAB, 80IAC, 80IB, 80IBA, 80ID, 80IE, 80JJA, 80JJAA, 80LA, 80M, 80P, 80PA) – Assessment of Firms, AOP, BOI, Company and Co-operative society.	18	Chalk & Talk , Spot Test, Demo Coding

II	<p><b>Tax Returns and Tax planning</b></p> <p>Return of income: Statutory obligation, Return Forms, Time for filing of return, Revised return, Modified return–Assessment -Tax Deducted at Source - Advance payment of Tax: Persons liable to pay, Due date, Computation - Payment in pursuance of order of Assessing Officer, Consequences on non-payment. – Tax planning, Tax avoidance and Tax evasion - Tax planning and specific management decisions: Make or buy, Own or lease, Retain or replace, Shut down or continue.</p>	18	Chalk & Talk , Demo Coding
III	<p><b>International business taxation</b></p> <p>International business taxation - Taxation of Non-resident - Double taxation relief - Transfer pricing and other anti-avoidance measure - Application and interpretation of tax treaties - (Double taxation avoidance agreement - DTAA) - Equalization levy.</p>	18	Chalk & Talk, Spot Test Demo Coding
IV	<p><b>Goods and Services Tax</b></p> <p>Goods and Services Tax: GST Act, 2017 - Registration – Procedure for registration under Schedule III – Amendment of registration – Rates of Tax of IGST, CGST, SGST/UGTST- Assessment of GST- Self-assessment – Provisional assessment – Scrutiny of returns – Assessment of non filers of returns – Assessment of unregistered persons – Assessment in certain special cases – Tax Invoice – Credit and Debit Notes – Payment of Tax – Input Tax Credit - Anti profiteering – Filing of Returns- Penalties – Prosecution – Appeal and Revision.</p>	18	Chalk & Talk Demo Coding Spot Test
V	<p><b>Customs Act, 1962</b></p> <p>Customs Act, 1962: Important Definitions – Basics – Importance of Customs Duty – Constitutional authority for levy of Customs Duty – Types of Customs Duty – Prohibition of Importation and Exportation of goods – Valuation of goods for Customs Duty – Transaction Value – Assessable Value – Computation of Assessable Value and Customs Duty.</p>	18	Chalk & Talk, Spot Test Demo Coding Students Seminar

Course Designer Mrs.Jeyapriya



II M.Com(CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Core-VIII	23OPCCA32	Research Methodology	5	6	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the fundamentals of research
2. To construct theoretical design and formulate hypotheses
3. To evaluate the data collection techniques
4. To perform parametric and non-parametric tests
5. To enhance report writing skills and develop ethical conduct in research

**Course Content:****UNIT : I - Introduction to Research Methodology**

Research: Definition – Objectives – Motivations for research – Types of research – Maintaining objectivity in research – Criteria of good research – Applications of research in business - Formulating a research problem – Literature Review – Reasons for review – Reference management tools - Identification of research gap – Framing of objectives.

**UNIT : II - Hypothesis Testing and Research Design**

Hypothesis – Formulation of hypothesis – Testing of hypothesis – Type I and Type II errors – Research design – Types of research design - Methods of data collection: Census, Sample survey, Case study – Sampling: Steps in sampling design, Methods of sampling – Testing of reliability and validity – Sampling errors.

**UNIT : III - Data Collection**

Variable: Meaning and types - Techniques of data collection – Primary data: Meaning, Advantages and limitations – Techniques: Interview, Schedule, Questionnaire, Observation – Secondary Data: Meaning and sources.

**UNIT : IV - Data Analysis**

Data Analysis – Uni-variate Analysis: Percentile, Mean, Median, Mode, Standard deviation, Range, Minimum, Maximum, Independent sample t-test – Bi-variate analysis: Simple correlation, Simple Regression, Chi-square, Paired samples t-test, ANOVA, Man-Whitney test – Wilcoxon signed rank test – Kruskal Wallis test (Simple problems) Multi Variate Analysis: Multiple Correlation, Multiple Regression, Factor Analysis, Friedman's test, Cluster analysis, Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM), Multiple Discriminant Analysis.

## UNIT : V - Preparation of Research Report

Report preparation – Guidelines and precautions for interpretation – Steps in Report writing - Style of research reports (APA, MLA, Anderson, Harvard) – Mechanics of report writing – Ethics in Research – Avoiding plagiarism – Plagiarism checker tools – Funding agencies for business research.

### Books for study:

1. Tripathi, (2014) “Research Methodology in Management and Social Sciences”. Sultan Chand & Sons, New Delhi.
2. Kothari C.R and GauravGarg, (2020) “Research Methodology” – Methods and Techniques. New Age International (P) Limited, New Delhi.
3. Krishnaswami and Ranganathan, (2011) “Methodology of Research in Social Sciences”, Himalaya Publishing House, Mumbai.

### Books for study:

1. Tripathi, (2014) “Research Methodology in Management and Social Sciences”. Sultan Chand & Sons, New Delhi.
2. Kothari C.R and GauravGarg, (2020) “Research Methodology” – Methods and Techniques. New Age International (P) Limited, New Delhi.
3. Krishnaswami and Ranganathan, (2011) “Methodology of Research in Social Sciences”, Himalaya Publishing House, Mumbai.

### Web references:

1. [https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture\\_notes/health\\_science\\_students/ln\\_research\\_method\\_final.pdf](https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_research_method_final.pdf)
2. <https://ccsuniversity.ac.in/bridge-library/pdf/MPhil%20Stats%20Research%20Methodology-Part1.pdf>
3. <https://prog.lmu.edu.ng/colleges\CMS/document/books/EIE%20510%20LECTURE%20NOTES%20first.pdf>
4. <https://www.statisticssolutions.com/academic-research-consulting/data-analysis-plan/>

### Pedagogy :

Chalk and Talk, PPT, group discussion, OHP presentations, quiz, on the spot test

**Activities to be Given :**To collect project report

**Question pattern: Theory: 80%; Problems: 20%**

### Course Learning Outcomes(CLO)

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Recall the research concepts and recognise the research problem	Upto K4
CLO2	Formulate research hypothesis and determine the sample size	Upto K4
CLO3	Select appropriate method for data collection	Upto K4

CLO4	Make inferences based on statistical tests	Upto K5
CLO5	Draft a research report avoiding plagiarism	Upto K5

- K1- Remembering and recalling facts with specific answers
- K2- Basic understanding of facts and stating main ideas with general answers
- K3– Application oriented – Solving Problems
- K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	3	3	2	2	3
CLO2	3	3	3	2	2	3
CLO3	3	3	3	2	2	3
CLO4	3	3	3	2	2	3
CLO5	3	3	3	2	2	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 105 hrs**

UNI TS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<b>Introduction to Research Methodology</b> Research: Definition – Objectives – Motivations for research – Types of research – Maintaining objectivity in research – Criteria of good research – Applications of research in business - Formulating a research problem – Literature Review – Reasons for review – Reference management tools - Identification of research gap – Framing of objectives.	18	Chalk & Talk , Spot Test, Demo Coding
II	<b>Hypothesis Testing and Research Design</b> Hypothesis – Formulation of hypothesis – Testing of hypothesis – Type I and Type II errors – Research design – Types of research design - Methods of data collection: Census, Sample survey, Case study – Sampling: Steps in sampling design, Methods of sampling – Testing of reliability and validity – Sampling errors.	18	Chalk & Talk , Demo Coding

III	<p><b>Data Collection</b></p> <p>Variable: Meaning and types - Techniques of data collection – Primary data: Meaning, Advantages and limitations – Techniques: Interview, Schedule, Questionnaire, Observation – Secondary Data: Meaning and sources.</p>	18	Chalk & Talk, Spot Test Demo Coding
IV	<p><b>Data Analysis</b></p> <p>Data Analysis – Uni-variate Analysis: Percentile, Mean, Median, Mode, Standard deviation, Range, Minimum, Maximum, Independent sample t-test – Bi-variate analysis: Simple correlation, Simple Regression, Chi-square, Paired samples t-test, ANOVA, Man-Whitney test – Wilcoxon signed rank test – Kruskal Wallis test (Simple problems)</p> <p>Multi Variate Analysis: Multiple Correlation, Multiple Regression, Factor Analysis, Friedman’s test, Cluster analysis, Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM), Multiple Discriminant Analysis.</p>	18	Chalk & Talk Demo Coding Spot Test
V	<p><b>Preparation of Research Report</b></p> <p>Report preparation – Guidelines and precautions for interpretation – Steps in Report writing - Style of research reports (APA, MLA, Anderson, Harvard) – Mechanics of report writing – Ethics in Research – Avoiding plagiarism – Plagiarism checker tools – Funding agencies for business research.</p>	18	Chalk & Talk, Spot Test Demo Coding Students Seminar

Course Designer : Mrs.D.Reena

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Core-IX	23OPCCA3P	Computers in Business Lab	5	6	40	60	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the fundamentals of SPSS
2. To compare the values obtained in t-test and ANOVA
3. To perform regression and non-parametric tests
4. To create company, groups and ledgers and obtain financial statements using Tally Prime
5. To understand inventory management and account for goods and services tax

**Course Content:****UNIT : I - Introduction to SPSS**

Opening a data file in SPSS – Variable view – Data view – Entering data into the data editor – Saving the data file– Table creation – Descriptive statistics: Percentile values, Measures of central tendency, Measures of dispersion, Distribution – Cronbach's Alpha test – Charts and graphs - Editing and copying SPSS output.

**UNIT : II - Parametric Tests in SPSS**

Compare means: One-sample t-test, Independent Samples t-test, Paired-samples t-test and One-way ANOVA, Two-way ANOVA - Correlation: Bi-variate, Partial and Multiple. Simple linear regression.

**UNIT : III - Non-parametric Tests in SPSS**

Chi-square test - Mann Whitney's test for independent samples – Wilcoxon matched pairs sample test– Friedman's test – Wilcoxon signed rank test – Kruskal Wallis test

**UNIT : IV - Introduction to Tally Prime**

Tally Prime: Introduction – Starting Tally Prime – Creation of a Company - Selecting company - Shutting a company - Altering company– Creating Accounting groups and ledgers – Vouchers – Practical problems for a new and existing business and not-for profit organisation. Accounting reports: Introduction – Displaying Trial balance, Profit and Loss Account, Balance sheet, Day book, Purchase register, Sales register, Cashflow/Funds flow and ratio analysis – Practical problems.

**UNIT : V - Inventory and GST in Tally Prime**

Inventory: Introduction to Inventory Masters – Creation of stock group – Creation of Godown – Creation of unit of measurement – Creation of stock

item – Entering inventory details in Accounting vouchers – Practical problems. GST: Introduction – Enabling GST – Defining tax details – Entries in Accounting vouchers – View invoice report – Practical problems.

### Books for study:

1. SundaraPandian.P, Muthulakshmi. S &Vijayakumar, T (2022), Research Methodology &Applications of SPSS in Social Science Research, Sultan Chand & Sons, New Delhi
2. Morgan George. A, Barrett C Karen, Leech L Nancy and Gloeckner Gene W (2019), IBM SPSS for Introductory Statistics, Routledge, 6<sup>th</sup> Edition, U.K
3. Official Guide to Financial Accounting using TallyPrime (2021), BPB Publication, Delhi
4. Chheda Rajesh, U (2020), Learn Tally Prime, Ane Books, 4<sup>th</sup> Edition, New Delhi

### Books for reference:

1. Kulas John, Renata Garcia Prieto Palacios Roji, Smith Adams (2021), IBM SPSS Essentials: Managing and Analysing Social Sciences Data, 2<sup>nd</sup> Edition, John Wiley & Sons Inc., New York
2. Rajathi. A, Chandran. P (2011), SPSS for You, MJP Publishers, Chennai
3. SangwanRakesh (2022), Learn Tally Prime in English, Ascend Prime Publication, Pilani
4. LodhaRoshan (2022), Tally Prime with GST Accounting, Law Point Publication, Kolkata

### Web references:

1. <https://www.spss-tutorials.com/basics/>
2. <https://www.tallyclub.in/>
3. <https://tallysolutions.com/business-guides/inventory-management-in-tally-erp9/>

### Pedagogy :

Chalk and Talk, PPT, group discussion, OHP presentations, quiz, on the spot test

**Rationale for Nature of Course:** Will be able to acquire knowledge about both banking and insurance

**Activities to be Given :** Different types of Indian Insurance market and Digital Transaction

**Question Pattern: 100% Practical**

### Course Learning Outcomes(CLO)

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Create data file in SPSS	Upto K4
CLO2	ExamineMeans of samples	Upto K4
CLO3	Conduct non-parametric tests	Upto K4
CLO4	Create a company, form groups and get automated financial statements	Upto K5
CLO5	Automate inventory management and GST filing	Upto K5

- K1- Remembering and recalling facts with specific answers  
 K2- Basic understanding of facts and stating main ideas with general answers  
 K3- Application oriented – Solving Problems  
 K4 –Examining, analyzing, presentation and make inferences with evidences

### Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	2	3	2	2	3	3
CLO2	3	3	2	2	3	3
CLO3	3	3	2	2	3	3
CLO4	3	3	2	3	3	3
CLO5	3	3	2	3	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

### LESSON PLAN : 90 hrs

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<b>Introduction to SPSS</b> Opening a data file in SPSS – Variable view – Data view – Entering data into the data editor – Saving the data file– Table creation – Descriptive statistics: Percentile values, Measures of central tendency, Measures of dispersion, Distribution – Cronbach’s Alpha test – Charts and graphs - Editing and copying SPSS output.	18	Chalk & Talk, Spot Test, Demo Coding
II	<b>Parametric Tests in SPSS</b> Compare means: One-sample t-test, Independent Samples t-test, Paired-samples t-test and One-way ANOVA, Two-way ANOVA - Correlation: Bivariate, Partial and Multiple. Simple linear regression.	18	Chalk & Talk, Spot Test, Demo Coding
III	<b>Non-parametric Tests in SPSS</b> Chi-square test - Mann Whitney’s test for independent samples – Wilcoxon matched pairs sample test– Friedman’s test – Wilcoxon signed rank test – Kruskal Wallis test	18	Chalk & Talk, Spot Test, Demo Coding

IV	<p><b>Introduction to Tally Prime</b></p> <p>Tally Prime: Introduction – Starting Tally Prime – Creation of a Company - Selecting company - Shutting a company - Altering company– Creating Accounting groups and ledgers – Vouchers – Practical problems for a new and existing business and not-for profit organisation. Accounting reports: Introduction – Displaying Trial balance, Profit and Loss Account, Balance sheet, Day book, Purchase register, Sales register, Cashflow/Funds flow and ratio analysis – Practical problems.</p>	18	Chalk & Talk, Spot Test, Demo Coding
V	<p><b>Inventory and GST in Tally Prime</b></p> <p>Inventory: Introduction to Inventory Masters – Creation of stock group – Creation of Godown – Creation of unit of measurement – Creation of stock item – Entering inventory details in Accounting vouchers – Practical problems. GST: Introduction – Enabling GST – Defining tax details – Entries in Accounting vouchers – View invoice report – Practical problems.</p>	18	Chalk & Talk, Spot Test, Demo Coding

Course Designer : Ms.A.Nazima.



II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Core- X	23OPCCA34	International Business	4	6	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the concepts of International Business and International Business Environment
2. To analyse the different theories of International Business.
3. To understand the legal procedures involved in International Business.
4. To evaluate the different types of economic integrations.
5. To analyse the operations of MNCs through real case assessment.

**Course Content:****UNIT : I - Introduction to International business**

International Business - Meaning, Nature, Scope and Importance- Stages of internationalization of Business-Methods of entry into foreign markets: Licensing- Franchising- Joint Ventures-Strategic Alliances- Subsidiaries and Acquisitions - Framework for analyzing international business environment- Domestic, Foreign and Global Environment-Recent Developments in International Business.

**UNIT : II - Theoretical Foundations of International business**

Theoretical Foundations of International Business: Theory of Mercantilism- Theory of Absolute and Comparative Cost Advantage - Haberler's Theory of Opportunity Cost- Heckscher- Ohlin Theory Market Imperfections Approach-Product Life Cycle Approach - Transaction Cost Approach- Dunning's Eclectic Theory of International Production.

**UNIT : III - Legal framework of International Business**

Legal framework of International Business: Nature and complexities: Code and common laws and their implications to Business-International Business contract - Legal provisions, Payment terms.

**UNIT : IV - Multi-Lateral Agreements and Institutions**

Multi-Lateral Agreements and Institutions: Economic Integration – Forms: Free Trade Area, Customs Union, Common Market and Economic Union-Regional Blocks: Developed and Developing Countries-NAFTA- EU-SAARC, ASEAN - BRICS - OPEC- Promotional role played by IMF-World Bank and its affiliates- IFC, MIGA and ICSID – ADB -Regulatory role played by WTO and UNCTAD.

**UNIT : V - Multinational Companies (MNCs) and Host Countries**

Multinational Companies (MNCs) and Host Countries: MNCs – Nature and characteristics.

Decision Making-Intra Firm Trade and Transfer Pricing – Technology Transfer-Employment and labour relations- Management Practices- Host Country Government Policies-International Business and Developing countries: Motives of MNC operations in Developing Countries (Discuss case studies)-Challenges posed by MNCs.

**Books for study:**

1. Charles W.L. Hill, International Business: Competing in the Global Market Place, McGraw Hill, New York
2. Charles W. L. Hill, Chow How Wee & Krishna Udayasankar, International Business: An Asian Perspective- McGraw Hill, New York
3. Rakesh Mohan Joshi (2009), International Business, Oxford University Press

**Books for reference:**

1. Donald Ball, Michael Geringer, Michael Minor & Jeanne McNett, International Business: The Challenge of Global Competition, McGraw Hill Education, New York
2. Alan M Rugman & Simon Collinson, International Business: Pearson Education, Singapore

**Web references:**

1. <https://www.icsi.edu/media/webmodules/publications/9.5%20International%20Business.pdf>
2. [https://ebooks.lpude.in/commerce/mcom/term\\_3/DCOM501\\_INTERNATIONAL\\_BUSINESS.pdf](https://ebooks.lpude.in/commerce/mcom/term_3/DCOM501_INTERNATIONAL_BUSINESS.pdf)
3. <https://www.shobhituniversity.ac.in/pdf/econtent/International-Business-Unit-1-Dr-Neha-Yajurvedi.pdf>

**Pedagogy:** Chalk and Talk, Quiz, Assignment, Seminar.

**Rationale for nature of Course:** Can be acquiring the knowledge of Business Management.

**Activities to be given**

1. Practice of using the planning and organization of different companies.
2. To executes the motivation and direction of the business.

**Course Learning Outcomes(CLO)**

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Recall the concepts of International Business and International Business Environment	Upto K4
CLO2	Analyze different theories of International Business	Upto K4
CLO3	Evaluate the legal procedures involved in International Business	Upto K4
CLO4	Explain the different types of economic integrations.	Upto K5
CLO5	Identify the operations of MNCs through real case assessment	Upto K5

- K1- Remembering and recalling facts with specific answers
- K2- Basic understanding of facts and stating main ideas with general answers
- K3- Application oriented – Solving Problems
- K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	1	3	1	2	2	2
CLO2	3	2	3	1	3	3
CLO3	2	1	2	3	2	2
CLO4	1	3	1	2	1	1
CLO5	3	2	2	2	2	2

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 75 hrs**

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<p><b>Introduction to International business</b>                      International Business - Meaning, Nature, Scope and Importance- Stages of internationalization of Business-Methods of entry into foreign markets: Licensing- Franchising- Joint Ventures-Strategic Alliances- Subsidiaries and Acquisitions - Framework for analyzing international business environment- Domestic, Foreign and Global Environment-Recent Developments in International Business.</p>	18	Chalk & Talk , Spot Test, Demo Coding
II	<p><b>Theoretical Foundations of International business</b>                      Theoretical Foundations of International Business: Theory of Mercantilism- Theory of Absolute and Comparative Cost Advantage - Haberler’s Theory of Opportunity Cost- Heckscher- Ohlin Theory Market Imperfections Approach-Product Life Cycle Approach - Transaction Cost Approach- Dunning’s Eclectic Theory of International Production.</p>	18	Chalk & Talk , Spot Test, Demo Coding
III	<p><b>Legal framework of International Business</b>                      Legal framework of International Business: Nature and complexities: Code and common laws and their implications to Business-International Business contract - Legal provisions, Payment terms.</p>	18	Chalk & Talk , Spot Test, Demo Coding

IV	<p><b>Multi-Lateral Agreements and Institutions</b></p> <p>Multi-Lateral Agreements and Institutions: Economic Integration – Forms: Free Trade Area, Customs Union, Common Market and Economic Union-Regional Blocks: Developed and Developing Countries-NAFTA- EU-SAARC, ASEAN - BRICS - OPEC-Promotional role played by IMF-World Bank and its affiliates- IFC, MIGA and ICSID – ADB - Regulatory role played by WTO and UNCTAD.</p>	18	Chalk & Talk , Spot Test, Demo Coding
V	<p><b>Multinational Companies (MNCs) and Host Countries</b></p> <p>Multinational Companies (MNCs) and Host Countries: MNCs – Nature and characteristics. Decision Making-Intra Firm Trade and Transfer Pricing – Technology Transfer- Employment and labour relations- Management Practices- Host Country Government Policies-International Business and Developing countries: Motives of MNC operations in Developing Countries (Discuss case studies)-Challenges posed by MNCs.</p>	18	Chalk & Talk , Spot Test, Demo Coding

Course Designer : Mrs.S.Jeyasakthi

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Elective- V A	23OPCCADSE3A	<b>Applied Data Analytics and Machine Learning</b>	3	3	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand basics of data analysis in Python
2. To interpret the data analysis pipeline via usage of NumPy and Pandas.
3. To examine methods of working with textual and time series data
4. To investigate machine learning techniques with Scikit-Learn
5. To understand advanced machine learning techniques

**Course Content:****UNIT : I - Introduction to Data Analysis with Python**

Introduction to Data Analysis with Python: Data Analysis - Understanding Nature of Data -Data Analysis Process - Quantitative and Qualitative Data Analysis-Introduction to Python - PyPI, SciPy.Getting started with Python - Explore the first data set - The Jupyter notebook.

**UNIT : II - Working across the entire data analysis pipeline**

Working across the entire data analysis pipeline, - Getting, cleaning and manipulating the data - Numpy library – Ndarray - Basic Operation- Shape Manipulation - Array Manipulation - General Concepts - Pandas Library- Introduction to Pandas Data Structures - Index functionalities - Operations between Data Structures - Interacting with Databases.

**UNIT : III - Working with textual and time-series data**

Working with textual data - Working with time-series data - Databases in Python - Statistical data analysis.

**UNIT : IV - Basics of machine learning with Scikit-learn**

Basics of machine learning with Scikit-learn - Introduction to machine learning -Fitting a first model - Cost functions and outliers - Linear regressions - Gradient descent - Feature engineering.

**UNIT : V - Advanced machine learning techniques**

Advanced machine learning techniques: K-nearest neighbours - Logistic regressions -

Decision trees and SVMs - Clustering and Dimensionality reduction - Introduction to deep learning.

**Books for study:**

1. Fabio Nelli (2018), “Python Data Analytics with Pandas, Numpy and Matplotlib”, 2<sup>nd</sup> Edition, Apress, New York.
2. Paul Barry, Shroff (2011), “Head First Python”, 1<sup>st</sup> Edition, O’Reilly Media, USA.
3. Mark Lutz, Shroff (2011), “Programming Python”, 4<sup>th</sup> Edition, O’Reilly Media, USA.

**Books for reference:**

1. Wes McKinney, “Python for Data Analysis”, 2<sup>nd</sup> Edition, O’Reilly publication, USA.
2. Martin C Brown (2001), “Python the Complete Reference”, McGraw Hill, USA.
3. Mark Lutz, Shroff (2010), “Python Pocket Reference”, 3<sup>rd</sup> Edition, O’Reilly Media, USA.
4. Ashok Namdev Kamthane, Amit Ashok Kamthane (2018), “Problem Solving and Python Programming”, McGraw Hill Education Pvt. Ltd. Noida.

**Web references:**

1. <https://pandas.pydata.org/pandas-docs/version/1.4.4/pandas.pdf>
2. [https://mrcet.com/downloads/digital\\_notes/CSE/IV%20Year/MACHINE%20LEARNING\(R17A0534\).pdf](https://mrcet.com/downloads/digital_notes/CSE/IV%20Year/MACHINE%20LEARNING(R17A0534).pdf)

**Pedagogy :**

Chalk and Talk , PowerPoint Presentation , Group Discussion , Student Seminar, Spot Test, Assignments , Quiz.

**Rationale for Nature of Course:** Quickly analyzing large amounts of data from different sources, in many different formats and types

**Activities to be Given :** Practice to Create Data Collection, Group Discussion, Seminar.

**Course Learning Outcomes(CLO)**

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Demonstrate data analysis with apt knowledge in foundational concepts of Python	Upto K4
CLO2	Demonstrate getting, cleaning and manipulation of data using NumPy and Pandas	Upto K4
CLO3	Use Python for Statistical Data analysis	Upto K4
CLO4	Use Scikit-Learn for advanced Data analysis	Upto K5
CLO5	Explain advanced machine learning techniques	Upto K5

- K1- Remembering and recalling facts with specific answers
- K2- Basic understanding of facts and stating main ideas with general answers
- K3– Application oriented – Solving Problems
- K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	1	2	1	3	3	1
CLO2	1	2	1	3	3	1
CLO3	1	2	1	3	3	1
CLO4	1	2	1	3	3	1
CLO5	1	2	1	3	3	1

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 75 hrs**

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<p><b>Introduction to Data Analysis with Python</b></p> <p>Introduction to Data Analysis with Python: Data Analysis - Understanding Nature of Data -Data Analysis Process - Quantitative and Qualitative Data Analysis-Introduction to Python - PyPI, SciPy.Getting started with Python - Explore the first data set - The Jupyter notebook.</p>	12	Chalk & Talk , Spot Test, Demo Coding
II	<p><b>Working across the entire data analysis pipeline</b></p> <p>Working across the entire data analysis pipeline, - Getting, cleaning and manipulating the data - Numpy library – Ndarray - Basic Operation- Shape Manipulation - Array Manipulation - General Concepts - Pandas Library- Introduction to Pandas Data Structures - Index functionalities - Operations between Data Structures - Interacting with Databases.</p>	12	Chalk & Talk , Spot Test, Demo Coding
III	<p><b>Working with textual and time-series data</b></p> <p>Working with textual data - Working with time-series data - Databases in Python - Statistical data analysis.</p>	12	Chalk & Talk , Spot Test, Demo Coding
IV	<p><b>Basics of machine learning with Scikit-learn</b></p> <p>Basics of machine learning with Scikit-learn - Introduction to machine learning -Fitting a first model - Cost functions and outliers - Linear regressions - Gradient descent - Feature engineering.</p>	12	Chalk & Talk , Spot Test, Demo Coding

V	<b>Advanced machine learning techniques</b> Advanced machine learning techniques: K-nearest neighbours - Logistic regressions - Decision trees and SVMs - Clustering and Dimensionality reduction - Introduction to deep learning.	12	Chalk & Talk , Spot Test, Demo Coding
---	---	----	---------------------------------------

Course Designer : Ms.A.Josephine



II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	Elective – V	23OPCCADSE3 B	Python and R for Data Analytics	3	3	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the basics of Python
2. To learn Bio Python
3. To understand the features of R
4. To learn data handling
5. To identify the use of bio conductor

**Course Content:****UNIT : I - Introduction to Python**

Installation of Python - Variables - Types - Strings - Jupiter notebooks - Objects - Functions - Control structures - Operators - User-Defined Functions - Data Structures - List, Tuple - Dictionary.

**UNIT : II - Numpy and Scipy**

Numpy library – Ndarray - Basic Operations - Conditions and Boolean Arrays - Shape Manipulation - Array Manipulation - General Concepts - Structured Arrays - Reading and Writing Array on Files - SciPy Library for Statistics: linalg sub package - Normality- Correlation - t-Test- Chi-Test- ANOVA.

**UNIT : III - R Programming**

Introduction to R - Installing R - Features of R - Reserved words - Operators, -Strings - Data types and operations - Basic Data types – Vectors - List, Matrices – Arrays - Factors - Data frames - Flow control - Decision making - Loop Control Statements -Loops.

**UNIT : IV - Visualisation using R**

R as a Deluxe Calculator - Creating Objects and Assigning Values - Graphics: Simple Plotting - Advanced Plotting - Using Color in Plots - Using Subscripts and Superscripts in Graph Labels - Interactive Graphics - Saving Graphical Output - Loops.

**UNIT : V - Data Handling**

Feature selection models - Data Preprocessing - Normalization - Methods - Data reduction - Data sampling - Heat maps - Classification: Based on analogy - rules - probabilities -

statistics and prediction with R.

**Books for study:**

1. Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2<sup>nd</sup> Edition, Apress, New York.
2. Wes McKinney, "Python for Data Analysis", 2<sup>nd</sup> Edition, O'Reilly publication, USA.
3. Jeeva Jose (2018), "Beginner's Guide for Data Analysis using R Programming", Khanna Book Publishing Co. Ltd., New Delhi.
4. Norman Matloff (2011), "The Art of R programming - A tour of statistical software design", 1<sup>st</sup> Edition, No Starch Press, USA.

**Books for reference:**

1. Mark Lutz (2009), "Learning Python", O'Reilly Media Publication, USA.
2. Martin C Brown (2001), "Python: The Complete Reference". McGraw-Hill Media, USA.
3. Gentleman R, Carey V.J, Huber W, Irizarry, RA, and Dudoit, S, "Bioinformatics and Computational Biology Solutions Using R and Bioconductor", Springer, New York.

**Web references:**

1. [www.sthurlow.com/python/](http://www.sthurlow.com/python/)
2. [www.learnpython.org](http://www.learnpython.org)
3. [www.codecademy.com/en/tracks/python](http://www.codecademy.com/en/tracks/python)

**Pedagogy :**

Chalk and Talk , PowerPoint Presentation, Group Discussion, Student Seminar ,Spot Test  
Practical Labs, Assignments , Quiz.

**Rationale for Nature of Course:** To learn about data storage techniques and query processing  
Students will gain knowledge of Python systems by doing programs.

**Activities to be Given :** Practice to Create own programs, Group Discussion, Seminar.

**Course Learning Outcomes(CLO)**

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Describe the basics of Python	Upto K4
CLO2	Explain the necessity for programming in biology	Upto K4
CLO3	Apply R programming	Upto K4
CLO4	Discuss Data handling	Upto K5
CLO5	Apply R in Phylogenetics	Upto K5

- K1- Remembering and recalling facts with specific answers  
 K2- Basic understanding of facts and stating main ideas with general answers  
 K3- Application oriented – Solving Problems  
 K4 –Examining, analyzing, presentation and make inferences with evidences

### Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	2	2	2	2	1	2
CLO2	2	2	2	2	1	2
CLO3	3	3	3	3	2	3
CLO4	3	3	3	3	3	3
CLO5	3	3	3	3	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

### LESSON PLAN : 75 hrs

UNI TS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<b>Introduction to Python</b> Installation of Python - Variables - Types - Strings - Jupyter notebooks - Objects - Functions - Control structures - Operators - User-Defined Functions - Data Structures - List, Tuple -Dictionary.	12	Chalk & Talk , Spot Test, Demo Coding
II	<b>Numpy and Scipy</b> Numpy library – Ndarray - Basic Operations - Conditions and Boolean Arrays - Shape Manipulation - Array Manipulation - General Concepts - Structured Arrays - Reading and Writing Array on Files - SciPy Library for Statistics: linalg sub package - Normality- Correlation - t-Test- Chi- Test- ANOVA.	12	Chalk & Talk , Spot Test, Demo Coding
III	<b>R Programming</b> Introduction to R - Installing R - Features of R - Reserved words - Operators, -Strings - Data types and operations - Basic Data types – Vectors - List, Matrices – Arrays - Factors - Data frames - Flow control - Decision making - Loop Control Statements -Loops.	12	Chalk & Talk , Spot Test, Demo Coding
IV	<b>Visualisation using R</b> R as a Deluxe Calculator - Creating Objects and Assigning Values - Graphics: Simple Plotting - Advanced Plotting - Using Color in Plots - Using Subscripts and Superscripts in Graph Labels - Interactive Graphics - Saving Graphical Output - Loops.	12	Chalk & Talk , Spot Test, Demo Coding

V	<b>Data Handling</b> Feature selection models - Data Preprocessing - Normalization - Methods - Data reduction - Data sampling - Heat maps - Classification: Based on analogy - rules - probabilities - statistics and prediction with R.	12	Chalk & Talk , Spot Test, Demo Coding
---	---	----	---------------------------------------

Course Designer : Mrs.Kavitha

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
III	SEC II	23OPCCASEC3P	Python Lab	2	3	40	60	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the basics of Python.
2. To learn Bio Python.
3. To acquire programming skills in core Python
4. To learn Strings and function
5. To develop object oriented skills in Python

**Course Content:****LIST OF PROGRAMS**

Write a program to demonstrate different number data types in Python.

Write a python program to find largest of three numbers.

Write a program to perform different Arithmetic Operations on numbers in Python.

Write a program to create, concatenate and print a string and accessing sub-string from a given string.

Write a program to create, append, and remove lists in python.

Write a Python script that prints prime numbers less than 20.

Write a Python class to reverse a string word by word.

Write a program to demonstrate working with tuples in python.

Write a Python program to construct the following pattern, using a nested for loop.

Write a program that asks the user for a weight in kilograms and converts it to pounds.

( There are 2.2 pounds in a kilogram. )

Program to find the maximum of two numbers

Find length of string in python

Program to interchange first and last elements in a list

Adding and Subtracting Matrices in Python

Python program to get current Time.

**Books for study:**

1. Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2<sup>nd</sup> Edition, Apress, New York.
2. Wes McKinney, "Python for Data Analysis", 2<sup>nd</sup> Edition, O'Reilly publication, USA.

**Books for reference:**

1. Mark Lutz (2009), "Learning Python", O'Reilly Media Publication, USA.
2. Martin C Brown (2001), "Python: The Complete Reference". McGraw-Hill Media, USA
3. Reema Thareja, (2017) Python Programming using problem solving approach, 1<sup>st</sup> Edition, Oxford University Press.
4. Dr. R. Nageswara Rao, (2017) Core Python Programming, 1<sup>st</sup> Edition, Dream tech Publishers.

**Web Resources :**

1. [www.sthurlow.com/python/](http://www.sthurlow.com/python/)
2. [www.learnpython.org](http://www.learnpython.org)
3. [www.codecademy.com/en/tracks/python](http://www.codecademy.com/en/tracks/python)

**E-books :**

1. <http://repository.itbad.ac.id/146/1/403.%20Fundamentals%20of%20Python%20First%20Programs%2C%20Second%20Edition.pdf>
2. <https://www.coursehero.com/file/50836140/Python-Data-Analytics-2nd-Editionpdf/>
3. <https://www.perlego.com/book/1443335/django-3-by-example-build-powerful-and-reliable-python-web-applications-from-scratch-3rd-edition-pdf>

**Pedagogy**

Projector Demonstration and Practical sessions.

**Rationale for Nature of the course**

To learn about Python Program language, Python coding and web development tools.

**Activities to be Given :** Practice to Create own programs, Group Discussion, Seminar.

**Course Learning Outcomes(CLO)**

**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Describe the basics of Python	Up to K4
CLO2	Explain the necessity for programming in Python	Up to K4
CLO3	Comprehend the programming skills in python and develop applications using conditional branches and loop	Up to K4
CLO4	python Create applications with strings and functions	Up to K5
CLO5	Understand and implement the Object Oriented Programming paradigm	Up to K5

K1- Remembering facts with specific answers

K2- Basic understanding of facts.

K3- Application oriented

K4- Analyzing, examining and making presentations with evidences.

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	2	3	2	2	2
CLO2	3	3	2	3	2	3
CLO3	2	3	2	3	2	2
CLO4	3	2	2	2	2	3
CLO5	2	3	3	2	2	2

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 75 hrs**

UNIT S	DESCRIPTION	No. of Hours	Mode of Teaching
I	Write a program to demonstrate different number data types in Python. Write a python program to find largest of three numbers. Write a program to perform different Arithmetic Operations on numbers in Python.	12	Demo & Practical Session
II	Write a program to create, concatenate and print a string and accessing sub-string from a given string. Write a program to create, append, and remove lists in python. Write a Python script that prints prime numbers less than 20.	12	Demo & Practical Session
III	Write a Python class to reverse a string word by word. Write a program to demonstrate working with tuples in python. Write a Python program to construct the following pattern, using a nested for loop.	12	Demo & Practical Session
IV	Write a program that asks the user for a weight in kilograms and converts it to pounds. There are 2.2 pounds in a kilogram. program to find themaximum of two numbers Find length of string in python	12	Demo & Practical Session
V	Program to interchange first and last elements in a list Adding and Subtracting Matrices in Python Python program to get current Time.	12	Demo & Practical Session

Course Designer : Mrs.S.Chitradevi

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
IV	Core –XI	23OPCCA41	Corporate and Economic Laws	5	6	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To analyse current and capital account transactions and deal with foreign currency under FEMA Act
2. To understand unethical competitive practices and forums for redressal of consumer disputes under Competition Act and Consumer Protection Act
3. To understand the procedure for obtaining patents and copyright under The Copyright and Patents Act
4. To evaluate offences and punishment for money laundering under Prevention of Money Laundering Act
5. To explain the registration and related procedures under Real Estate Act

**CourseContent:****UNIT : I - Introduction to Foreign Exchange Management Act, 1999**

Foreign Exchange Management Act, 1999: Introduction – Definitions – Current Account transactions – Capital Account transactions – Realisation, repatriation and surrender of foreign currency – Remittance of assets – Possession and retention of foreign currency or foreign coins – Authorised person – Adjudication and Appeal.

**UNIT : II - Competition Act, 2002 and Consumer Protection Act, 2019**

Competition Act, 2002: Objective – Prohibition of Agreements, Prohibition of Abuse of Dominant Position - Regulation of combinations - Competition Commission of India: Duties, Powers and Functions of Commission - Appellate Tribunal.

The Consumer Protection Act, 2019: Objects; Rights of consumers – Consumer Dispute Redressal Commissions - Consumer protection councils – Procedure for admission to complaints – Appeal against orders.

**UNIT : III - Law relating to intellectual property rights**

Law relating to intellectual property rights: Introduction - The Copyright Act, 1957: Works in which copyright subsist - Ownership of copyright and the rights of the owner - Assignment of copyright - Disputes with respect to assignment of copyright - Term of copyright - Registration of copyright - Infringement of copyright.

The Patents Act, 1970: Inventions not patentable - Applications for patents - Publication and examination of applications - Grant of patents and rights conferred - Register of patents. Trademarks Act, 1999: Conditions for registration - Procedure for and duration of



registration - Effect of registration - Collective marks.

#### **UNIT : IV - Prevention of Money Laundering Act, 2002**

Prevention of Money Laundering Act, 2002: Offence of money laundering –Punishment for money laundering –Attachment, adjudication and confiscation - Obligations of Banking Companies, Financial Institutions and Intermediaries – Summons, Search and Seizure – Appellate Tribunal.

#### **UNIT : V - Real Estate (Regulation and Development) Act, 2016**

Real Estate (Regulation and Development) Act, 2016: Introduction - Salient features of the Act - Registration of Real Estate Project – Registration of Real Estate agents – Functions and duties of promoter – Rights and duties of Allottees – Offences, penalties and adjudication – Specimen agreement for sale to be executed between the promoter and the allottee.

#### **Books for study:**

1. MunishBandari (2022), A Textbook on Corporate and Economic Laws, 33<sup>rd</sup> Edition, Bestword Publications, New Delhi
2. AmitVohra and RachitDhingra (2022), Economic, Business and Commercial Laws, 18th Edition, Bharat Book House, Siliguri
3. PankajGarg (2021), Taxmann’s Corporate and Economic Laws, 7<sup>th</sup> Edition, Taxmann Publications, New Delhi

#### **Books for reference:**

1. Sekar G and SaravanaPrasath B (2022), Students’ Handbook on Corporate and Economic Law, Commercial Law Publishers (India) Pvt.Ltd., New Delhi
2. Taxmann (2021), FEMA & FDI Ready Reckoner, 15<sup>th</sup> Edition, Taxmann Publications, New Delhi
3. [AhujaV.K. and ArchaVashishtha](#) (2020), Intellectual Property Rights (contemporary Developments), Thomson Reuters, Toronto, (CAN)

#### **Web references:**

1. <https://resource.cdn.icai.org/67333bos54154-m3cp1.pdf>
2. <https://resource.cdn.icai.org/67335bos54154-m3cp3.pdf>
3. <https://resource.cdn.icai.org/68523bos54855-cp1.pdf>
4. <https://resource.cdn.icai.org/68524bos54855-cp2.pdf>

#### **Pedagogy :**

Chalk and Talk, PPT, group discussion, OHP presentations, quiz, on the spot test

**Rationale for Nature of Course:** Can be cost controller, financial consultants, chief accountant and internal auditors

**Activities to be Given :**Assign the cost to the products and calculating the efficiency of the cost usage.

**Course Learning Outcomes(CLO)**  
**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Recall important provisions of FEMA	Upto K4
CLO2	Evaluate the provisions of the Competition Act, 2002 and Consumer Protection Act to govern commercial competition and protect a consumer	Upto K4
CLO3	Recall the process relating to obtaining copyrights and patents.	Upto K4
CLO4	Examine the provisions of Money Laundering Act	Upto K5
CLO5	Analyse the provisions relating to regulation of real estate.	Upto K5

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented – Solving Problems

K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	3	2	2	3	3
CLO2	3	3	3	2	2	3
CLO3	3	3	2	2	2	3
CLO4	3	3	3	3	3	3
CLO5	3	3	2	2	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 90 hrs**

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<b>Introduction to Foreign Exchange Management Act, 1999</b> Foreign Exchange Management Act, 1999: Introduction – Definitions – Current Account transactions – Capital Account transactions – Realisation, repatriation and surrender of foreign currency – Remittance of assets – Possession and retention of foreign currency or foreign coins – Authorised person – Adjudication and Appeal.	18	Chalk & Talk , Spot Test, Demo Coding

II	<p><b>Competition Act, 2002 and Consumer Protection Act, 2019</b></p> <p>Competition Act, 2002: Objective – Prohibition of Agreements, Prohibition of Abuse of Dominant Position - Regulation of combinations - Competition Commission of India: Duties, Powers and Functions of Commission - Appellate Tribunal.</p> <p>The Consumer Protection Act, 2019: Objects; Rights of consumers – Consumer Dispute Redressal Commissions - Consumer protection councils – Procedure for admission to complaints – Appeal against orders.</p>	18	Chalk & Talk , Spot Test, Demo Coding
III	<p><b>Law relating to intellectual property rights</b></p> <p>Law relating to intellectual property rights: Introduction - The Copyright Act, 1957: Works in which copyright subsist - Ownership of copyright and the rights of the owner - Assignment of copyright - Disputes with respect to assignment of copyright - Term of copyright - Registration of copyright - Infringement of copyright.</p> <p>The Patents Act, 1970: Inventions not patentable - Applications for patents - Publication and examination of applications - Grant of patents and rights conferred - Register of patents. Trademarks Act, 1999: Conditions for registration - Procedure for and duration of registration - Effect of registration - Collective marks.</p>	18	Chalk & Talk , Spot Test, Demo Coding
IV	<p><b>Prevention of Money Laundering Act, 2002</b></p> <p>Prevention of Money Laundering Act, 2002: Offence of money laundering –Punishment for money laundering –Attachment, adjudication and confiscation - Obligations of Banking Companies, Financial Institutions and Intermediaries – Summons, Search and Seizure – Appellate Tribunal.</p>	18	Chalk & Talk , Spot Test, Demo Coding
V	<p><b>Real Estate (Regulation and Development) Act, 2016</b></p> <p>Real Estate (Regulation and Development) Act, 2016: Introduction - Salient features of the Act - Registration of Real Estate Project – Registration of Real Estate agents – Functions and duties of promoter – Rights and duties of Allottees – Offences, penalties and adjudication – Specimen agreement for sale to be executed between the promoter and the allottee.</p>	18	Chalk & Talk , Spot Test, Demo Coding

Course Designer : Mrs.D.Reena

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
IV	Core -XII	23OPCCA42	Human Resource Analytics	5	6	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand the concept and framework of human resource analytics
2. To evaluate the process of human resource analytics and the relevant research tools
3. To illustrate the evolution, types and design of HR metrics
4. To deal with data collection and transformation
5. To adopt tools and techniques for predictive modeling

**Course Content:****UNIT : I - Introduction to Human Resource Analytics**

Human Resource Analytics: Introduction –Concept – Evolution - Importance – Benefits – Challenges - Types of HR Analytics – HR Analytics Framework and Models.

**UNIT : II - Business Process and HR Analytics**

Business Process and HR Analytics: Introduction – Data Driven Decision Making in HR - Data Issues – Data Validity – Data Reliability - HR Research tools and techniques – Statistics and Statistics Modelling for HR Research

**UNIT : III - Introduction to HR Metrics**

HR Metrics: Introduction - Historical Evolution of HR metrics- Importance – Types of HR Metrics – Types of data - HR Metrics Design Principles — HR Scorecard – HR Dashboards.

**UNIT : IV - HR Analytics and Data**

HR Analytics and Data:Introduction – HR Data Collection – Data quality – Big data for Human Resources – Process of data collection for HR Analytics – Transforming data into HR information – HR Reporting – Data Visualization – Root cause analysis.

**UNIT : V - HR Analytics and Predictive Modelling**

HR Analytics and Predictive Modelling: Introduction – HR Predictive Modelling – Different phases – Predictive analytic tools and techniques – Information for Predictive analysis - Software solutions - Predictive Analytic Models for Quantitative Data - Steps involved in predictive analytics.

**Books for study:**

1. NishantUppal (2020), Human Resource Analytics Strategic Decision Making, 1st Edition, Pearson EducationPvt. Ltd., Chennai
2. Sarojkumar and Vikrant Verma (2022), HR analytics, Thakur PublicationPvt. Ltd, Lucknow.
3. Dipak Kumar Bhattacharyya (2017), HR analytics: understanding theories and applications, 1<sup>st</sup> Edition, Sage Publications India Private Limited, New Delhi

**Books for reference:**

1. Ramesh Soundararajan and Kuldeep Singh (2019), Winning on HR analytics, Sage publishing, New Delhi
2. AnshulSaxena (2021), HR analytics: quantifying the intangible, 1st Edition, Blue Rose publishers, New Delhi
3. Michael J. Walsh (2021), “HR analytics essentials you always wanted to know”, 7<sup>th</sup> Edition, Vibrant publishers, Mumbai.

**Web references:**

1. <https://hbr.org/webinar/2017/06/leveraging-hr-analytics-in-strategic-decisions>
2. <https://www.mbaknol.com/human-resource-management/human-resource-metrics/>
3. <https://www.managementstudyguide.com/hr-metrics-and-workforce-analysis.htm>

**Pedagogy :**

Chalk and Talk, PPT, group discussion, OHP presentations, quiz, on the spot test

**Rationale for Nature of Course:** Make the students to prepare the process of company’s financial transactions.

**Activities to be Given :**Prepare the financial transactions and activities of a branded company.

**Course Learning Outcomes(CLO)**  
**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CO1	Examine the concept of human resource analytics	Upto K4
CO2	Apply the HR tools and techniques in decision making	Upto K4
CO3	Examine the different types of HR metrics and their relative merits	Upto K4
CO4	Collect and transform data leading to HR reporting	Upto K5
CO5	Build models for predictive analysis	Upto K5

- K1- Remembering and recalling facts with specific answers
- K2- Basic understanding of facts and stating main ideas with general answers
- K3– Application oriented – Solving Problems
- K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	2	2	3	3	3
CLO2	3	3	2	3	3	3
CLO3	3	3	2	3	3	3
CLO4	3	3	2	3	3	3
CLO5	3	3	2	3	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

**LESSON PLAN : 90 hrs**

UNI TS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<p><b>Introduction to Human Resource Analytics</b></p> <p>Human Resource Analytics: Introduction –Concept – Evolution - Importance – Benefits – Challenges - Types of HR Analytics – HR Analytics Framework and Models.</p>	18	Chalk & Talk , Spot Test, Demo Coding
II	<p><b>Business Process and HR Analytics</b></p> <p>Business Process and HR Analytics: Introduction – Data Driven Decision Making in HR - Data Issues – Data Validity – Data Reliability - HR Research tools and techniques –Statistics and Statistics Modelling for HR Research</p>	18	Chalk & Talk , Spot Test, Demo Coding
III	<p><b>Introduction to HR Metrics</b></p> <p>HR Metrics: Introduction - Historical Evolution of HR metrics- Importance – Types of HR Metrics – Types of data - HR Metrics Design Principles — HR Scorecard – HR Dashboards.</p>	18	Chalk & Talk , Spot Test, Demo Coding
IV	<p><b>HR Analytics and Data</b></p> <p>HR Analytics and Data:Introduction – HR Data Collection – Data quality – Big data for Human Resources – Process of data collection for HR Analytics – Transforming data into HR information – HR Reporting – Data Visualization – Root cause analysis.</p>	18	Chalk & Talk , Spot Test, Demo Coding

V	<b>HR Analytics and Predictive Modelling</b> HR Analytics and Predictive Modelling: Introduction – HR Predictive Modelling – Different phases – Predictive analytic tools and techniques – Information for Predictive analysis - Software solutions - Predictive Analytic Models for Quantitative Data - Steps involved in predictive analytics.	18	Chalk & Talk , Spot Test, Demo Coding
---	---	----	---

Course Designer : Dr.(Mrs).T.Karthiyayini

I M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
<b>IV</b>	<b>Core</b>	<b>23OPCCAPR4</b>	<b>Project with Viva</b>	<b>7</b>	<b>10</b>	<b>20</b>	<b>80</b>	<b>100</b>

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Objectives:**

1. To facilitate the students to undertake project work.
2. To help the students to acquire expertise in programming languages.

Each student should undertake a project under the guidance of staff member and should submit the report in not less than 50 pages in A4 size paper. The report must be submitted at the end of the Fourth Semester. The project report shall be valued jointly by the internal and external examiners. Marks are awarded for the project report and viva voce.



II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
IV	Elective - VIA	23OPCCADSE4A	Cyber and Data Security	3	4	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To understand threats and risks in cyber security landscape
2. To interpret cyber security framework and regulations
3. To examine data security and integrity regulations
4. To discuss network security management
5. To recall cyber security disasters

**Course Content:****UNIT : I - Cybersecurity Landscape**

Cybersecurity Landscape: Threats that are related to current and emerging trends, cyber security awareness, high profile cybercrime statistics and methods, the importance and functions of Governance, Risk Management, and Compliance in Cyber security program management, best practices in risk management including the domains of risk assessment and risk treatment, the structure and content of Cybersecurity-related strategy, plans, and planning. types of vulnerabilities and frauds in different domains eg. Financial and Banking, Ecommerce, Telecom, GDPR.

**UNIT : II - Cybersecurity Frameworks**

Cybersecurity Frameworks: International and industry-specific cybersecurity regulations, challenges to organisation, multiple security regulations, Define key concepts and terminology in Cybersecurity, threats to cybersecurity, strategies to identify and remediate vulnerabilities in information assets, the systemic components (including personnel) necessary for an effective cybersecurity program, NIST Framework.

**UNIT : III - Data Security**

Data Security: Data Integrity and Security, digital security, Data volume and velocity, Bigdata, multiple data sources, data diversity, Data (dis)organization, Unique data storage requirements, Security tools, Inflexible reporting and query systems.

**UNIT : IV - Managing Network Security**

Managing Network Security: The threats to data from information communication technology (ICT), the issues and practices associated with managing network security, Identify the practices, tools, and methodologies associated with assessing network security,

the components of an effective network security program. Phishing attacks on sites, digital advertising spoofing, Search indexing

### **UNIT : V – Cybersecurity Incidents and Disasters**

Cybersecurity Incidents and Disasters: Hacking attempts, web site defacement, denial of service attacks, information disclosures, natural and man-made cybersecurity disasters, the components of a cybersecurity contingency planning program, contingency strategies including data backup and recovery and continuity of cybersecurity operations, the components and structure of an effective cybersecurity disaster recovery program, the components and structure of an effective cybersecurity incident response program. Digital ecosystem, Cloud computing.

#### **Books for study:**

1. Nina Godbole, SunitBelapure(2016), "Cyber Security", Wiley India, New Delhi.
2. AvantikaYadav (2017), "Cyber security", Narosa Publishing House Pvt Ltd. New Delhi.
3. Tim Mather, SubraKumaraswamy, ShahedLatif (2010), "Cloud Security and Privacy", OREILLY Media, USA.

#### **Books for reference:**

1. Nina Godbole, "Information Systems Security", Wiley India, New Delhi.
2. Kenneth J. Knapp, "Cyber Security & Global Information Assurance", Information Science Publishing.
3. Thomas J Mowbray (2016), "Cyber Security Managing Systems, Conducting Testing and Investigating Intrusions", Wiley India Pvt. Ltd, New Delhi.

#### **Web references:**

1. [https://mrcet.com/pdf/Lab%20Manuals/IT/CYBER%20SECURITY%20\(R18A0521\).pdf](https://mrcet.com/pdf/Lab%20Manuals/IT/CYBER%20SECURITY%20(R18A0521).pdf)
2. <http://www.uptti.ac.in/classroom-content/data/cyber%20security%20unit-3.pdf>

#### **Pedagogy :**

Chalk and Talk, PowerPoint Presentation, Group Discussion, Student Seminar, Spot Test, Practical Labs, Assignments, Quiz.

**Rationale for Nature of Course:** To learn about data security and Cyber security techniques. Students will gain knowledge on database searching, inferring data relationships.

**Activities to be Given :** Practice the students to do mini projects related to product and price comparison, image caption related to Cyber Security.

**Course Learning Outcomes(CLO)**  
**On completion of the course, behind the students will be able to:**

CLOs	Course Outcomes	Knowledge Level
CLO1	Develop plans to mitigate risks and threats to cybersecurity	Upto K4
CLO2	Solve vulnerabilities in cybersecurity frameworks	Upto K4
CLO3	Solve issues in integrity issues in cybersecurity	Upto K4
CLO4	Implement radical changes in cybersecurity management	Upto K5
CLO5	Formulate strategies to overcome cybersecurity disasters	Upto K5

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3– Application oriented – Solving Problems

K4 –Examining, analyzing, presentation and make inferences with evidences

**Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)**

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	3	3	3	3	2	2
CLO2	3	3	3	3	2	2
CLO3	3	3	3	3	2	2
CLO4	3	3	2	3	2	2
CLO5	3	3	2	3	2	2

1 - Basic Level

2- Intermediate Level

3-Advance Level

## LESSON PLAN : 75 hrs

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<p><b>Cybersecurity Landscape</b></p> <p>Cybersecurity Landscape: Threats that are related to current and emerging trends, cyber security awareness, high profile cybercrime statistics and methods, the importance and functions of Governance, Risk Management, and Compliance in Cyber security program management, best practices in risk management including the domains of risk assessment and risk treatment, the structure and content of Cybersecurity-related strategy, plans, and planning. types of vulnerabilities and frauds in different domains eg. Financial and Banking, Ecommerce, Telecom, GDPR.</p>	12	Chalk & Talk, Spot Test, Demo Coding
II	<p><b>Cybersecurity Frameworks</b></p> <p>Cybersecurity Frameworks: International and industry-specific cybersecurity regulations, challenges to organisation, multiple security regulations, Define key concepts and terminology in Cybersecurity, threats to cybersecurity, strategies to identify and remediate vulnerabilities in information assets, the systemic components (including personnel) necessary for an effective cybersecurity program, NIST Framework.</p>	12	Chalk & Talk, Spot Test, Demo Coding
III	<p><b>Data Security</b></p> <p>Data Security: Data Integrity and Security, digital security, Data volume and velocity, Bigdata, multiple data sources, data diversity, Data (dis)organization, Unique data storage requirements, Security tools, Inflexible reporting and query systems.</p>	12	Chalk & Talk, Spot Test, Demo Coding
IV	<p><b>Managing Network Security</b></p> <p>Managing Network Security: The threats to data from information communication technology (ICT), the issues and practices associated with managing network security, Identify the practices, tools, and methodologies associated with assessing network security, the components of an effective network security program. Phishing attacks on sites, digital advertising spoofing, Search indexing</p>	12	Chalk & Talk, Spot Test, Demo Coding

V	<b>Cybersecurity Incidents and Disasters</b> Cybersecurity Incidents and Disasters: Hacking attempts, web site defacement, denial of service attacks, information disclosures, natural and man-made cybersecurity disasters, the components of a cybersecurity contingency planning program, contingency strategies including data backup and recovery and continuity of cybersecurity operations, the components and structure of an effective cybersecurity disaster recovery program, the components and structure of an effective cybersecurity incident response program. Digital ecosystem, Cloud computing.	12	Chalk & Talk, Spot Test, Demo Coding
---	---	----	--------------------------------------

Course Designer : Mrs.M.Sharmiladevi

II M.Com (CA)								
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours /week	CIA	SE	Total
IV	Elective -VIB	23OPCCADSE4B	E-Commerce	3	4	25	75	100

Nature of the Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To explain use of Information technology and e-commerce for entrepreneur
2. To apply the functions of Windows operating system
3. To apply the advance functions of MS word
4. To apply the functions of MS excel
5. To understand the concept of E-Commerce and Electronic payments

**Course Content:****UNIT : I - E-Commerce and Electronic Payment Systems**

What is Electronic Commerce - Brief history of Electronic Commerce - Advantages and Limitations of Electronic Commerce - Types of Electronic commerce - Integrating Electronic Commerce - Key questions for management - Overview of the Electronic payment technology- Requirements for Internet based payments - Electronic payment medium – Electronic Commerce and Banking.

**UNIT : II - Electronic Data Interchange**

Benefits of EDI, EDI technology, EDI standards, EDI communications, EDI Implementation, EDI Agreements, EDI Security. Electronic Payment Systems, Need of Electronic Payment System: Study and examine the use of Electronic Payment system and the protocols used, Study Electronic Fund Transfer and secure electronic transaction protocol for credit card payment. Digital economy: Identify the methods of payments on the net – Electronic Cash, cheques and credit cards on the Internet.

**UNIT : III - Consumer Oriented E Commerce:**

E-Retailing: Traditional retailing and e retailing, Benefits of e retailing, Key success factors, Models of e retailing, Features of e retailing. E services: Categories of e-services, Web-enabled services, matchmaking services, Information-selling on the web, e entertainment, Auctions and other specialized services. Business to Business Electronic Commerce

**UNIT : IV - E-security and Web based business**

Security in the cyberspace - Designing for security -Virus -Security Protection and Recovery - Encryption - Business-to-Business Electronic Commerce - Intranets and Extranets - Intranets and Supply Chain Management - Legal and Ethical issues - Case studies.

**UNIT : V - Issues in E Commerce**

Understanding Ethical, Social and Political issues in E-Commerce: A model for Organizing the issues, Basic Ethical Concepts, Analyzing Ethical Dilemmas, Candidate Ethical principles Privacy and Information Rights: Information collected at E-Commerce Websites, The Concept of Privacy, Legal protections Intellectual Property Rights: Types of Intellectual Property protection, Governance.

**Books for study:**

1. Ravi Kalkota and Andrew B Whinston, "Frontiers of Electronic Commerce", Pearson, Noida.
2. Henry Chan, Raymond Lee, Tharam Dillon, Elizabeth Chang, "E-Commerce Fundamentals and Applications, Wiley Publishers, New Delhi.
3. Senn, "Information Technology: Principles, Practices and Opportunities James", Prentice Hall, New Delhi.
4. Richard Hammer (1998), "Enterprise Resource Planning"

**Books for reference:**

1. Efraim Turban, Jae Lee, David King ,H. Michael Chung (2001), "Electronic Commerce - A Managerial Perspective", Addison-Wesley, USA.
2. Ania Agrawal, Rahul Kotian, Tushar Agarwal and Vijalakshmi Kannan, (2016), "E Commerce and Digital Marketing", Himalaya Publishing House, Mumbai.

**Web references:**

1. <https://www.slideshare.net/kamalgulati7/full-notes-on-ecommerce-study-material-for-ecommerce>
2. <https://www.techtarget.com/searchcio/definition/e-commerce?amp=1>

**Pedagogy :**

Chalk and Talk, PowerPoint Presentation, Group Discussion, Student Seminar, Spot Test, Practical Labs, Assignments, Quiz.

**Rationale for Nature of Course:** To learn about

**Activities to be Given :** Practice

### Course Learning Outcomes(CLO)

On completion of the course, behind the students will be able to:

CLOs	Course Outcomes	Knowledge Level
CLO1	Understand the hardware and software of a system	Upto K4
CLO2	Apply the functions of Windows operating system	Upto K4
CLO3	Apply the advance functions of MS word	Upto K4
CLO4	Apply the functions of MS excel	Upto K5
CLO5	Understand the concept of E-Commerce and Electronic payments	Upto K5

K1- Remembering and recalling facts with specific answers

K2- Basic understanding of facts and stating main ideas with general answers

K3- Application oriented – Solving Problems

K4 –Examining, analyzing, presentation and make inferences with evidences

### Mapping of Course Learning Outcomes (CLOs) with Programme Outcomes (POs)

CLOs	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	2	2	1	2	2	2
CLO2	2	2	2	2	2	2
CLO3	3	3	3	3	3	3
CLO4	3	3	3	3	3	3
CLO5	3	3	3	3	3	3

1 - Basic Level

2- Intermediate Level

3-Advance Level

### LESSON PLAN : 75 hrs

UNITS	DESCRIPTION	No. of Hours	Mode of Teaching
I	<p><b>E-Commerce and Electronic Payment Systems</b></p> <p>What is Electronic Commerce - Brief history of Electronic Commerce - Advantages and Limitations of Electronic Commerce - Types of Electronic commerce - Integrating Electronic Commerce - Key questions for management - Overview of the Electronic payment technology- Requirements for Internet based payments - Electronic payment medium – Electronic Commerce and Banking.</p>	12	Chalk & Talk, Spot Test, Demo Coding



II	<p><b>Electronic Data Interchange</b></p> <p>Benefits of EDI, EDI technology, EDI standards, EDI communications, EDI Implementation, EDI Agreements, EDI Security. Electronic Payment Systems, Need of Electronic Payment System: Study and examine the use of Electronic Payment system and the protocols used, Study Electronic Fund Transfer and secure electronic transaction protocol for credit card payment. Digital economy: Identify the methods of payments on the net – Electronic Cash, cheques and credit cards on the Internet.</p>	12	Chalk & Talk, Spot Test, Demo Coding
III	<p><b>Consumer Oriented E Commerce:</b></p> <p>E-Retailing: Traditional retailing and e retailing, Benefits of e retailing, Key success factors, Models of e retailing, Features of e retailing. E services: Categories of e-services, Web-enabled services, matchmaking services, Information-selling on the web, e entertainment, Auctions and other specialized services. Business to Business Electronic Commerce</p>	12	Chalk & Talk, Spot Test, Demo Coding
IV	<p><b>E-security and Web based business</b></p> <p>Security in the cyberspace - Designing for security - Virus -Security Protection and Recovery - Encryption - Business-to-Business Electronic Commerce - Intranets and Extranets - Intranets and Supply Chain Management - Legal and Ethical issues - Case studies.</p>	12	Chalk & Talk, Spot Test, Demo Coding
V	<p><b>Issues in E Commerce</b></p> <p>Understanding Ethical, Social and Political issues in E-Commerce: A model for Organizing the issues, Basic Ethical Concepts, Analyzing Ethical Dilemmas, Candidate Ethical principles Privacy and Information Rights: Information collected at E-Commerce Websites, The Concept of Privacy, Legal protections Intellectual Property Rights: Types of Intellectual Property protection, Governance.</p>	12	Chalk & Talk, Spot Test, Demo Coding

Course Designer : Mrs.M.Sharmiladevi

Department of Commerce					II M.Com(CA)			
Sem	Category	Course Code	Course Title	Credits	Contact Hours/w week	CIA	Ext	Total
IV	SEC-III	23OPCCASEC4P	Web Designing Lab	2	4	40	60	100

Nature of Course		
Knowledge and Skill Oriented	Employability Oriented	Entrepreneurship oriented
✓	✓	

**Course Objectives:**

1. To develop the skill & knowledge of Web page design.
2. To define the principle of Web page design.
3. To acquire programming skills using PHP in Web designing.
4. Visualize the basic concept of HTML
5. Recognize the elements of HTML

**Course Content:****LIST OF PROGRAMS**

Write a HTML program to design a Bio-Data.

Write a HTML program to create a webpage with four frames (Picture, table, list, and hyperlink).

Write a HTML program to create a web page using style sheet.

Write an HTML code to display your education details in a tabular format.

Write HTML code to create a Web page of pink colour and display a moving message in red colour.

Write a HTML program to create a webpage of pink color and display a moving message in red color.

Write a HTML program to illustrate List tags.

Write PHP program to get name of the user from a form and show greeting text.

Write PHP program for Age calculator.

Write a PHP program to design personal information.

Write a PHP program to calculate Date and Time function.

Write a PHP program to design Curriculum Vitae.

Write a PHP program to generate a list of first 20 prime numbers

**Books for study:**

1. Mastering, (2014.),” HTML5 and CSS3 “, Made Easy!, TeachUComp Inc.
2. Mario Lurig .(2018). PHP Reference: Beginner to Intermediate PHP5. First Edition

**Books for reference:**

1. Dr.VakaMuraliMohan,S.Pratap Singh (2013),”The Modern Approach to Web Technologies” , Scirech Publication ,1st Edition
2. Ivan Bayross,(2018) Web Technologies part II, BPB publications, New Delhi, 2 nd Edition.
3. .Adams, A. (2022 ). PHP Programming-The Complete Guide. Code Academy. First Edition.
4. Altaf Hussain. ( 2016). Learning PHP 7 High Performance Paperback. Packt Publishing Limited. Fourth Edition

**Web Resources :**

1. [https://www.w3schools.com/html/html\\_intro.asp](https://www.w3schools.com/html/html_intro.asp)
2. <https://www.javatpoint.com/what-is-html>
3. [https://developer.mozilla.org/enUS/docs/Learn/Getting\\_started\\_with\\_the\\_web/HTML\\_basics](https://developer.mozilla.org/enUS/docs/Learn/Getting_started_with_the_web/HTML_basics)

**E-books :**

1. [https://github.com/manjunath5496/PHP-ProgrammingBooks/blob/5b4c11bd5e45d75489a61859922b971c26145683/php\(1\).pdf](https://github.com/manjunath5496/PHP-ProgrammingBooks/blob/5b4c11bd5e45d75489a61859922b971c26145683/php(1).pdf)
2. <https://ptgmedia.pearsoncmg.com/images/9780321833891/samplepages/9780321833891.pdf>
3. <https://downloads.mysql.com/docs/apis-php-en.pdf>
4. <http://cs.petsru.ru/~musen/php/2015/Books/PHP6%20and%20MySQL%20Bible%20by%20Steve>

**Pedagogy**

Projector Demonstration and Practical sessions.

**Rationale for Nature of the course**

Students can able to design a simple web page using HTML and develop programming application using PHP.

**Course Learning Outcomes(CLOS)**

**On completion of the course behind the students would be able to :**

No.	Course Outcomes	Knowledge
CO1	Understand the basic concept of HTML	Up to K4
CO2	Identify the tools which will be suitable for the requirement of the webpage.	Up to K4
CO3	Implement HTML tools and Style Sheets effectively in the Web Pages	Up to K4
CO4	Apply PHP to design and effectiveness of the Web Pages	Up to K5
CO5	Design the web page using PHP attributes.	Up to K5

K1- Remembering facts with specific answers

K2- Basic understanding of facts.

K3- Application oriented

K4- Analyzing, examining and making presentations with evidences.

**Mapping of Course Learning Outcomes(CLOs) with Programme Outcomes(POs)**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>
<b>CLO 1</b>	3	2	3	2	2	3
<b>CLO 2</b>	3	3	2	3	3	3
<b>CLO 3</b>	2	2	2	2	2	2
<b>CLO 4</b>	3	3	2	2	3	3
<b>CLO 5</b>	3	3	3	3	3	2

1 – Basic Level

2 – Intermediate Level

3- Advance Level

**Lesson Plan**

<b>UNIT</b>	<b>Topics to be Covered</b>	<b>Hours</b>	<b>Mode</b>
I	Write a HTML program to design a Bio-Data. Write a HTML program to create a webpage with four frames (Picture, table, list, and hyperlink). Write a HTML program to create a web page using style sheet.	12	Demo & Practical Session
II	Write an HTML code to display your education details in a tabular format. Write HTML code to create a Web page of pink colour and display a moving message in red colour.	12	Demo & Practical Session
III	Write a HTML program to create a webpage of pink color and display a moving message in red color. Write a HTML program to illustrate List tags.	12	Demo & Practical Session
IV	Write PHP program to get name of the user from a form and show greeting text. Write PHP program for Age calculator. Write a PHP program to design personal information	12	Demo & Practical Session
V	Write a PHP program to calculate Date and Time function. Write a PHP program to design Curriculum Vitae. Write a PHP program to generate a list of first 20 prime numbers	12	Demo & Practical Session

Course Designer: Mrs.S.Chitradevi