M.Com., COMPUTER APPLICATIONS

SYLLABUS

FROM THE ACADEMIC YEAR 2023 - 2024

TAMILNADU STATE COUNCIL FOR HIGHER EDUCATION, CHENNAI – 600 005

M.Com.,

COMPUTER APPLICATIONS

Programme Outcomes:

PO1: Problem Solving Skill:

Apply knowledge of Management Theories and Human Resource Practices to solve business problems through research in global context.

PO2: Decision Making Skill:

Foster analytical and critical thinking abilities to enable decision-making based on data.

PO3: Ethical Value:

Incorporate quality, ethical and value-based legal perspectives in all organisational activities.

PO4: Employability Skill:

Develop business acumen to enhance employability skills in the competitive environment.

PO5: Entrepreneurial Skill:

Equip with skills and competencies to become an entrepreneur.

PO6: Contribution to Society:

Succeed in career endeavours and contribute significantly to society.

PO7: Communication Skill:

Develop communication, managerial and interpersonal skills.

PO8: Individual and Team Leadership Skill:

Lead oneself and the team to achieve organizational goals.

PO 9: Multicultural competence:

Demonstrate knowledge of the values and beliefs of multiple cultures to address issues in the global scenario

PO 10: Moral and ethical awareness/reasoning:

Embrace moral and ethical values in one's life,

PO 11: Leadership readinessqualities:

Demonstrate to take up leadership mapping out the tasks and formulating an inspiring vision and mission

PO 12: Lifelong learning:

Acquire knowledge and skills, including "learning how to learn",

M.Com., Computer Applications

Programme Specific Outcomes:

PSO 1 - Entrepreneurship:

Exhibit entrepreneurial ability by enhancing critical thinking, problem solving, decision making and leadership skills that will facilitate startups and high potential organisations.

PSO2 – Research and Development:

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.

PSO 3 – Contribution to the Society:

Contribute to the development of the society by collaborating with stakeholders for mutual benefit.

PSO4 - Placement:

Demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply in diverse frames of decisions and actions.

PSO5 - Contribution to Business World:

Facilitate production of employable, ethical and innovative professionals to sustain in the dynamic business world.

Mapping of Course outcomes (COs) with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) can be carried out, assigning the appropriate level(1 – Low; 2 – Middle and 3 – High) in the grids:

| CO 1 CO 2 CO 3 CO 4 | | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PS0 1 | PSO 2 | PSO 3 |
|---------------------|------|------|------|------|------|------|------|-------|-------|-------|
| CO 3 | CO 1 | | | | | | | | | |
| | CO 2 | | | | | | | | | |
| CO 4 | CO 3 | | | | | | | | | |
| | CO 4 | | | | | | | | | |
| CO 5 | CO 5 | | | | | | | | | |

Strong - 3 -2 Low - 1

| | METHODS OF EVALUATION | |
|---------------|--|---------------------|
| Internal | Continuous Internal Assessment Test | |
| Evaluation | Assignments / Snap Test / Quiz | 25 Marks |
| | Seminars | |
| | Attendance and Class Participation | |
| External | End Semester Examination | 75 Marks |
| Evaluation | | |
| | Total | 100 Marks |
| | METHODS OF ASSESSMENT | |
| Remembering | • Thelowestlevelofquestionsrequirestudentstorecalling | nformationfromthec |
| (K1) | oursecontent | |
| | Knowledgequestionsusuallyrequirestudentstoidenti | fyinformationinthe |
| | textbook. | |
| Understanding | Understandingoffactsandideasbycomprehendingoffactsand | organizing,compar |
| (K2) | ing,translating, interpolatingandinterpretinginthe | irownwords. |
| | Thequestionsgobeyondsimplerecallandrequirestu | dentstocombineda |
| | tatogether | |
| Application | Studentshavetosolveproblemsbyusing/applyingae | conceptlearnedinth |
| (K3) | eclassroom. | |
| | Studentsmust usetheir knowledgetodetermineaex | actresponse. |
| Analyze (K4) | Analyzingthequestionisonethatasksthestudentstol | breakdownsometh |
| | ingintoitscomponentparts. | |
| | Analyzingrequiresstudentstoidentifyreasonscause | esormotivesandrea |
| | chconclusionsorgeneralizations. | |
| Evaluate (K5) | Evaluationrequiresanindividualtomakejudgmento | onsomething. |
| | Questionstobeaskedtojudgethevalueofanidea,ach | aracter,aworkofart, |
| | orasolutiontoaproblem. | |
| | Studentsareengagedindecision-makingandproble | m-solving. |
| | Evaluationquestionsdonothavesinglerightanswer | |
| Create (K6) | Thequestionsofthiscategorychallengestudentstog | etengagedincreativ |
| | eandoriginalthinking. | |
| | Developingoriginalideasandproblemsolvingskills | |

Credit Distribution for PG Programme in Commerce M.Com., Computer Applications

| Sem | Course Code | Courses | List of Courses | Т/Р | Credit | Hours/ | M | ax. Mai | rks |
|-----|---------------------------|--------------|--|-------|----------|-----------|------|---------|-------|
| | Course Coue | Courses | List of Courses | 1/1 | Credit | week | Int. | Ext. | Total |
| I | 23MCC1C1 | Core– I | Business Finance | T | 5 | 7 | 25 | 75 | 100 |
| | 23MCC1C2 | Core – II | Digital Marketing | T | 5 | 7 | 25 | 75 | 100 |
| | 23MCC1C3 | Core – III | Banking and Insurance | T | 4 | 6 | 25 | 75 | 100 |
| | 23MCC1E1/ | DSE-I | Introduction to Industry 4.0/ | T | 3 | 5 | 25 | 75 | 100 |
| | 23MCC1E2 | DOL 1 | Big Data Analytics | _ | | | | " | 100 |
| | 23MCC1E3/ 23MCC1E4 | DSE-II | Enterprise Resource Planning/ Database Management System | T | 3 | 5 | 25 | 75 | 100 |
| | 201110 0 1 2 . | | TOTAL | _ | 20 | 30 | 125 | 375 | 500 |
| II | 23MCC2C1 | Core IV | Strategic Cost Management | T | 4 | 6 | 25 | 75 | 100 |
| | 23MCC2C2 | Core V | Corporate Accounting | T | 4 | 6 | 25 | 75 | 100 |
| | 23MCC2C3 | Core VI | Setting up of Business Entities | T | 4 | 6 | 25 | 75 | 100 |
| | 23MCC2E1/ 23MCC2E2 | DSE - 3 | Data Mining and Data Warehousin (or) Technology in Banking | Т | 3 | 4 | 25 | 75 | 100 |
| | 23MCC2E3/ 23MCC2E4 | DSE - 4 | Financial Analytics (or) Management Information System | Т | 3 | 4 | 25 | 75 | 100 |
| | 23MCC2S1 | AEC | Credit Analyst | T | 2 | 2 | 25 | 75 | 100 |
| | 23MCC2S2 | SEC - 1 | Stock Market Operation | T | 2 | 2 | 25 | 75 | 100 |
| | | Internsh | ip/industrial activity during the sum | mer v | vacation | after I y | ear | • | |
| III | 23MCC3C1 | Core VII | Taxation | Т | 4 | 6 | 25 | 75 | 100 |
| | 23MCC3C2 | Core VIII | Research Methodology | T | 4 | 6 | 25 | 75 | 100 |
| | 23MCC3P1 | Core IX | Computers in Business | P | 4 | 5 | 25 | 75 | 100 |
| | 23MCC3C3 | Core X | International Business | T | 4 | 5 | 25 | 75 | 100 |
| | 23MCC3E1 / 23MCC3E2 | DSE - 5 | A)Applied Data Analytics and Machine Learning (or) B) Python and R for Data Analytics | Т | 3 | 4 | 25 | 75 | 100 |
| | 23MCC3S1 | AEC | Export – Import Documentation | Т | 2 | 2 | 25 | 75 | 100 |
| | 23MCC3S2 | SEC-2 | Entrepreneurship Development Skills | Т | 2 | 2 | 25 | 75 | 100 |
| | 23MCC3I/ 23MCC3IA | | Internship/ Industrial Activity | PR | 2 | - | 25 | 75 | 100 |
| | | I | Total | | 25 | 30 | 200 | 600 | 800 |
| | 23MCC4C1 | Core XI | Corporate and Economic Laws | Т | 4 | 6 | 25 | 75 | 100 |
| | 23MCC4C2 | Core XII | Human Resource Analytics | Т | 4 | 6 | 25 | 75 | 100 |
| | 23MCC4PR | Core XIII | Project with Viva | PR | 6 | 10 | 50 | 150 | 200 |
| | 23MCC4E1/ 23MCC4E2 | DSE - 6 | A) Cyber and Data Security (or) B) E-Commerce | Т | 3 | 4 | 25 | 75 | 100 |
| | 23MCC4S1 | AEC-4 | Advanced Excel | Т | 2 | 2 | 25 | 75 | 100 |
| | 23MCC4S2 | SEC-3 | Employability Skills | Т | 2 | 2 | 25 | 75 | 100 |
| | 23MEA4 | | Extension Activity | P | 1 | - | 25 | 75 | 100 |
| | | | Total | | 22 | 30 | 200 | 600 | 800 |
| | | | | | 91+EC | | 750 | 2250 | 3000 |

CC-Core Courses

DSE – Discipline Specific Elective –Give more option to the student (Choice) and it may be conducted by parallel sessions.

SEC- Skill Enhancement Course; AEC-Ability Enhancement Course Dissertation/Project -Marks -Vivo-voce (50) + thesis (100) + internal (50) = 200 Internship report Vivo-voce (25) + Report (50) + internal (25) = 100

Chairperson details: Dr.S.Ganapathy, Professor, Department of Commerce, Alagappa University, Karaikudi. Mobile No: 9442677764

| Course | Title of the Course | Catagomy | | | | | | Inst. | | Marks | |
|--|---|--|------------------------------------|----------------------------|------------------------|--|--|---------------------------------|------------------|-------------------------------------|--|
| Code | | Category | L | T | P | 0 | Credits | Hours | CIA | External | Total |
| 23MCC1C1 | BUSINESS FINANCE | CORE | 7 | - | - | - | 5 | 7 | 25 | 75 | 100 |
| | | Learning | g Ob | ject | ives | , | | | | | |
| 1 | To outline the fundament | tal concepts in | fina | nce | | | | | | | |
| 2 | To estimate and evaluate | risk in investi | nent | pro | posa | als | | | | | |
| 3 | To evaluate leasing as a s | source of finar | nce a | nd c | letei | mir | ne the so | urces of | startu | p financing | 3 |
| 4 | To examine cash and inv | entory manage | emer | it te | chni | ique | es | | | | |
| 5 | To appraise capital budge | eting techniqu | es fo | r M | NC | S | | | | | |
| | | Cour | se U | nits | | | | | | | |
| UNIT I | Introduction to Business Objectives, Scope -Time Sinking Fund Deposit Fa rate of interest – Doublin | Value of mor actor – Capital | iey: l Rec | Mea ove | ning ry F | g, C Facto | auses – or – Mul | Compoi tiple Co | unding ompou | g – Discour Inding– Ef | nting – |
| UNIT II | Risk Management: Risk Measurement of Return – proposals to minimise Ris Hedging currency risk. | - General patte | ern o | f Ri | sk a | nd I | Return – | Criteria | for e | valuating | |
| UNIT III | Startup Financing at (Bootstrapping, Angel in Agreements – Advantag perspective of Lessor and | vestors, Ventues and Disad | ire c | apit | al fi | and) |) - Leasi | ng: Mea | ning - | - Types of | Lease |
| UNIT IV | Cash, Receivable and I and Importance – Cash Cash balance - Receivabl Debt collection period, receivable - Inventory M | Cycle – Minim le Managemer | num (nt: M | Ope Iean | rati | ng (| Cash - S | afety le | vel of Contro | cash - Op | ectives |
| | - | | | | ctor | ing | – Evalı | ating i | | nent in ac | timum /ables: counts |
| UNIT V | ABC Analysis. Multi National Capital I Multi National Capital I considered – International expenditure proposals: Profitability Index and analysis in Capital Budge | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate | Mean Ieani Inan Pay | ng, ce – Ba | Ste Ck | ing d C ps i chn Per | - Evaluation - Eva | s – EO , Compevaluate PV, Pro | Q with | h price brokes, Factors it-national | timum vables: counts eaks – to be capital |
| Course Out | ABC Analysis. Multi National Capital Multi National Capital Considered – International expenditure proposals: Profitability Index and analysis in Capital Budge comes: | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate | Mean Ieani Inan Pay | ng, ce – Ba | Ste Ck | ing d C ps i chn Per | - Evaluation - Eva | s – EO , Compevaluate PV, Pro | Q with | h price brokes, Factors it-national | timum vables: counts eaks – to be capital |
| Course Out Students wil | ABC Analysis. Multi National Capital I Multi National Capital I considered – International expenditure proposals: Profitability Index and analysis in Capital Budge comes: I be able to | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate eting. | Mean Ieani Inan Pay | ng, ce – Ba | Ste Ck | ing d C ps i chn Per | - Evaluation - Eva | s – EO , Compevaluate PV, Pro | Q with | h price brokes, Factors it-national | timum vables: counts eaks – to be capital |
| Course Out Students wil CO 1 | ABC Analysis. Multi National Capital Multi National Capital Considered – International expenditure proposals: Profitability Index and analysis in Capital Budge comes: I be able to Explain important finance | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate eting. | Mean Ieani Inan Pay of | ng, ce – Ba Rett | Ste Ck | ing d C ps i chn Per | - Evaluation - Eva | s – EO , Compevaluate PV, Pro | Q with | h price brokes, Factors it-national | timum vables: counts eaks – to be capital |
| Course Out Students will CO 1 1 CO 2 1 | ABC Analysis. Multi National Capital I Multi National Capital I considered – International expenditure proposals: Profitability Index and analysis in Capital Budge comes: I be able to | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate eting. Concepts The its impact of the its | Meanifinance Pay of | nng, ce – Ba Retu | Ste Ste Ck | ps ing | - Evaluation - Eva | s – EO , Compevaluate PV, Pro | Q with | h price brokes, Factors it-national | timum vables: counts eaks — to be capital |
| Course Out Students wil CO 1 1 CO 2 1 CO 3 1 | ABC Analysis. Multi National Capital Multi National Capital Considered – International expenditure proposals: Profitability Index and analysis in Capital Budgetomes: I be able to Explain important finance Estimate risk and determine | Management: Budgeting Budgeting: Mal sources of for Discounted Internal Rate eting. Concepts The its impact of sources of final sources of f | Meaninand Pay of I | ng, Ba Retu | Ste Te ck urn | ps ing ps in | - Evaluation - Eva | , Compevaluate PV, Prationing | Q with | h price brokes, Factors it-national | timum vables: counts eaks – to be capital |

- 1. Maheshwari S.N., (2019), "Financial Management Principles and Practices", 15th Edition, Sultan Chand &Sons, New Delhi.
- 2. Khan M.Y &Jain P.K, (2011), "Financial Management: Text, Problems and Cases", 8th Edition, McGraw Hill Education, New Delhi.
- 3. Prasanna Chandra, (2019), "Financial Management, Theory and Practice", 10th Edition, McGraw Hill Education, New Delhi.

Apte P.G, (2020), "International Financial Management" 8th Edition, Tata McGraw Hill, New Delhi.

Books for reference:

- 1. Pandey I. M., (2021), "Financial Management", 12th Edition, Pearson India Education Services Pvt. Ltd, Noida.
- 2. KulkarniP. V. &Satyaprasad B. G., (2015), "Financial Management", 14thEdition, Himalaya Publishing House Pvt Ltd, Mumbai.
- 3. Rustagi R. P., (2022), "Financial Management, Theory, Concept, Problems", 6th Edition, Taxmann Publications Pvt. Ltd. New Delhi.
- 4. ArokiamaryGeetha Rufus, Ramani N. & Others, (2017), "Financial Management", 1st Edition, Himalaya Publishing House Pvt Ltd, Mumbai.

Web references:

- 1. https://resource.cdn.icai.org/66674bos53808-cp8.pdf
- 2. https://resource.cdn.icai.org/66677bos53808-cp10u2.pdf
- 3. https://resource.cdn.icai.org/66592bos53773-cp4u5.pdf
- 4. https://resource.cdn.icai.org/65599bos52876parta-cp16.pdf

Note: Latest edition of the books may be used

Mapping of Course Outcomes with POs and PSOs

| | | | PO | Os | | | | | |
|-----|---|---|----|----|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 3 | 3 | 1 | 3 | 3 | 3 | 2 | 2 | 2 |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO3 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO4 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| CO5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |

| Course | T:41 f 41 C | C-4 | | | | | C 1'4- | Inst. | | Marks | |
|------------|--|--|--|--|-----------------------|-------------------------------------|---|---------------------------------------|---|--|--|
| Code | Title of the Course | Category | L | T | P | O | Credits | Hours | CIA | External | Total |
| 23MCC1C | 22 DIGITAL MARKETING | | 7 | - | - | - | 5 | 7 | 25 | 75 | 100 |
| | <u>, </u> | Learning | Ob | ject | ives | 5 | | 1 | | | • |
| 1 | To assess the evolution of o | ligital marke | ting | , | | | | | | | |
| 2 | To appraise the dimensions | | | _ | g mi | X | | | | | |
| 3 | To infer the techniques of o | | ting | | | | | | | | |
| 4 | To analyse online consume | | | | | | | | | | |
| 5 | To interpret data from social | | | | | gar | ne based | l market | ing | | |
| | | Cours | se U | nits | | | | | | | |
| UNIT I | Introduction to Digital M. Digital Marketing – Trans Growth of e-concepts – C digital marketing as a too benefits and limitations – I for digital marketing profes | sition from to Growth of e- l – Digital r Factors for s | -bus nark | sines cetir | ss to | o ac han | lvanced nels – I | e-comr Digital 1 | nerce narke | Emerge ting applic | nce of ations, |
| UNIT II | Online marketing mix Online marketing mix – E-1 segmentation – Targeting – characteristics affecting onl marketing mix decisions | oroduct – E- ₁ Positioning | - C | onsı | ıme | rs a | nd onlin | e shopp | ing iss | sues – Web | |
| UNIT III | Digital media channels Digital media channels – S display advertising – Opt-i – Campaign management disadvantages of digital me | n-email marl using – Fac | ketii ebo | ng a ok, | nd 1 Tw | mob itte | ile text: r, Corpo | messagi orate Bl | ng, In | vasive man | keting |
| UNIT IV | Online consumer behavior Online consumer behavior of online consumer visit – process – Data base mark Process – Benefits – Role – | Cultural irModels of eting – Elec | web tron | site | vis ons | its - | – Web a | and cons | sumer | decision n | naking |
| UNIT V | Analytics and Gamification Digital Analytics – Conceptions of metrics – Measurement Instagram, Snapchat and L. Meaning – Benefits – Community Market influence analytics Word of mouth – Influence game based marketing – Benefits – Be | on ot – Measure ent metrics for inkedIn – Ea ponents – Br – Consumer analytics – I | eme or Fa arne rand ger Min | nt faceld so shared sha | ram book beial are of | k, Tv l me dime med sum | witter, Y edia met ensions - lia and o er gener | ouTuberics - I - Brand pinion ated me | , Slide Digital audie leader edia – | e Share, Pir brand ana nce dimens s – Peer re Gamificati | nterest, lysis – sions – view – |
| Course Ou | | | | | | | • | _ · _ ~ _ | | | |
| Students w | ill be able to | | | | | | | | | | |
| CO 1 | Explain the dynamics of digital | tal marketing | g | | | | | | | | |
| CO 2 | Examine online marketing m | nix | | | | | | | | | |
| CO 3 | Compare digital media chang | | | | | | | | | | |
| CO 4 | | | | | | | | | | | |
| CO 4 | Interpret online consumer be Analyse social media data | Havior | | | | | | | | | |
| CUS | Anaryse social incula data | | | | | | | | | | |

- 1. Puneet Singh Bhatia, (2019) "Fundamentals of Digital Marketing", 2nd Edition, Pearson Education Pvt Ltd, Noida.
- 2. Dave Chaffey, Fiona Ellis-Chadwick, (2019) "Digital Marketing", Pearson Education Pvt Ltd, Noida.
- 3. Chuck Hemann& Ken Burbary, (2019) "Digital Marketing Analytics", Pearson Education Pvt Ltd, Noida.
- 4. Seema Gupta, (2022) "Digital Marketing" 3rd Edition, McGraw Hill Publications Noida.
- 5. Kailash Chandra Upadhyay, (2021) "Digital Marketing: Complete Digital Marketing Tutorial", Notion Press, Chennai.
- 6. Michael Branding, (2021) "Digital Marketing", Empire Publications India Private Ltd, New Delhi.

Books for reference:

- 1. VandanaAhuja, (2016) "Digital Marketing", Oxford University Press. London.
- 2. Ryan Deiss& Russ Henneberry, (2017) "Digital Marketing", John Wiley and Sons Inc. Hoboken.
- 3. Alan Charlesworth, (2014), "Digital Marketing A Practical Approach", Routledge, London.
- 4. Simon Kingsnorth, Digital Marketing Strategy,(2022) "An Integrated approach to Online Marketing", Kogan Page Ltd. United Kingdom.
- 5. MaityMoutusy, (2022) "Digital Marketing" 2nd Edition, Oxford University Press, London.

Web references:

- 1. https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf
- 2. https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning
- 3. https://journals.ala.org/index.php/ltr/article/download/6143/7938

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | PSOs | | | | | |
|-----|---|---|----|----|---|---|------|---|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | | | |
| CO4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | | | |
| CO5 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 3 | 2 | | | |

| Course Cod | Title of the Course | Catagony | | Т | Ъ | | Cuadita | Inst. | | Marks | |
|--------------|--|---|---|-------------------|-------------------------------|------------------------------|---|--|--|--|---------------------------|
| Course Cod | e Title of the Course | Category | L | T | P | U | Credits | Hours | relevant regulations apid Transformation e Financial Disrupto g – Electronic Paym Debit Clearing – NE chnology – Blockcha ences between DLT a tential of Blockchai le of DLT in finance in Sof AI in Bankin d banking - Meanin atition and Functions as in Insurance Sector surance Intermedian sessors - Third Pa — Quality of Service incation and Custon tem in Insurance Regulat Guidelines. I insurance industrie | Total | |
| 23MCC1C | BANKING AND INSURANCE | | 6 | - | - | - | 4 | 6 | | 100 | |
| | | Learning (| Obje | cti | ves | | | | | ransformations ransformations ransformations ransformation | • |
| 1 | To understand the evolution | on of new era | banl | cin, | g | | | | | | |
| 2 | To explore the digital ban | | es | | | | | | | | |
| 3 | To analyse the role of insu | | | | | | | | | | |
| 4 | | | | | | | | | levant | regulatio | ns |
| 5 | To analsye risk and its im | | _ | | nsur | anc | e industr | y | | | |
| | | Course | | | | | | | | | |
| UNIT I | Banking: Customer Shift - Digital Financial Revoluti Systems-Electronic Fund - RTGS -VSAT-SFMS-S | Fintech Over on - New Era Transfer Syst | rviev ı of l | v - Bar | Fint ikin | ech g. [| Outlook Digital Ba | - The F inking - | inanc Elec | ial Disrup tronic Pay | tors - ment |
| UNIT II | Contemporary Developm Meaning - Structure of Blo Blockchain - Benefits of Crypto currencies, Centra services - AI in Banking Importance of AI in bank Benefits in switching to C | ockChain - Ty Blockchain a al Bank Digit g: Future of A ting - Bankin | ypes nd E tal C AI in g rei | of DLT Curi | Bloo [- l renc Bank | ck C Unlo y (G | Chain - Docking the CBDC) - - Appli | ifference ne poter - Role cations | es bet tial of of DL of Al | ween DL' f Blockch T in fina I in Bank | T and ain – ancial ting - |
| UNIT III | Indian Insurance Marke Insurance – Insurance Con Insurance Organisation – Insurance Broker – Insurance Administrators (Health Se | et: History of ntract – Indian Insurance trance Agent | f Ins n Ins e org | ura gan Sur | nce isati veyo | Ma ion ors | rket – Re structure and Los | eforms i e. Insur s Asse | n Insuance | ırance Sed Intermedi | ctor – aries: |
| UNIT IV | Customer Services in In Role of Insurance Agent Service –Ethical Behaviou –Integrated Grievance Ma and Development Authori | surance: Customer in Insurance nagement Sys | stom er S e – (stem | erv Grie In | Service- evan | vice Age ice l ance | in Insurent's Cor Redressa Ombud | rance – mmunic l Systen sman - l | ation n in In Insura | and Cust surance S nce Regul | tomer Sector |
| UNIT V | Risk Management: Risk Methods of Risk Manage Tools for Controlling Risk | ement – Risk | | | | | | _ | - Rapid Transformation - The Financial Disruptor Inking – Electronic Paymend Debit Clearing – NE - Technology – Blockchar Ferences between DLT are potential of Blockchair Role of DLT in financiations of AI in Banking Cloud banking - Meaning - Meaning Cloud banking - Meaning - M | | |
| Course Out | | | _ | _ | _ | _ | | | | | |
| Students wil | | <u> </u> | | | | | | | | | |
| | Relate the transformation in | | | diti | iona | l to | new age | | | | |
| | Apply modern techniques of | | ing | | | | | | | | |
| | Evaluate the role of insuran | | | | | | | | The Financial Disruptor king – Electronic Paymend Debit Clearing – NEI Technology – Blockchain ferences between DLT a potential of Blockchain Role of DLT in financiations of AI in Banking loud banking - Meaning loud banking - Meaning efinition and Functions orms in Insurance Sector Insurance Intermediarie Assessors - Third Part. Ince – Quality of Service munication and Custom System in Insurance Regulator and Guidelines. and insurance industries | | |
| | Examine the regulatory med | | | | | | | | | | |
| CO 5 | Assess risk mitigation strate | egies | | | | | | | | | |

- 1. Indian Institute of Banking and Finance (2021), "Principles & Practices of Banking", 5th Edition, Macmillan Education India Pvt. Ltd, Noida, Uttar Pradesh.
- 2. Mishra M N & Mishra S B, (2016), "Insurance Principles and Practice", 22nd Edition, S. Chand and Company Ltd, Noida, Uttar Pradesh.
- 3. Emmett, Vaughan, Therese Vaughan M., (2013), "Fundamentals of Risk and Insurance", 11th Edition, Wiley & Sons, New Jersey, USA.

<u>Theo Lynn</u>, <u>John G. Mooney</u>, <u>PierangeloRosati</u>, <u>Mark Cummins</u> (2018), Disrupting Finance: FinTech and Strategy in the 21st Century (Palgrave Studies in Digital Business & Enabling Technologies), Macmillan Publishers, NewYork (US)

Books for reference:

- 1. SundharamKPM &Varshney P. N., (2020), "Banking Theory, Law and Practice", 20th Edition, Sultan Chand & Sons, New Delhi.
- 2. Gordon & Natarajan, (2022), "Banking Theory, Law and Practice", 9th Edition, Himalaya Publishing House Pvt Ltd, Mumbai.
- 3. Gupta P. K. (2021), "Insurance and Risk Management" 6th Edition, Himalaya Publishing House Pvt Ltd, Mumbai.
 - Susanne Chishti., & Janos Barberis (2016), The Fintech book: The financial technology handbook for investors, entrepreneurs and visionaries. John Wiley & Sons.

Web references:

- 1. https://corporatefinanceinstitute.com/resources/knowledge/finance/fintech-financial-technology
- 2. https://mrcet.com/downloads/digital_notes/CSE/IV%20Year/CSE%20B.TECH%20IV%20YEAR%20II%20SEM%20BCT%20(R18A0534)%20NOTES%20Final%20PDF.pdf
- 3. https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral Layout.aspx?page=Page

No108&flag=1

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | PSOs | | | | |
|-----|---|---|----|----|---|---|------|---|---|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | |
| CO1 | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | | |
| CO4 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | | |
| CO5 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | | |

Low - 1

Strong - 3 Medium – 2

| Course | Title of the Course | Category | | | | | Credits | Inst. | | Marks | |
|-------------------------|--|--|---------------------------------------|---|--------------------------------------|--------------------------------------|---|--|--|---|-----------------------|
| Code | | Category | L | T | P | O | Cicuits | Hours | CIA | External | Total |
| 23MCC1E | 1 INTRODUCTION TO INDUSTRY 4.0 | DSE-1 | 5 | - | - | - | 3 | 5 | 25 | 75 | 100 |
| | | Learning | Ob | ject | ives | | | | | | |
| 1 | To enable the students to | comprehend tl | ne c | hanş | ge fi | rom | industry | 1.0 to | 4.0 | | |
| 2 | To gain knowledge on the | challenges ar | ıd fi | ıture | e pro | ospe | ects of ap | plying | artific | ial intellige | ence |
| 3 | To learn the applications of | | | | | | | levelopr | nent | | |
| 4 | To understand the applica | | | | | | | | | | |
| 5 | To understand why educa | | | | | h in | dustry 4. | .0 | | | |
| | | Cours | | | | | | | | | |
| UNIT I | Introduction: Industry: M 4.0: Meaning, Goals and Artificial Intelligence (AI) Augmented Reality. | Design Princi | oles | - Te | echr | olo | gies of I | ndustry | 4.0 -] | Big Data – | 1.0 to |
| UNIT II | Artificial Intelligence: As environment - Societal Inf Technologies of AI - Futu | luences of AI | – A | ppli | cati | on l | Domains | and To | | | e AI - |
| UNIT III | Big Data: Evolution - Data Industry 4.0 - Big Data McCharacteristics - Big Data Big Data Domain Stack: Learning - Big Data in Data for Industry -Big Data RolloT - Architecture of IoT of IoT - Security in IoT. | erits and Limi Processing Fr Big Data in Databases - Big les - Learning | tatio ame ata S Data Plat | ons - ewor Scie Scie Us tfor | - Big rks - nce ecas ns; | g Da - Big – B ses: Inte | ata Comg g Data T ig Data i Big Dat rnet of T | ponents fools - E fin IoT - fa in Soc fhings (| : Big Big Da Big D cial Ca IoT): | Data ta Applicat tata in Mac tuses - Big Introduction | hine Data on to |
| UNIT IV | Applications of IoT: IoT Defence – Agriculture – T Impact on Business, Gove Data Analytics - Virtual R | ransportation rnment, Peopl | and le - ' | Log Too | gisti Is fo | cs – or A | - Impact rtificial l | of Indu Intellige | stry 4. | 0 on Societ | |
| UNIT V | Industry 4.0: Education Tools for Education – A aligning Education with Ir | rtificial Intell | | | | | • | | - | | |
| Course Ou Students w | tcomes: | | | | | | | | | | |
| CO 1 | Discuss on the change from | industry 1.0 t | o 4. | 0 | | | | | | | |
| CO 2 | Discover the challenges and | future prospe | ects | of a | pply | ing | artificia | l intelli | gence | | |
| CO 3 | Apply big data for industria | l growth and o | leve | lop | men | t | | | | | |
| | Apply IoT in various sec Défense | tors like Ma | nuf | actu | ring | g, H | lealthcar | e, Edu | cation | , Aerospac | e and |
| CO 5 | Appraise why education has | s to be aligned | wit | h in | dus | try 4 | 4.0 | | | | |

- 1. SeemaAcharya J, SubhashiniChellappan, (2019) "Big Data and Analytics", 2nd Edition, Wiley Publication, New Delhi.
- 2. Russel S, Norvig P (2010), "Artificial Intelligence: A Modern approach", 3rdEdition, Prentice Hall, New York.

Pethuru Raj and Anupama C. Raman, (2017),"The Internet of Things: Enabling Technologies, Platforms, and Use Cases", Auerbach Publications

Books for reference:

1. Judith Hurwitz, Alan Nugent, Fern Halper, Marcia Kaufman, "Big Data for Dummies", John Wiley & Sons, Inc.

Nilsson (2000), Artificial Intelligence: A new synthesis, Nils J Harcourt Asia PTE Ltd.

Web references:

- 1. https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SEEA1403.pdf
- 2. https://library.oapen.org/bitstream/handle/20.500.12657/43836/external_content.pdf?sequence=1 https://www.vssut.ac.in/lecture notes/lecture1428643004.pdf

Note: Latest edition of the books may be used.

Mapping of course outcomes with POs and PSOs

| | | | | P | Os | | PSOs | | | | | | | |
|-----|---|---|---|---|----|---|------|---|---|--|--|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | | | |
| CO1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |
| CO2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |
| CO3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |
| CO4 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |
| CO5 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |

Strong - 3 -2 Low - 1

| Course | Title of the Course | Category | L | T | P | 0 | Credits | Inst. | | Marks | |
|-------------|--|--|------------|----------------------|-------|--------------|------------------------------|----------------|---------------------------|--------------------|------------------|
| Code | | | | | | | | Hours | CIA | External | Total |
| 23MCC1E2 | BIG DATA ANALYTICS | DSE-1 | 5 | - | - | - | 3 | 5 | 25 | 75 | 100 |
| | T | Learning | | | | | | | | | |
| 1 | To understand the various | aspects of da | ita sc | eien | ce a | nd a | applying | them in | healtl | n care | |
| 2 | To learn the applications | of big data for | r ind | ustr | ial g | grov | vth and d | evelopr | nent | | |
| 3 | To understand the charact | eristics of 5 V | V's | | | | | | | | |
| 4 | To know the big data prob | olems | | | | | | | | | |
| 5 | To understand the Hadoop |) | | | | | | | | | |
| | | Cour | se U | nits | | | | | | | |
| UNIT I | Introduction to Data Sci Biomedicine and Healthca Language Processing – No | are – Sequenc | e Pro | oces | sing | g – I | Medical | Image A | Analys | | |
| UNIT II | Big Data: Big data: Mean Big Data - Machine -Gen Organization of Generated | erated Data - | Adv | anta | iges | -E | | | | | e of |
| UNIT III | Characteristics of Big Dat Characteristics of Big Dat using 5-step process to str | a – Veracity - | - Va | lenc | | | | | | | Oata |
| UNIT IV | Data Science: Getting va Big Data science – Five C Preprocessing and Explor- insights into action. | omponents of | f Dat | a So | cien | ce. | Steps in | Data Sc | ience: | Acquiring | Data, |
| UNIT V | Big Data Systems and Hover the Internet – Programmer The Hadoop Distributed In the Hadoop Distri | amming Mod | lels f | or l | Big | Dat | ta – Intro | oduction | n to H | adoop syst | |
| | Manager for Hadoop | Map Reduce | : Si | mpĺ | e P | rog | ramming | for B | ig Res | | source |
| Course Ou | Reconsider Hadoop? – Clatcomes: | Map Reduce | : Si | mpĺ | e P | rog | ramming | for B | ig Res | | source |
| Students wi | Reconsider Hadoop? – Cletcomes: ll be able to | Map Reduce | e: Sing: A | mpl n ii | e P | rogi | ramming nt Big Da | for Batta enab | ig Res ler. | sults – Wl | source |
| Students wi | Reconsider Hadoop? – Cletcomes: Il be able to Describe the Big Data lan | Map Reduce oud Computin | e: Sing: A | mpl n ii | e P | rogi | ramming nt Big Da | for Batta enab | ig Res ler. | sults – Wl | source |
| CO 1 CO 2 | Reconsider Hadoop? – Cletcomes: Il be able to Describe the Big Data lan Explain the advantages of | Map Reduce oud Computing dscape include Big Data. | e: Sing: A | mpl n ii | npo | rogi rtar | ramming at Big Da | for Bata enab | ig Res ler. lata pr | oblems | source nen to |
| Students wi | Reconsider Hadoop? – Cletcomes: Il be able to Describe the Big Data lan Explain the advantages of Explain the Vs of Big Data and reporting | Map Reduce oud Computing dscape include TBig Data. | :: Sing: A | mpl an ii exar | mpo | rogi rtar | ramming at Big Da f realwore | for Batta enab | ler. | oblems storage, an | nen to |
| CO 1 CO 2 | Reconsider Hadoop? – Cletcomes: Il be able to Describe the Big Data land Explain the advantages of Explain the Vs of Big Data | Map Reduce oud Computing dscape include TBig Data. | :: Sing: A | mpl an ii exar | mpo | rogi rtar | ramming at Big Da f realwore | for Batta enab | ler. | oblems storage, an | nen to |

- 1. Peter Guerra and Kirk Borne (2016), "Ten Signs of Data Science Maturity", O'Reily Media Pvt Ltd, USA
- 2. Tom White (2012), "Hadoop: The Definitive Guide" Third Edition, O'Reily Media, USA.
- 3. SeemaAcharya (2015), Subhasini Chellappan, "Big Data Analytics", Wiley, USA

Books for reference:

- 1. Howard Wen, Big Ethics for Big Data, O'Reilly Media, USA.
- 2. Michael Mineli, Michele Chambers, AmbigaDhiraj (2013), Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses, Wiley Publications, USA.
- 3. Judith S.Hurwitz, Alan Nugent, Fern Halper, Marcia Kaufman (2015), "Big Data for Dummies", John Wiley & Sons, Inc., USA.

Web references:

- 1. https://www.coursera.org/learn/big-data-introduction/home/welcome
- 2. https://www.coursera.org/learn/bioconductor?action=enroll&authMode=login

Note: Latest edition of the books may be used.

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | PSOs | | | | | |
|-----|---|---|---|----|---|---|------|---|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | | | |
| CO2 | 2 | 2 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | | | |
| CO3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | | | |
| CO4 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | | | |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |

| Course | Title of the Course | Catagory | т | T | P | 0 | Credits | Inst. | | Marks | | | |
|------------------------|--|--------------|------|-------|--|----------|-----------|----------|------------|-------------|--------|--|--|
| Code | Title of the Course | Category | L | 1 | P | U | Credits | Hours | CIA | External | Total | | |
| 23MCC1E3 | ENTERPRISE DESCRIPCE DI ANNINC | DSE-2 | 5 | _ | _ | _ | 3 | 5 | 25 | 75 | 100 | | |
| | RESOURCE PLANNING | т • | | • 4 | <u>. </u> | | | | | | | | |
| | m 1 11 1 | Learning | Ob | ject | ives | S | | | | | | | |
| 1 | To learn the history and gro | | | | D D | | | | | | | | |
| 2 | To understand the risks invo | | | _ | | | | | | | | | |
| 3 | To gain knowledge on the v | | | nnol | ogie | es | | | | | | | |
| 5 | To learn the dynamics of EI | | | .1 | | | | | | | | | |
| 3 | To choose appropriate ERP | Cours | | | | | | | | | | | |
| | | | | | | | | | T . | . 1 | | | |
| | Enterprise an Overview: E | | | | | | | | _ | - | | | |
| UNIT I | Management Information - I | | | | | | | | | | | | |
| | Major Business Processes. Introduction to ERP: Common ERP Myths - A Brief History of ERP - Reasons for the Growth of ERP Market - Advantages of ERP. | | | | | | | | | | | | |
| | ERP - Reasons for the Growth of ERP Market - Advantages of ERP. Risk of ERP: People Issues - Process Risks - Technological Risks - Implementation Issues- | | | | | | | | | | | | |
| | Operation and Maintenance | | | | | | _ | | - | | | | |
| | Projects. Benefits of ERP: In | | | | | | | | | | | | |
| UNIT II | Shipment - Reduction in Cy | | | | | | | | | | | | |
| | Satisfaction - Improved Sup | | - | | | | | | | | | | |
| | - Better Analysis and Planni | | | | | | | | | | | | |
| | Making Capability - Use of | | | | _ | | | | • | , | | | |
| | ERP and Related Technological | | | | | Re | engineer | ring (BF | PR) - B | Business | | | |
| | Intelligence (BI) - Business | Analytics (H | 3A) | - D | ata ' | Waı | ehousing | g- Data | Minin | g - On - Li | ne | | |
| | Analytical Processing (OLA | | | | | | | | | | | | |
| UNIT III | Management (SCM) - Custo | | | | | | | | | | nation | | |
| | Systems (GIS) - Intranets an | | | | | | <i></i> | | | • | • . | | |
| | Technological Advancemen | ts - Comput | er C | `rım | es - | ER | P and Se | curity - | Comp | outer Secur | ıty - | | |
| | Crime and Security. | | _ | | | | | | | | | | |
| | ERP Market Place and M | | | | | | | | | | | | |
| UNIT IV | Market Place Dynamics - I | | | | | | | | | | | | |
| | Business Modules of an ER ERP, Supply Chain, and Cu | _ | | | | | | LEKP S | onwa | re: miegra | uon oi | | |
| | | | | | | | | | | | | | |
| | ERP Implementation: Ber | | - | | _ | | - | • | | _ | | | |
| UNIT V | Implementation Life Cycle | | | | | | | | | | | | |
| | Implementation- Reasons f Package Evaluation and Sele | | | | | | | | | | | | |
| C 0 | | ection - The | 361 | CCII | OII I | 100 | CSS - LIX | ГГаска | iges. N | nake of bu | у. | | |
| Course Out Students wi | | | | | | | | | | | | | |
| CO 1 | Recall the history and growth | th of ERP | | | | | | | | | | | |
| CO 2 | Appraise the risks involved | | ER | P | | | | | | | | | |
| CO 3 | Select from among various l | | | | | | | | | | | | |
| CO 4 | Analyse the dynamics of ER | | | | | | | | | | | | |
| CO 5 | Distinguish and choose appr | opriate ERI | o so | lutio | ons (| or p | ackages | | | | | | |
| | | • | | | | | | | | | | | |

- 1. Alexis Leon (2008), "Enterprise Resource Planning", 2nd edition, Tata McGraw-Hill, Noida.
- 2. Jagan Nathan Vaman (2008), "ERP in Practice", Tata McGraw-Hill, Noida.
- 3. MahadeoJaiswal and Ganesh Vanapalli (2009), "ERP", Macmillan India, Noida.

Books for reference:

- 1. Sinha P. Magal and Jeffery Word (2012), "Essentials of Business Process and Information System", Wiley India, USA.
- 2. Summer (2008), "ERP", Pearson Education, Noida.
- 3. Vinod Kumar Grag and N.K. Venkitakrishnan (2006), "ERP- Concepts and Practice", Prentice Hall of India, New Delhi.

Web references:

- 1. https://mrcet.com/downloads/digital_notes/CSE/III%20Year/ERP%20Digital% 20notes.pdf
- 2. https://mrcet.com/downloads/digital_notes/ME/III%20 year/ERP%20Complete%20Digital%20notes.pdf
- 3. https://www.vssut.ac.in/lecture notes/lecture1428643004.pdf

Note: Latest edition of the books may be used.

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | | PSOs | |
|-----|---|---|----|----|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |

Strong - 3 Medium - 2 Low - 1

Note: Latest edition of the books may be used

| C C- 1- | Tidle of the Comme | C-4 | т | T | Ъ | | C1:4 | Inst. | | Marks | |
|-----------------|---|---|---------------------|----------------------|------------------------------|---------------------|-----------------------------------|-----------------------------|----------------------------|-------------------------------------|-------------------|
| Course Code | Title of the Course | Category | L | T | P | U | Credits | Hours | CIA | External | Total |
| 23MCC1E4 | DATABASE MANAGEMENT SYSTEM | DSE-2 | 5 | - | - | - | 3 | 5 | 25 | 75 | 100 |
| | | Learning | Ob | ject | ives | 5 | | | | | |
| 1 | To introduce the basic concer knowledge of Linux environr | | tion | al D | atal | base | e Manage | ement S | ystem | and the w | orking |
| 2 | To understand designing data | bases and | que | ries | in S | SQL | 1 | | | | |
| 3 | To learn RDBMS | | | | | | | | | | |
| 4 | To upskill the functions and o | perators | | | | | | | | | |
| 5 | To understand the constraints | - | | | | | | | | | |
| | | Cours | e U | nits | } | | | | | | |
| UNIT I | Introduction to Database S Database System Structure Relational Model - Introduct Environment - Linux basics of - Pipes, Filters, and Wildcards | - Data Moion to Linu commands | ode ux (- W | ls I Ope: 'ork | ntro ratir ing | duc ng S witl | tion to System - h Files - | Networ Propert | k Modies of | dels: ER N Linux - D | Model, esktop |
| UNIT II | SQL Definition and Norma Views - Integrity and Secur Normalization for relational of | ity. Relation | ona | l Da | atab | ase | design - | - Funct | | | |
| UNIT III | Files and RDBMs: Record Devices - Operations on Fil Structure for Files - Differe Multimedia Databases - Bas Databases - Overview of RDI Mining. | les - Heap nt Types o ic Concep | Fi of I ots a | le - nde and | So xes Ap _l | rtec - E plic | l Files - B-Tree - ations - | Hashir B+Tree Indexir | ng Teo e - Qu ng and | chniques - ery Proces Hashing | Index ssing Text |
| UNIT IV | Data Definition and Ma Manipulation Language - T Privilege Command - Set Op Multiple and Correlated Sub Conversion and Group Function | ransaction perators - J Queries - | Co Ioin | ntro s- k | ol - Kind | Da ls o | ta Contı f Joins - | ol Lang Table | guage Aliase | Grant - R s - Sub qu | Revoke eries - |
| UNIT V | Constraints and MYSQL: C Locks - Types of Locks, Tabl MySQL as an RDBMS Tool | e Partitions | s - S | Syno | onyı | n - | Introduc | | | | |
| Course Outo | | | | | | | | | | | |
| | dentify models and schemas i | n DBMS a | nd 1 | LIN | UX | | | | | | |
| | Demonstrate Queries in SQL | | | | | | | | | | |
| | Discuss handling files and data | hases | | | | | | | | | |
| | Apply skills on functions and of | | 1 R1 | DRN | ИS | | | | | | |
| | Apply constraints and locks in | • | . 1 | 1 | ,10 | | | | | | |
| | 11 7 | | | | | | | | | | |

- 1. Ramakrishnan Raghu and Gehrke Johannes, "Database Management Systems", McGraw-Hill, USA.
- 2. Rajendra Prasad Mahapatra and GovindVerma, "Database Management System", Khanna Publications, New Delhi.

Books for reference:

- 1. Ramon A Mata-Toledo and Pauline K Cushman, "Database Management System", Schaun's Outlines, New York.
- 2. Abraham Silberschatz, Henry F Korth and S. Sudarshan, "Database System Concepts" McGraw-Hill, USA.

Web references:

- 1. http://education-portal.com/academy/lesson/what-is-a-database-management-systempurpose-and-function.html.
- 2. http://www.comptechdoc.org/os/linux/usersguide/linux_ugbasics.html.
- 3. http://www.dummies.com/how-to/content/common-linux-commands.html.

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | | | |
|-----|---|---|---|----|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 |
| CO3 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 3 | 2 |

Strong - 3 -2 Low - 1

M.Com., Computer Applications First Year Core – IV Semester II

STRATEGIC COST MANAGEMENT

| | | | A | A | | | | | r. | | Mar | ·ks |
|---------------|---------------------|---|--|--------------------------|-----------------------|---------------------------------|---------------------|--------------------------|-------------------------------|-------------------------------|-----------------------------|-------------------------------|
| Course | e Code | Title of the Course | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total |
| 23MC | C2C1 | STRATEGIC COST MANAGEMENT | Core | 6 | - | - | - | 4 | 6 | 25 | 75 | 100 |
| Lear Objec | _ | To analyse the aspe To analyse and sele To apply activity ba To utilise transfer parts To apply cost mana | ct cost cost cost ricing m | ont ting eth | rol to for ods | echn decis in co | iqu sior st c | es 1 mak letern | ing inatio | on | ment | |
| Course | Units | | | | | | | | | | | |
| UNI | IT 1 | Introduction to Strategic Introduction to Strategic C between SCM and Tradition and steps - Quality Cost M - Cost of Quality -India Introduction to Lean System Costing. | Cost Ma onal Cost anagem on Cost | nag st N ent Ac | eme Iana : Me | nt (S igem canin nting | ent g o g S | - Va f Qua tanda | lue Cl llity anrd rd 21 | nain An nd Qua on Q | nalysis lity M uality | : Meaning anagement Control - |
| UNI | T 1I | Cost Control and Reductions Cost Management Techniques Reduction: Meaning and Solar reduction - Pareto Analysis Meaning, steps and Principus stage of product life cycle, and applications. | ues: Cos cope – D : Meani les – Lit | oiffe ng, fe C | erenc impo ycle | ces b ortar Cos | etw nce sting | veen C and a g: Me | Cost copplication | ontrol attions - T Strateg | nd cos Farget gies fo | t Costing: r each |
| UNIT | Γ1II | Activity Based Cost Mana Activity Based Cost Manag Decision making and its Ap | gement: | Cor | | | | | | | | evance in |
| UNI | Γ 1V | Transfer Pricing Transfer Pricing: Meaning, transfer price, Negotiated p Problems. | Benefit ricing a | s, M nd I | letho Prici | ods: ng b | Prio aseo | cing b | ased o | on cost, | Mark | - |
| UNI | T V | Agriculture Sector: Feature performance, Minimum Su Technology Sector: Feature Perspective. | s, Cost S pport Pr | Stru ice | ctur and | e, Co Inter | ost] rnat | ional | Persp | ective - | - Infor | mation |
| | Outcon s will be | tcomes Il be able to | | | | | | | | | | |
| 1 | Discuss | strategic cost management a | ınd QC | | | | | | | | | |
| 2 | | the appropriate technique fo | | ntr | ol | | | | | | | |
| 3 | | activity based costing in prac | tice | | | | | | | | | |
| 4 | | ransfer pricing methods | 1.70 | | | | | | | | | |
| 5 | Build co | d cost structure for Agriculture and IT sector | | | | | | | | | | |

- 1. Ravi M Kishore (2018), "Strategic Cost Management", 5thEdition, TaxmannPublications Pvt. Ltd, New Delhi.
- 2. Bandgar P. K., (2017), "Strategic Cost Management", 1stEdition, Himalaya Publishing House Pvt Ltd, Mumbai.
- 3. Sexena V. K., (2020), "Strategic Cost Management and Performance Evaluation", 1st Edition, Sultan Chand & Sons, New Delhi.

Books for reference:

- 1. John K Shank and Vijay Govindarajan(2008), Strategic Cost Management, Simon & Schuster; Latest edition, UK
- 2. JawaharLal, (2015), "Strategic Cost Management", 1st Edition, Himalaya Publishing House Pvt Ltd, Mumbai.)
- 3. Arora M. N., (2021), "A Text Book of Cost and Management Accounting", 11th Edition, Vikas Publishing House Pvt. Ltd., New Delhi.

Web references:

- 1. https://www.accountingtools.com/articles/strategic-cost-management.html#:~:text= Strategic%20cost%20management%20is%20the,it%20or%20have%20no%20impact.
- 2. https://ca-final.in/wp-content/uploads/2018/09/Chapter-4-Cost-Management-Techniques.pdf
- 3. https://resource.cdn.icai.org/66530bos53753-cp5.pdf

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | | PSOs 1 2 3 3 3 3 3 3 3 | | | | |
|-----|---|---|----|----|---|---|---|-------------------------|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | | | |
| CO5 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | | | |

Strong - 3 Medium - 2 Low - 1

M.Com., Computer Applications First Year Core – IV Semester II

CORPORATE ACCOUNTING

| | | | | x | | | | | | Ľ | | Mar | ks | | | |
|-----------|-------------------|--------------------------------------|--|---|---|--------------------------------|-------------------|----------------|-------------|------------------|--------|---|--------------------------|--|--|--|
| Cou Co | irse ode | , | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | ilding- Buy-back f Companies as ts of life assura al accounts of F and Loss Accour ompany holdings g – Human resou counting Standa aning, Key e, Reporting of t,2013 nal accounts of I cewithAS21. | Total | | | |
| 23MC | CC2C2 | | CORPORATE ACCOUNTING | Core | 6 | - | - | - | 4 | 6 | 25 | Building- Buy-back of Sof Companies as perion. Dounts of life assurance of the accounts of Final accounts of Final accounts of Final accounts of Final accounts of the account recompany holdings | | | | |
| | earnin jectivo | | To understand To determine p To prepare cor To account for To adopt finan | profits for solidated price lev cial repor | find find find find find find find find | re an nanc chan g sta | d n ial ges | narir state | e ins | suranc | | ares | | | | |
| LINIT | 1 | Isana | of Chause and Einel A | Course | | | | .: | | | | | | | | |
| UNIT | | Issue (Shares | of Shares and Final A of Shares: ESOPs - ES s - Conversion of debo ule III of the Companie | SPS - Sw entures in | eat ito | Equ sha | uity res | Sha - Fi | nal | accou | nts of | Compar | • | | | |
| UNIT | | Insura Comp | ance Company Account ance Company Account anies- Ascertainment of and miscellaneous Ins | ts: Types of profit- | Va | aluat | ion | Bal | | | | | | | | |
| Unit II | | Conso Minor Prepar | blidated financial state blidated financial statementy interest — Cost of ration of consolidated B | ents as p control alance Sl | - nee | Cap | | | | | | | | | | |
| UNIT | | Accou | emporary Accounting on the street of the str | anges – S | | ial r | esp | onsi | bility | / acco | unting | g – Huma | in resource | | | |
| UNIT | | Financ (AS 5, provis CSR, l | cial reporting cial reporting: Meaning AS 10, AS 19, AS 20) cions of Companies Act Presentation and disclos | – Corpor , 2013, A sure in th | rate ccc e fi | Soc ounti | ial ng | Res | pons CSR | ibility expen | : Mea | ning, Ke | y | | | |
| Course | | | Theory: 20%; Proble | ms: 80% |) | | | | | | | | | | | |
| Studen | | | | | | | | | | | | | | | | |
| CO1 | Prepa | areFin | ancialStatementsofcom | paniesasp | ers | sche | dul | eIIIo | fCoı | npani | esAct, | ,2013 | | | | |
| CO2 | 1 | - | provisions of IRDA Re and General Insurance (| _ | | 002 | in 1 | the p | repa | ration | of fir | nal accou | nts of Life | | | |
| СОЗ | Prepa | areCon | nsolidatedFinancialStat | ementsof | Ho | lding | gСc | mpa | nies | inacco | ordanc | ewithAS | 21. | | | |
| CO4 | Asse | ss con | temporary accounting r | nethods | | | | | | | | | | | | |
| CO5 | | ounting | nancialReporting gStandardsandprovision | | | sed iesA | ct2 | 013v | vithr | on espec | ttoCor | | appropriate cialRespo | | | |

- 1. Gupta R. L. &Radhaswamy M. (2021), "Corporate Accounting Volume I & II", 14thEdition, Sultan Chand &Sons, New Delhi.
- 2. Maheshwari S. N., Sharad K. Maheshwari&Suneel K. Maheshwari, (2022), "Advanced Accountancy Volume I &II", 11thEdition, Vikas PublishingHouse Pvt. Ltd., New Delhi.
- 3. Jain S. P., Narang K. L., SimmiAgrawal and Monika Sehgal (2019), "AdvancedAccountancy Corporate Accounting Volume II", 22ndEdition, KalyaniPublishers, New Delhi.
- 4. Reddy T. S. &Murthy A., (2022), "Corporate Accounting Volume I &II", 17th Edition, Margham Publications, Chennai.

Books for reference:

- 1. ArulanandamM.A &Raman K.S., (2021), "Advanced Accounting (Corporate Accounting II)", 8thEdition, Himalaya Publishing House Pvt Ltd, Mumbai.
- 2. Shukla M C, Grewal T S and Gupta S C, (2022), "Advanced Accounts Volume II",19thEdition, Sultan Chand &Sons, New Delhi.
- 3. Gupta R. L., (2022), "Problems and Solutions in Company Accounts", 2ndEdition,Sultan Chand &Sons, New Delhi.

Web references:

- 1. https://resource.cdn.icai.org/66550bos53754-p1-cp9.pdf
- 2. https://resource.cdn.icai.org/66545bos53754-p1-cp4.pdf
- 3. https://resource.cdn.icai.org/66638bos53803-cp1.pdf
- 4. http://ppup.ac.in/download/econtent/pdf/MBA%201st%20sem%20Lecture%20note%20on%2 Oforensic%20accounting%20by%20Anjali.pdf

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PO | Os | | | PSOs | | | | |
|------|---|---|----|----|---|---|------|---|---|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | |
| CO 1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | | |
| CO 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |

Strong - 3 Medium - 2 Low - 1

M.Com., Computer Applications First Year Core – VI Semester II

SETTING UP OF BUSINESS ENTITIES

| | | | | | | | | Ø | Marks | | | | | | | |
|------------------------|--|--|-----------------------------------|--|--|---------------------------------------|--|--|--|---------------------------------------|---|--|--|--|--|--|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total | | | | | |
| 23MCC2C3 | SETTING UP OF BUSINESS ENTITIES | | 6 | - | 1 | - | 4 | 6 | 25 | 75 | 100 | | | | | |
| Learning Objectives | To analyse the formati To outline the concept To understand the proc To create awareness ab | To outline the concept of LLP and business collaboration To understand the procedure for obtaining registration and license | | | | | | | | | | | | | | |
| | | Cour | se l | Jnit | S | | | | | | | | | | | |
| UNIT I | Types of business organisati Startups – Evolution – Defin India policy – Funding suppo Exemptions for startups – La Financing options available for Crowd funding – Incubators - | > To create awareness about the legal compliances governing business entities | | | | | | | | | | | | | | |
| UNIT II | Not-for-Profit Organisations Formation and registration of Exemptions – Requirements Trust: Objectives of a trust – public and private trust – Exe deed –Society – Advantages – to NGOs. | f NGO of Sec Perso emption | ctio ons ons | n 8 wh ava | Co: o ca ilab | mpa an c le t | any - create o tru | - Ap e a t ists - | plica rust - - For | ntion : – Difi matio | for incorporation – ferences between a n of a trust - Trust | | | | | |
| UNIT III | Limited Liability Partnership: Limited Liability Partnership: disadvantages – Procedure for LLP-Business collaboration: disadvantages – Types – Join Special Purpose Vehicle – Me | Define income Define t vent | nition rpor niti ture | on – atic on agr | Na n – – ' eem | ture LL Typ nent | e and P ag es - Su | reen Join | nent - it ve ssful | - Ann enture | ual compliances of Advantages and | | | | | |
| UNIT IV | Registration and Licenses Registration and Licenses: I registration – PAN – Signific PAN with Aadhar –TAN – I Procedure to apply for TAN Shops and Establishment Act Board – FSSAI registration and | ntrodu ance Person —GS —MS | uction Ans 1: T: ME | on ppliable Pro | – Bicatice to cedu | Businon apure | ness and ply for on – | enti regis for T regis Clea | ity restration | on of – Re on – e fron | PAN – Linking of levance of TAN – Registration under Pollution Control | | | | | |
| UNIT V | Environmental Legislations Geographical Indication of G Salient Features - The Environmental Pollution) Act, 1974: The Cer Pollution - Powers and Functi - Penalties and Procedure- T Central and State Boards for T Functions - Prevention and Co | in Incoods onmer poll ntral a ons of he Ai | dia (Re ntal utio nd S f Bo ir (I | gista Pro State State Prevention | ration technology The Bosen Francisco Francisc | on a tion he parc Previon | and I Ac Wat Is for vention and Cont | Prote t, 19 er (r Pre on a Con | ection 86: Preventiond Control trol | Prevention an ontrol of Pollic Pollic | , 1999: Objectives, ention, control and And Control of d Control of Water of Water Pollution llution) Act, 1981: ation - Powers And | | | | | |

| | Course Outcomes |
|--------|--|
| Studen | ts will be able to: |
| CO 1 | Build a startup and acquire finance |
| CO 2 | Comply with the legal requirements for Section 8 Company |
| CO 3 | Initiate the proceedings for LLP |
| CO 4 | Illustrate the registration and licensing procedure |
| CO 5 | Examine the compliance of regulatory framework |

- 1. Kailash Thakur, (2007) "Environment Protection Law and Policy in India", 2nd Edition, Deep & Deep Publication Pvt. Ltd., New Delhi.
- 2. Avtar Singh, (2015), "Intellectual Property Law", Eastern Book Company, Bangalore
- 3. Zad N.S and DivyaBajpai, (2022) "Setting up of Business Entities and Closure" (SUBEC), Taxmann, Chennai
- 4. AmitVohra&RachitDhingra (2022) "Setting Up Of Business Entities & Closure", 6th Edition, Bharath Law House, New Delhi

Books for reference:

- 1. Setting up of Business Entities and Closure (2021), Module 1, Paper 3, The Institute of Company Secretaries of India, MP Printers, Noida
- 2. The Air (Prevention and Control of Pollution) Act, 1981, Bare Act, 2022 Edition, Universal/LexisNexis, Noida
- 3. The Water (Prevention and Control of Pollution) Act, 1974, Bare Act, 2022 Edition, Universal/LexisNexis, Noida
- 4. Cliff Ennico, (2005) "Small Business Survival Guide Starting Protecting and Securing your Business for Long-Term Success", Adams Media, USA
- 5. Daniel Sitarz, (2011) "Sole Proprietorship: Small Business Start-up Kit", 3rd Edition, Nova Publishing, USA

Web references:

- 1. https://www.icsi.edu/media/webmodules/FINAL FULL BOOK of EP SBEC 2018.pdf
- 2. https://www.mca.gov.in/MinistryV2/incorporation_company.html 3)
- 3. https://legislative.gov.in/sites/default/files/The%20Limited%20Liability%20 Partnership%20 Act,%202008.pdf
- 4. https://legislative.gov.in/sites/default/files/A1999-48.pdf
- 5. https://www.indiacode.nic.in/bitstream/123456789/6196/1/the_environment_protection_act%2C1986.pdf

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | PSOs | | | | |
|-----|---|---|----|----|---|---|------|---|---|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | |
| CO1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | | |
| CO2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | | |
| CO3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |

Strong - 3

Medium - 2

Low - 1

M.Com., Computer Applications First Year Elective – III A Semester II

DATA MINING AND DATA WAREHOUSING

| | | > | | | | | | ILS | Marks | | | |
|----------------|---|--|-------------------------------------|--------------------------------|---|---|--|---|---|---------------------------------|---|--|
| Course Code | Title of the Course | Category | Categor L T I | | P | O | Credits | Inst. Hours | CIA | External | Total | |
| 23MCC2E1 | DATA MINING AND DATA WAREHOUSING | DSE-3 | 4 | - | - | - | 3 | 4 | 25 | 75 | 100 | |
| | | ARNING | OF | BJE | CTI | VES | <u>. </u> | | | | | |
| | To understand the ba To gain knowledge implementation. To understand steps To learn the features. | sic conce on the in impler types ar | epts, e da nent | pri ata ing | ncip war data | les arehounder man | nd n use rt and data | archit d its v minir | ecture arious | , mo | delling and its | |
| | To aid the students to understand the various data mining tools and techniques Course Units | | | | | | | | | | | |
| UNIT I | Data Warehouse Definition - history of data warehouse - features of data warehouses - characteristics of data warehouse - goals of data warehousing- principles of data warehousing - need for data warehouse - benefits of data warehouse - need for separate data warehouse - difference between database and data warehouse - applications of data warehouses - components of data warehouse- data staging component. | | | | | | | | | | | |
| UNIT II | Data Warehouse Architect Data warehouse architecture warehouse architectures- the and load) process - selecting warehouses - data wareho warehouse models- data implementation guidelines - of metadata- metadata repos | e - prope ree-tier d g an ELT ouse mo- wareho meta da | ata too delli ouse ta - | war l- D ng do nec | ehou iffer - da esign essan | ise a rence ata 1 n - ry of | rchite bet node dar met | ecture ween elling ta w adata | e - ET ETL a life c arehor in dat | L (ex and El cycle use | tract, transform, LT types of data - types of data implementation- | |
| UNIT III | Data Mart Data Mart- Reasons for crea a Data Mart- Difference Modeling-Objectives of Dir Elements of Dimensional M Data Cube. | ting a da between nensiona | ıta n Da 1 M | nart ta ode | - Ty War ling | pes e ehou | of Da | ata M and I ages (| arts- S Data l | Mart. nensio | - Dimensional onal Modeling - | |
| UNIT IV | Data Cube. Data Mining Definition - History of Data Mining- Features of Data Mining - Types of Data Mining - Data Mining Vs Data Warehousing- Advantages and Disadvantages of Data Mining - Data Mining Applications - Challenges of Implementation in Data mining - Steps involved in Data Mining - Classification of Data Mining Systems. | | | | | | | | | | | |
| UNIT V | Data Mining Tools & Tech Data Mining Implementation Mining - Different types of Mining Vs Big Data - Data M | on Proce Clusteri | ng - | Te | xt D | ata | Mini | ng - I | Bitcoir | | _ | |

| | Course Outcomes |
|------|---|
| | Students will be able to: |
| CO 1 | Explain the basic concepts, principles and need of data warehousing |
| CO 2 | Appraise data warehouse architecture, modelling and its implementation. |
| CO 3 | Choose various steps in implementing data mart and its dimensions |
| CO 4 | Recall the features and types of data mining |
| CO 5 | Apply various data mining tools and techniques |

- 1. Jiawei Han, MichelineKamber (2011), Data Mining, Concepts and Techniques, Morgan Kauffman Publishers, California.
- 2. Pang Ning Tan, Michael Steinbach, Vipin Kumar (2005), Introduction to Data Mining, Addison Wesley, USA.
- 3. K. P. Soman, ShyamDiwakar, V. Ajay (2006), Insight into Data Mining: Theory & Practice, Prentice Hall of India, New Delhi.

Books for reference:

- 1. BPB Editorial Board (2004), "Data Mining", BPB publications, Noida.
- 2. Ian H. Witten & Eibe Frank (2011), "Data Mining, Practical Machine Learning Tools and Techniques", Morgan Kaufmann series.
- 3. Ramesh Sharda, DursunDelen, Efraim Turban (2018), "Business Intelligence", Pearson Education Services Pvt Ltd, Noida.

Web references:

- 1. https://mrcet.com/downloads/digital_notes/ME/III%20 year/ERP%20 Complete%20Digital%20notes.pdf
- 2. https://mrcet.com/pdf/Lab%20Manuals/IT/DATA%20WAREHOUSING%20AND%020DATA%20MINING%20(R18A0524).pdf00

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | PSOs | | | | | |
|-----|---|---|---|----|---|---|------|---|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | | | |
| CO2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | | | |
| CO3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |

 $Strong - 3 \qquad \qquad Medium - 2 \qquad \qquad Low - 1$

M.Com., Computer Applications First Year Elective – III B Semester II

TECHNOLOGY IN BANKING

| | | _ | | | | | | S | | | Marks | |
|------------------------|--|---|-----------------------------|------------------------------------|---------------------------------------|--|---------------------------------|--------------------------------|--|---|--|--|
| Course Code | Title of the Course | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total | |
| 23MCC2E2 | TECHNOLOGY IN BANKING | DSE-3 | 4 | - | - | - | 3 | 4 | 25 | 75 | 100 | |
| | To understand the n | ı network | ess | enti | als | for | an o | nerat | ional | core | banking system | |
| Learning Objectives | To provide an over To understand the esector To analyse the digition To understand the interest and the in | view of evolution | cus n of nolo | tom f ele | er o | ent onic fere | ric e fund d in | lectro d tran bank | onic isfer | banki syste | ng. ms in the banking | |
| UNIT I | Introduction to Core Ban EssentialsofBankComputer LocalAreaNetwork and W Core Banking:EssentialRed | rization- ide Are | –Sta | and. Netv | Alo: vor | near k: F | ndMi eatu | | | | | |
| UNIT II | ElectronicPaymentSystems land White Label ATM, I SmartCards:Features,Bene ElectronicPurse —ElectronicPurse —ElectronicPurse —ElectronicPurse —ElectronicPurse —ElectronicPurse —ElectronicPurse —ElectronicPurse — Cheque — Cheque | | | | | | | | | | | |
| UNIT III | Electronic Fund Transfer Electronic Fund Transfer RTGS,VSAT, SFMS,SW | System – Cheque Truncation – MICR and OCR:Characteristics—AdvantagesandLimitations. Electronic Fund Transfer and Its Transitions Electronic Fund Transfer System – Electronic Credit and Debit Clearing – NEFT, RTGS,VSAT, SFMS,SWIFT:Features,AdvantagesandLimitations—DigitalSignature – UnifiedPayments Interface(UPI):Concept,MechanismandServicesCovered – | | | | | | | | | | |
| UNIT IV | Trends in Banking Techn Recent Developments in I Programming Interface – Computing – NUUP (N Payment System) –APBS (Institute of Development development - Status of I banking - Emerging chall challenges. | Banking Video ational (Aadh ent and E-bankin | Te Col Un aar R | chn llabe ifie Pa Rese | olo orat d U ymo arc | gy: ion JSS ents h | Digi – P D P Bri in | erson Platfo dge Bank | n-to-lorm), Syst (ing) of E | Person AeP em) in -Bank | n Payments – Cloud S (Aadhaar enabled - Role of IDBRT banking technology ting - Benefits of E- | |
| UNIT V | Information Security Sys Information security - So systems (smart card, M Pharming, Key loggers, Card related fraud - Site of and security measur characteristics) - Encryption environment of intermation Cyber security a RBIGuidelinesonInternetB | ftware chip) – Screen cloning es (Fon and et banks | Ha lo - F Pass d ing per | cke ogge alse wor sec | rs: 'ers, e m ed urit ega | Feclorial Philoner Ph | nniquant ant cotec Cust | ues g - 7 site ction come worl | used Froja - Aut - Si r c r for | by to the thention of the | he hackers, Phishing, insaction poisoning - cation methodologies cards - Biometric entiality - Regulatory tronic Transactions - | |

| Course Or Students v | utcomes will be able to |
|-------------------------|---|
| CO 1 | Discuss the utility of stand-alone and multi-user systems access in Core banking. |
| CO 2 | Assess the multi-faceted electronic payment options available to customer and host transactions in banking. |
| CO 3 | Evaluate the dynamic transitions in Electronic Fund transfer systems. |
| CO 4 | Evaluate the enhanced utility and user interface and other recent developments in banking technologies. |
| CO5 | Assess the information security system |

- 1. SangeethaR,(2013) "Technology in Banking", 1st Edition, Charulatha Publications, Chennai.
- 2. Sohani, A K, (2012) "Technology in Banking Sector", SBS Publishers and Distributors Pvt Ltd, New Delhi.
- 3. Uppal R K and Dhiraj Sharma, (2017) "Banking with Technology: A New Vision -2020", Bharti Publication, New Delhi
- 4. Indian Institute of Banking and Finance, (2017) "Information Technology, Data Communications and Electronic Banking", 3rd Edition, Macmillan Publishers India Private Limited, Noida.

Books for reference:

- 1. Vadlamani Ravi, (2007) "Advances in Banking Technology and Management: Impacts of ICT and CRM", 1st Edition, Information Science Reference, Hershey, (USA).
- 2. Lucian Morrisand Tim Walker, (2021) "The Handbook of Banking Technology", John Wiley & Sons, New York.
- 3. Indian Institute of Banking and Finance, (2017), "Security in Electronic Banking", 3rd Edition, Macmillan Publishers India Private Limited, Noida.
- 4. Uppal R.K., AgrimUppal(2008) "Banking Services and Information Technology: The Indian Experience", New Century Publications, New Delhi.

Web references:

- 1. https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/64767.pdf
- https://www.researchgate.net/profile/Ravi-Vadlamani/publication/237383828_Chapter_I_Introduction_to_Banking_Technology_and_Mana gement/links/572a89bc08aef7c7e2c4fbc3/Chapter-I-Introduction-to-Banking-Technology-and-Management.pdf
- $\label{eq:linear_solution} \textbf{3.} \quad \frac{\text{https://eprocure.gov.in/cppp/rulesandprocs/kbadqkdlcswfjdelrquehwuxcfmijmuixngudufgbuub}{\text{gubfugbububjxcgfvsbdihbgfGhdfgFHytyhRtMjk4NzY=\#:} \sim: \text{text=\%5B9th\%20June\%2C\%202000}}{\text{\%5D\%20An,communication\%20and\%20storage\%20of\%20information\%2C}}$

Note: Latest edition of the book may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | PSOs | | | | | |
|-----|---|---|----|----|---|---|------|---|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | | | |
| CO2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO3 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO4 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| CO5 | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | | | |

Strong - 3

Medium - 2

Low - 1

M.Com., Computer Applications First Year Elective - IV A Semester II

FINANCIAL ANALYTICS

| | | >. | | | | | | I.S | | Marks | |
|------------------------|---|------------------------------------|------------------------------|--------------------|-------------------|------------------------------|---------|-------------|----------|---|---------|
| Course Code | Title of the Course | Category | L | T | P | o | Credits | Inst. Hours | CIA | 75 on making models we staten dgeting under Analys: Understate a g of fin etter fin details a g of fin etter fin | Total |
| 23MCC2E3 | FINANCIAL ANALYTICS | DSE-4 | 4 | - | - | - | 3 | 4 | 25 | 75 | 100 |
| Learning Objectives | To understand the statistic under uncertainty and analyse accounting data To gain knowledge on R To prepare, analyse and f To gain knowledge on co | alysis of exssion, time and pythor | kplo e sei n pr anc | oratories rogra | ana ama ami | data alysi ming eme | s and | d build | ding of | models | using |
| Course Uni | ts | | | | | | | | | | |
| UNIT I | Statistical Concepts Probability, Normal, Lognormal uncertainty - Cleaning and pre-prinance. | | | | | | | | | | is in |
| UNIT II | Simple Linear Models Use of Regression in Finance, Estock price behaviour, time serie | | | | | | ccou | nting | Data, U | Jndersta | anding |
| UNIT III | Using R for Analysis of Data Quick introduction to R and P Using R for analysis of data. | ython, und | ders | tanc | ling | g da | ta in | finar | ice, soi | urces of | f data, |
| UNIT IV | Cash Flow Concepts Cash flow statement – Prepare statements. | and Ana | lyse | e, M | Iod | ellin | g an | nd for | ecastinį | g of fin | nancial |
| UNIT V | Capital Budgeting NPV, IRR – Concept, applicati outcomes. | on, and is | sues | s, U | se | of r | eal o | ption | s for b | etter fin | nancial |
| Course Out | | | | | | | | | | | |
| Students wil | l be able to | | | | | | | | | | |
| CO 1 | Analyse decisions under uncertair | nty and also | o an | alys | se e | explo | rato | ry | | | |
| CO 2 | Build models using accounting da | | lyse | usi | ng | regr | essic | n and | time se | eries too | ols |
| CO 3 | Apply R and python programming | | | | | | | | | | |
| CO 4 | Estimate and analyse financial sta | | | | | | | | | | |
| CO 5 | Select appropriate capital budgeting | ng techniq | ues | for | dec | isio | n ma | king | | | |
| Books for st | tudy: | d | | | | | | | | | |

- 1. Gary Koop, "Analysis of Economic Data", 4th Edition, Wiley, USA.
- 2. David Ruppert, David S. Matteson, "Statistics and Data Analysis for Financial Engineering: with R examples", Springers, USA.

Books for reference:

- 1. Ang Clifford, "Analyzing Financial Data and Implementing Financial Models Using 'R", Springers, USA.
- 2. Wayne L. Winston, "Microsoft Excel 2013: Data Analysis and Business Modeling", Microsoft Publishing, USA

Web references:

- 1. https://personal.ntu.edu.sg/nprivault/MH8331/financial risk analytics.pdf
- 2. https://dynamics.microsoft.com/en-us/finance/what-is-financial-analytics/

Note: Latest edition of the books may be used

Note: 60% Problem, 40% Theory

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | PSOs | | | | | |
|-----|---|---|---|----|---|---|------|---|---|--|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | | |
| CO1 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | | | |
| CO2 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | | | |
| CO3 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | | | |
| CO4 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | | | |
| CO5 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | | | |

Strong - 3 Medium - 2 Low - 1

M.Com., Computer Applications First Year Elective – IV B Semester II

MANAGEMENT INFORMATION SYSTEM

| | | | | | | | | ø | | Mark | S |
|------------------------|--|---|--------------------------|-------------------------|------------------------|--------------------------|--|---------------------|----------------------|--|-------------------------------|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MCC2E4 | MANAGEMENT INFORMATION SYSTEM | DSE-4 | 4 | - | - | - | 3 | 4 | 25 | d Action and the community of the commun | 100 |
| Learning Objectives | To understand the basic continuous To identify the importance of the continuous To understand the Functiona To learn the role of system at the concept of Enterstand | of MIS al Manage analyst | mei | nt Iı | ıfoı | mat | ion S | Syste | em | | |
| UNIT I | Information System Introduction to information system Information needs and sources - Ty System classification - Elements of | pes of ma system, ir | nag iput | eme | ent | deci | sions | s and | l info | rmation | |
| UNIT II | Types of Management Information Systems Transaction Processing Information System - Information system for managers - Intelligence information system - Decision support system - Executive information systems. | | | | | | | | | | |
| UNIT III | Functional Management Informa Functional Management Informa Marketing Information Systems Information System - Human Resou | tion Sys | tem ıntiı | : Ing | Inf | orm | ation | | | | |
| UNIT IV | System design and Database System Analysis and Design: The Requirement analysis - Data flo Implementation - Evaluation and m Database - Components - Advantag | work of a ow diagra | sys am | sten -] f M | n ar Rela | nalys ation - Da | st - S nship taba | dia se S | agran ysten | n - De | esign - |
| UNIT V | Enterprise Resource Planning Enterprise Resource Planning (ER different from conventional packag ERP Package - ERP implement Organisation & Types - Decision Classification of information - Co- information and MIS | P) Syster es - Need ntation - Making - | m - for Cu - Da | Be ER isto ata | nef P - mei & | its ER r R info | of the P coellating P coellatin | ne E mpo onsh | RP - nents ip r - Ch | s - Selec nanager aracteris | etion of ment - stics & |
| Course Outc | | | | | | | | | | | |
| Students will CO 1 | Identify the basic concept of Inform | ation syst | em | | | | | | | | |
| CO 2 | Discuss the importance of MIS | | | | | | | | | | |
| CO 3 | Explain the functional MIS | | | | | | | | | | |
| CO 4 | Describe the role of system analyst | | | | | | | | | | |
| CO 5 | Apply the concept of Enterprise rese | ource plar | nin | g | | | | | | | |

- 1. Azam, M (2012), "Management Information System", McGrawHill Education, Noida.
- 2. Laudon, K., Laudon, J. and Dass, R. (2010), "Management Information Systems Managing the Digital Firm", 11th Edition, Pearson, Noida.
- 3. Murdick, R.G., Ross, J.E. and Claggett, J.R. (2011), "Information Systems for Modern Management", 3rd Edition, PHI, New Delhi.

Books for reference:

- 1. O'Brien, J.A., Morakas, G.M. and Behl, R. (2009), "Management Information Systems", 9th Edition, Tata McGraw-Hill Education, Noida.
- 2. Saunders, C.S. and Pearson, K.E. (2009), "Managing and Using Information Systems", 3rd Edition, Wiley India Pvt. Ltd., New Delhi.
- 3. Stair, R. and Reynolds, G. (2012), "Information Systems", 10th Edition, Cengage Learning, Noida.

Web references:

- 1. https://cleartax.in/g/terms/mis-meaning-mis-full-form-marketing-information-system/amp
- 2. https://www.techtarget.com/searchitoperations/definition/MIS-management-information-systems

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | | PSOs | |
|-----|---|---|----|----|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| CO2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| CO3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |

Strong - 3 Medium – 2 Low - 1

CREDIT ANALYST

First Year AEC I Semester II

| | | į | | | | | | S | l | Marks | |
|-------------------------|--|------------------------------|------|------|-----|------|----------|-------------|---------|----------|-------|
| Course Code | Title of the Course | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total |
| 23MCC2S1 | CREDIT ANALYST | AEC | 2 | - | - | - | 2 | 2 | 25 | 75 | 100 |
| Learning Objectives: | To acquire the practical Train them with critical Analysts Learn the role of credit Learn the investment op Acquire an understanding | thinkin manage portuni | g an | d co | omn | | cation s | kill to l | become | a Fina | ncial |
| Course Cont | | | | | | | | | | • | |
| Unit - I | A Brief Introduction- Banking Fundamental Financial Math- C | | | • | | | | | | 8 Ho | urs |
| Unit -II | Finance Training - Excel Co Analysis | rash C | ours | e: l | Mas | ter | Excel | for Fin | nancial | 8 H | ours |
| Unit - III | Risk Management - Risk Mana | gement | Pro | cess | - A | naly | sis . | | | 8 H | ours |
| Unit - IV | Financial Management A Com Career Hacking- Resume, Link | - | • | | | /CN | IA/CS/ | CFA/A | .CCA - | 8 H | ours |
| Unit - V | Essential of Soft Skills - Assign | ment | | | | | | | | 8 H | ours |

Course Outcomes

Students will able to

- CO1 Know the Credit Facilities and its Proceeding
- CO2 Understand the Finance Analysis
- CO3 Know the Risk Management
- CO4 Discuss the CA, CMA, CS
- CO5 Apply the Soft Skills

Books for Study

1. Blokdyk. Gerardus "Credit Analyst", Create Space Independent Publishing Platform, 2018.

Books for Reference

1. Arnold Ziegel, Ronna Ziegel, Fundamentals of Credit and Credit Analysis: Corporate Credit Analysis, Create Space Independent Publishing Platform, 2015

Mapping of Course Outcomes with POs and PSOs

| CO | | | P | PSOs | | | | | |
|-----|---|---|---|------|---|---|---|---|---|
| CO1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 |
| CO2 | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 2 | 1 |
| CO3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 |
| CO4 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 1 |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |

(3) S-Strong, (2) M-Medium, (1) L-Low

STOCK MARKET OPERATION

First Year SEC I Semester II

| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | Marks | | |
|-------------------|---|----------|---|---|---|---|---------|-------------|-------|----------|-------|
| | | | | | | | | | CIA | External | Total |
| 23MCC2S2 | STOCK MARKET OPERATIONS | | | - | - | - | 2 | 2 | 25 | 75 | 100 |
| | ➤ To understand the stock market operation | | | | | | | | | | |
| Learning | ➤ To operate of primary market | | | | | | | | | | |
| Objectives | ➤ To know the operation of the secondary market | | | | | | | | | | |
| | To understand the regulatory Framework of SEBI | | | | | | | | | | |
| | To know about the demat trading | | | | | | | | | | |
| Unit - I | Introduction Concept and types of Securities; Concept of return; Concept, types and measurement of risk; Development of Securities market in India. | | | | | | | | | | |
| Unit - II | Primary Market Concept, Functions and Importance; Functions of New Issue Market (IPO, | | | | | | | | | | |
| | FPO & OFS); Methods of Floatationfix price method and book building method; Pricing of | | | | | | | | | | |
| | Issues; Offer Documents; Appointment and Role of Merchant Bankers, Underwriters, Lead | | | | | | | | | | |
| | Managers, Syndicate Members, Brokers, Registrars, Bankers, ASBA; SME IPOs and | | | | | | | | | | |
| | Listing of Securities | | | | | | | | | | |
| Unit - III | Secondary Market Concept; Functions and Importance; Mechanics of Stock Market | | | | | | | | | | |
| | Trading-Different Types of Orders, Screen Based Trading, Internet-Based Trading and | | | | | | | | | | |
| | Settlement Procedure; Types of Brokers. | | | | | | | | | | |
| Unit - IV | Regulatory Framework SEBI (Issue of Capital and Disclosure Requirements) Regulation | | | | | | | | | | |
| | 2018; Stock Exchanges and Intermediaries; SEBI and Investor Protection; Securities | | | | | | | | | | |
| | Contract Regulation Act and SEBI (Listing Obligations and Disclosure Requirements) | | | | | | | | | | |
| | Regulation 2015. | | | | | | | | | | |
| Unit - V | Demat Trading Concept and Significance; Role of Depositories and Custodian of Securities | | | | | | | | | | |
| | in Demat Trading; SEBI Guidelines and other Regulations Relating to Demat Trading; | | | | | | | | | | |
| T | Procedure of Demat Trading. | | | | | | | | | | |
| Learning Outcomes | | | | | | | | | | | |

- 1. Explain the basic concept of the securities market.
- 2. Practice trading on the stock market
- 3. Analyze the legal framework of the securities market.
- 4. Explain different segments of the stock exchange.
- 5. Perform demat trading

Suggested Readings:

Gordon E. and Natarajan K. (2019). Financial Markets and Services. New Delhi: Himalaya Publishing House.

Benjamin, G. (1949). The Intelligent Investor. New York: Harper Publishing.

Dalton, J. M. (2001). How The Stock Market Works? New York: Prentice Hall Press.

Machiraju, H. R. (2019). Merchant Banking. New Delhi: New Age Publishers.

SEBI Regulations from SEBI Website.

Note: Learners are advised to use latest edition of text books.

Mapping of Course Outcomes with POs and PSOs

| CO | | | P | O_{S} | | | PSO _S | | | | | |
|-----|---|---|---|---------|---|---|------------------|---|---|--|--|--|
| CO1 | 2 | 3 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | | | |
| CO2 | 3 | 2 | 1 | 3 | 1 | 2 | 2 | 3 | 1 | | | |
| CO3 | 2 | 1 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | | | |
| CO4 | 1 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | | | |
| CO5 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | | | |
| · | | • | | • | • | | • | | | | | |

(3) S-Strong, (2) M-Medium, (1) L-Low

SUMMER INTERNSHIP / INDUSTRIAL ACTIVITIES

| The Students | undergone | internship / | industrial | activities | for 30 |) days | during | first | year | summer |
|------------------|-----------|--------------|------------|------------|--------|--------|--------|-------|------|--------|
| vacation period. | | | | | | | | | | |

M.Com., Computer Applications Second Year Core – VII Semester III

TAXATION

| | | | | | | | | g | | Marks | | | |
|----------------------|---|---|-------------------------------|--|-------------------------------|--|--------------------------|-------------------------------------|-----------------------------------|---|--|--|--|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total | | |
| 23MCC3C1 | TAXATION | Core | 6 | - | - | - | 4 | 6 | 25 | 75 | 100 | | |
| | To identify deductions from | | s to | tal | inco | me a | nd c | ompu | tation | of inco | me for | | |
| | different classes of assess | | ::1: | 4 | C | | 4 است | 1 . | : | | | | |
| | 1 | To understand the procedure for filing of returns and tax planning To analyse the structure on international business taxation | | | | | | | | | | | |
| | To assess Goods and Serv | | | | | | | | | | | | |
| | To compute customs duty as per Customs Act | | | | | | | | | | | | |
| Course Units | Units | | | | | | | | | | | | |
| UNIT I | Assessment of persons Tax Exemptions for Agricultural Income - Deductions to be made in computing tota 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. | | | | | | | | | | , 80IE, | | |
| 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 - Transfer pricing and other anti-a tax treaties - (Double taxation avo | voidanc | e m | eas | sure | - Ap | plica | ation a | and in | terpreta | tion of | | |
| UNIT IV | Goods and Services Tax Goods and Services Tax: GST A under Schedule III – Amendment SGST/UGTST- Assessment of Scrutiny of returns – Assessment persons – Assessment in certain services Payment of Tax – Input Tax Cred Prosecution – Appeal and Revision | Act, 201 nt of re GST- 3 of non special c | 17 - gisti Self file | Re rational rational rational | egistron – sessi of rei | ration Range | n - : ntes -] - A ice - | Proceof Tail Provises Seessing Cred | dure f x of ional ment o | or regist IGST, assessr of unreg | stration CGST, nent – gistered Notes – | | |
| UNIT V Course Outco | 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. | | | | | | | | | Outy – ustoms | | | |
| Students will | | | | | | | | | | | | | |
| CO 1 Estim | ate taxable income | | | | | | | | | _ | _ | | |
| CO 2 File re | eturns and plan taxes | | | | | | | | | | | | |

| CO 3 | Illustrate the nuances of international business taxation |
|------|---|
| CO 4 | Apply the provisions of GST |
| CO 5 | Assess the provisions of Customs Act |

- 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 and Yogendra Bangar, "Comprehensive Guide to Taxation" (Vol. I and II), Aadhya Prakashan, 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
- 2. 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

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | | PSOs | PSOs 2 | | |
|-----|---|---|---|----|---|---|---|------|---------|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | | |
| CO1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | | |
| CO2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | | |
| CO3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | | |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | | |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |

Strong - 3 Medium – 2 Low - 1

Second Year

M.Com., Computer Applications Core – VIII RESEARCH METHODOLOGY

Semester III

| | | | | | | | | | | Marks | | | |
|------------------------|--|---|---|--------------------------------------|-------------------|--|-------------------------------------|----------------------------|--------------------------------|----------------------------------|------------------------------------|--|--|
| Course C | Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total | |
| 23MCC3 | 3C2 | RESEARCH | Core | 6 | - | - | - | 4 | 6 | 25 | 75 | 100 | |
| 25111000 | JC2 | METHODOLOGY | | | | | | | | | | | |
| Learnii Objectiv | _ | To understand the fundamentals of research To construct theoretical design and formulate hypotheses To evaluate the data collection techniques To perform parametric and non-parametric tests To enhance report writing skills and develop ethical conduct in research | | | | | | | | | | | |
| | | Course | e Units | | | | | | | | | | |
| UNIT | 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. | | | | | | | | | | ions of v – | | |
| 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 I | Ш | Data Collection Variable: Meaning and types - Tecl Advantages and limitations - Tecl Observation - Secondary Data: Mea | Гесhniq | ues | : I1 | nter | | | | | | | |
| UNIT I | IV | Data Analysis Data Analysis – Uni-variate Analysis – Uni-variate Analysis: Simple correlation, Simple ANOVA, Man-Whitney test – Wilderschlerens) Multi Variate Analysis: Multiple of Friedman's test, Cluster analysis, | lysis: P eximum ble Reg coxon si Correlat | erce , Ir gress gne tion | entinder sion dra | le, pend , C nk ulti Fa | lent hi-s test ple ctoi | sar quar – Ki Reg | nple e, P ruska ressi | t-te aired al Wa ion, l | st – samp allis te Factor | Bi-variate bles t-test, est (Simple Analysis, | |
| UNIT | | Equation Modelling (SEM), Multiple Discriminant Analysis. 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. | | | | | | | | | | | |
| | | ern: Theory: 80%; Problems: 20% | | | | | | | | | | | |
| Course O Students v | | | | | | | | | | | | | |
| | | the research concepts and recognise | the rese | arcl | n pr | oble | m | | | | | | |
| CO 2 F | ormul | ate research hypothesis and determin | ne the sa | amp | le s | ize | | | | | | | |

| CO 3 | Select appropriate method for data collection |
|------|---|
| CO 4 | Make inferences based on statistical tests |
| CO 5 | Draft a research report avoiding plagiarism |

- 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 reference:

- 1. Donald R. Cooper, Pamela S. Schindler and J.K.Sharma, "Business Research Methodology", 12th Edition, Tata Mcgraw Hill, Noida (UP).
- 2. SashiK.Guptha and ParneetRangi,(2018) "Research Methodology", Kalyani Publisher, Ludhiana.
- 3. Sharma R D and HardeepChahal, (2004) "Research Methodology In Commerce and Management", Anmol Publications, New Delhi

Web references:

- 1. 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%20N OTES%20first.pdf
- 4. https://www.statisticssolutions.com/academic-research-consulting/data-analysis-plan/

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | | PSOs | |
|-----|---|---|---|----|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 |
| CO2 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 |
| CO3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 |

Low - 1

Strong - 3 Medium – 2

Second Year

M.Com., Computer Applications Core–IX COMPUTERS IN BUSINESS

Semester III

| | | | > | | | | | | ILS | | Mar | ks |
|---------------|---|--|--|-------------------------------|------------------------------|---------------------------|------------------|--------------------------------|--------------------------|-----------------------------------|------------|---------------------------|
| Course | e Code | Title of the Course | Category | L | T | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MC | CC3P1 | COMPUTERS IN BUSINESS | Core | 1 | - | 4 | - | 4 | 5 | 25 | 75 | 100 |
| Lear Objec | _ | To understand the fundament To compare the values obtain To perform regression and notes To create company, groups and prime To understand inventory management | ned in t-to on-param and ledge | est a etri ers a | and c te and o | sts obta | iin 1 | finan | | | | |
| Course | e Units | | | | | | | | | | | |
| UNI | 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. | | | | | | | | | | | |
| UNI | T 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 | ГIII | Non-parametric Tests in SPSS | | | | | | | | | | |
| UNI | ΓIV | Introduction to Tally Prime Tally Prime: Introduction – Start Selecting company - Shutting a congroups and ledgers – Vouchers – Prand not-for profit organisation. Account, Fregister, Cashflow/Funds flow and register. | npany - A ractical pr counting r Balance sl | Alter robl repo neet | ring ems orts: , Da | cor for Int ay b | npa ar rod | ny– new ; uctic t, Pu | Crea and on – rcha | ating existi Disp se reg | Accoung bu | unting siness Trial |
| UNI | | Inventory and GST in Tally Prim Inventory: Introduction to Inventory Godown – Creation of unit of me inventory details in Accounting vou Enabling GST – Defining tax det invoice report – Practical problems. | e y Masters casurement uchers – I cails – Er | – C nt – Prac | Creat Creatica | tion eation | of on o | stocl of st | k gro tock GS | oup – item Γ: Int | – En | tering tion – |
| Questi | on Patt | ern: 100% Practical | | | | | | | | | | _ |
| Course | Outco | | | | | | | | | | | |
| CO 1 | Create | data file in SPSS | | | | | | | | | | |
| CO 2 | Exami | neMeans of samples | | | | | | | | | | |
| CO 3 | Condu | ct non-parametric tests | | | | | | | | | | |
| CO 4 | Create | a company, form groups and get auto | omated fin | nano | cial | stat | eme | ents | | | | |
| CO 5 | Automate inventory management and GST filing | | | | | | | | | | | |

- 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, 6th 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, 4th Edition, New Delhi

Books for reference:

- Kulas John, Renata Garcia Prieto Palacios Roji, Smith Adams (2021), IBM SPSS Essentials: Managing and Analysing Social Sciences Data, 2nd 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/

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PC | Os | | | | PSOs | |
|------|---|---|----|----|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO 1 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 |
| CO 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 |
| CO 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 |
| CO 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO 5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |

Strong - 3 Medium - 2 Low - 1

M.Com., Computer Applications Second Year Core – X Semester IV

INTERNATIONAL BUSINESS

| | | × | | | | | | ırs | | Ma | arks | |
|----------------------------|--|---|----------------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|----------------|----------------|-----------------------|--|
| Course Cod | e Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total | |
| 23MCC3C | INTERNATIONAL BUSINESS | | 6 | - | - | - | 4 | 5 | 25 | 75 | 100 | |
| Learning Objectives | To understand the concepts of Environment To analyse the different theorie To understand the legal proced To evaluate the different types To analyse the operations of M | es of l lures i of ec | ntei nvo | nati lved mic | iona 1 in inte | l B Inte | usin erna ition | ess. tiona s. | l Bus | siness. | | |
| UNIT I | International Business - Meaning, internationalization of Business-Met Franchising- Joint Ventures-Strateg Framework for analyzing internation | 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 Internatio Absolute and Comparative Cost Adv Heckscher- Ohlin Theory Market | 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 | | | | | | | | | | |
| UNIT III | Legal framework of International B Legal framework of International common laws and their implications t provisions, Payment terms. | Busin | ess: | | | | | | - | | | |
| UNIT IV | Multi-Lateral Agreements and Institu Multi-Lateral Agreements and Institu Area, Customs Union, Common M Developed and Developing Countri OPEC-Promotional role played by IM | tions: Marke ies-NA IF-Wo | Eco t an AFT orld | nd 'A- Baı | Eco EU nk a | nor -SA nd | nic AAR its a | Unio C, A effilia | on-Re ASE | egiona AN - | al Blocks: BRICS - | |
| UNIT V | Multinational Companies (MNCs) characteristics. Decision Making-Intra Firm Trade Employment and labour relations- M | 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 | | | | | | | | | | |
| Course Out Students wil | comes | - 3-3- | <u>-,</u> | | | 051 | r ° | | <i>y</i> = -21 | | | |
| CO 1 Reca | Iltheconceptsof International Business an | d Inte | rna | tion | al B | usi | ness | Env | ironn | nent | | |
| CO 2 Ana | yzedifferent theories of International Bus | siness | | | | | | | | | | |
| CO 3 Eval | uatethe legal procedures involved in Inter | natethe legal procedures involved in International Business. | | | | | | | | | | |

| CO 4 | Explain the different types of economic integrations. | |
|------|--|--|
| CO 5 | Identify the operations of MNCs through real case assessment | |

- 1. Charles W.L. Hill, International Business: Competing in the Global Market Place, McGraw Hill, NewYork
- 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, NewYork
- 2. Alan M Rugman & Simon Collinson, International Business: Pearson Education, Singapore

Web references:

- $1. \ \underline{https://www.icsi.edu/media/webmodules/publications/9.5\%20International\%20Business.pdf}$
- 2. https://ebooks.lpude.in/commerce/mcom/term_3/DCOM501_INTERNATIONAL_BUSINESS.pdf
- 3. https://www.shobhituniversity.ac.in/pdf/econtent/International-Business-Unit-1-Dr-Neha-Yajurvedi.pdf

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | POs | | | | | PSOs | |
|-----|---|---|-----|---|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 1 | 2 |
| CO2 | 3 | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 1 |
| CO3 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 3 |
| CO4 | 1 | 3 | 1 | 2 | 1 | 1 | 2 | 2 | 2 |
| CO5 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |

Strong - 3 Medium - 2 Low - 1

M.Com., Computer Applications Second Year Elective - V A Semester III

APPLIED DATA ANALYTICS AND MACHINE LEARNING

| | | > | | | | | | Irs | | Mai | rks |
|---------------------|---|--|-----------------------|----------------------|---------------------|---------------------|----------------|--------------|----------------|-----------------|-----------------------|
| Course Coo | le Title of the Course | Category | L | T | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MCC3E | 1 APPLIED DATA ANALYTICS AND MACHINE LEARNING | DSE-5 | 3 | - | - | - | 3 | 4 | 25 | 75 | 100 |
| LEARNIN OBJECTIV | To understand basics of data To interpret the data analys To examine methods of wo To investigate machine lead To understand advanced methods of methods. | is pipeling rking with ming tech | e vi h te niq | a us xtua ues | age al ai wit | of nd ti h So | me s cikit- | series | s data | | |
| | Introduction to Data Analysis w | | n | | | | | | | | |
| UNIT I | Introduction to Data Analysis with Data -Data Analysis Process - Quarto Python - PyPI, SciPy.Getting structure of Jupyter notebook. | n Python: intitative a | Da and | Qu | alita | ative | e Da | ta Aı | nalys | is-Intr | oduction |
| UNIT II | Working across the entire data and the data - Numpy library - Ndarr Manipulation - General Concept Structures - Index functionalities with Databases. | alysis pipe ray - Bas s - Pand | eline ic C as] | e, -)pei Libi | Geration | on- Tr | Shap ntrod | e M uctio | anipu on to | ılatior Pand | a - Array das Data |
| UNIT III | Working with textual and time-s Working with textual data - Wor Statistical data analysis. | | | ne-s | serie | es d | ata - | Dat | tabas | es in | Python - |
| UNIT IV | Basics of machine learning with | Scikit-le | arn | | | | | | | | _ |
| UNIT V | Advanced machine learning technical Advanced machine learning technical Decision trees and SVMs - Cluster deep learning. | ques: K-n | | | _ | _ | | • | _ | _ | |
| Course Ou | tcomes | | | | | | | | | | |
| | ll be able to: | | | | | | | | | | |
| | Demonstrate data analysis with apt kno | | | | | | | | | | |
| | Demonstrate getting, cleaning and man | - | of c | lata | usi | ng l | Num! | Py a | nd Pa | ndas | |
| | Use Python for Statistical Data analysi | | | | | | | | | | |
| | Use Scikit-Learn for advanced Data an | • | | | | | | | | | |
| | Explain advanced machine learning tec | hniques | | | | | | | | | |
| Books for s | study: | | | | | | | | | | |

Books for study:

- 1. Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2nd Edition, Apress, New York.
- Paul Barry, Shroff (2011), "Head First Python", 1st Edition, O'Reilly Media, USA.
 Mark Lutz, Shroff (2011), "Programming Python", 4th Edition, O'Reilly Media, USA.

Books for reference:

- 1. Wes McKinney, "Python for Data Analysis", 2nd 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", 3rd Edition, O'Reilly Media, USA.
- 4. Ashok NamdevKamthane, 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

Note: Latest edition of the books may be used.

Mapping of course outcomes with POs and PSOs

| | | | PO | Os | | | | PSOs | |
|-----|---|---|----|----|---|---|---|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 1 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 1 |
| CO2 | 1 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 1 |
| CO3 | 1 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 1 |
| CO4 | 1 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 1 |
| CO5 | 1 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 1 |

Strong - 3 -2 Low - 1

M.Com., Computer Applications Second Year Elective–V B Semester III

PYTHON AND R FOR DATA ANALYTICS

| | | > | | | | | | LS | | Mai | rks |
|------------------------|--|-------------------------|--------------|-----------|-------------|-------|---------|-------------|--------|----------|----------|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MCC3E2 | PYTHON AND R FOR DATA ANALYTICS | DSE-5 | 3 | - | - | - | 3 | 4 | 25 | 75 | 100 |
| Learning Objectives | To understand the basics of To learn Bio Python To understand the features o To learn data handling To identify the use of bio co | of R | | | | | | | | | |
| UNIT I | Introduction to Python Installation of Python - Variables Functions - Control structures - Op- List, Tuple - Dictionary. | | | | _ | | _ | | | | - |
| UNIT II | Numpy and Scipy Numpy library – Ndarrray - Basic (Manipulation - Array Manipulation and Writing Array on Files - So Normality- Correlation - t-Test- Chi | i - Genera ciPy Libi | al C rary | onc fo | ept r S | s - : | Struc | cture | d Ar | rays - | Reading |
| UNIT III | R Programming Introduction to R - Installing R - Fe Data types and operations - Basic Factors - Data frames - Flow contr Loops. | eatures of Data typ | R - | Re: | serv ect | ors | - Li | st, N | Aatrio | ces – | Arrays - |
| UNIT IV | Visualisation using R R as a Deluxe Calculator - Creating Plotting - Advanced Plotting - Usin | g Color in | n Pl | ots | - U | sing | Sub | scrip | ots ar | nd Sup | - |
| UNIT V | in Graph Labels - Interactive Graphics - Saving Graphical Output - Loops. 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. | | | | | | | | | | |
| Course Outco | omes | | | | | | | | | | |
| Students will 1 | | | | | | | | | | | |
| CO 1 | Describe the basics of Python | | | | | | | | | | |
| CO 2 | Explain the necessity for programm | ing in bio | log | y | | | | | | | |
| CO 3 | Apply R programming | | | | | | | | | | |
| CO 4 | Discuss Data handling | | | | | | | | | | |
| CO 5 | Apply R in Phylogenetics | | | | | | | | | | |

Books for study:

- 1. Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2nd Edition, Apress, New York.
- 2. Wes McKinney, "Python for Data Analysis", 2nd 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", 1st 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/
- 2. www.learnpython.org
- 3. www.codecademy.com/en/tracks/python

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | P | Os | | | | | |
|-----|---|---|---|----|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 3 |
| CO2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| CO3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Strong - 3 Medium - 2 Low - 1

EXPORT-IMPORT DOCUMENTATION

Second Year AEC II Semester III

| | | _ | | | | | | S | | Mark | S |
|------------------------|--|---|--------------------------------|----------------------------|---------------------------|-----------------------------|-----------------------|--------------------------------------|--|-----------------------------|---------------------------|
| Course Code | Title of the Course | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total |
| 23MCC3S1 | EXPORT – IMPORT DOCUMENTATION | AEC | 2 | - | - | - | 2 | 2 | 25 | 75 | 100 |
| Learning Objectives | Understand the Concepts and of export/import orders, shipmand types. Learn the special shipment of and by post, multimodal tran open policy. Through in General provisi initiatives for agriculture, ha jewellery authorization. Competent Foreign Trade Se Export Oriented Units, Specia Know about the Export orient | export sport, pons re andloor chemes | car process gard m, h | go ledunding and ported Zo | y s re a ex icra | port ea, a nd d ports ofts, | documents and leather | nentati go, lar entatio impor r good | on, let nd cust n, spec rts, sp ds and | ter of toms socific poecial | tation olicy, focus s and |
| UNIT I | Export Procedure: Offer and receipt of Export/Impo Export Documentation - Framework Commercial and Regulatory Documentation - | ork - St cuments | tand s - E | ardi Expo | zed ort (| pre- credi | shipm t instr | ent Ex ument | port D | ocum | ents - |
| UNIT II | Shipment of Export cargo: By Sea, Air, ICD (Internal Contarted Post - Procedure and Document transport - Procedure and document of export cargo - Procedure and | ainer D its req | epot uire | t), C ed fo | Cour or | ier, ship | Land ment | Custon | rgo - | Multin | nodal |
| UNIT III | Foreign Trade Policy and Provi General Provisions Regarding I Agriculture, Handloom, Handicr Promotional Schemes – Duty I Duty Free Import Authorization (| sions: Exports afts, Le Exempt | ane eath | d I1 er g Rem | good nissi | ls ar | nd Ger Schem | ns and | d Jewo dvance | ellery e Lice | (GJ)- nse / |
| UNIT IV | Foreign Trade Schemes: Export Promotion Capital Goods Electronic Hardware Technolog Scheme /Special Economic Zon Credit Entitlement Schemes. | y Park e (SEZ | (EI Z)/B | HTP io-te |)/ \$ | Softv | vare 7 | Techno | logy | Park (| STP) |
| UNIT V | Role and Functions of Special I Export Promotion Councils, Co. Intelligence and Statistics, Indian Foreign Trade, Marine Products E | mmodi n Trade | ty B | oar omo | tior | or Or | ganiza | tion, I | | commo Institu | |

- Understand the export procedure and shipment of export cargo.
 Comprehend the letter of credit and types, export credit insurance.
 Appreciate the foreign trade policy and provisions and foreign trade schemes.
 Make role and functions of special institutions.

Reference and Textbooks:-

C Ramagopal, Export Import Procedures- Documentation and Logistics, New Age International, 2010

Govt. of India, Bare Acts/ Manuals/ Handouts Institute Cargo Clauses, Incoterms – 1990, Carriage of *ICC 1983 Rev*, Uniform Customs & Practice for Documentary Credits.

Goods by Sea/ Air, Marine Insurance Act, FEMA, GSP Rules of Origin, etc.

Govt. of India, Foreign Trade Policy and Central Excise Rules & Duty Drawback Rules

IIFT, Background Papers on Export Procedures & Documentation.

Mahajan M, Foreign Trade Policy Procedures & Documentation Exports Imports Foreign Exchange Management W/cd, Snow White Publications Pvt Ltd, 2010.

S. Ramakrishna, et al., Quality Control and Pre-shipment Inspection for Exports.

V.S. Datey, ForeignTrade Policy, CCH India, 2010

Mapping of Course Outcomes with POs and PSOs

| CO | | | P | O_{S} | | | | PSO _S | O_{S} | | |
|-----|---|---|------------|-----------|----------|------------|----|-------------------------|---------|--|--|
| CO1 | 3 | 2 | 3 | 3 | 1 | 1 | 3 | 2 | 2 | | |
| CO2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 1 | | |
| CO3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | | |
| CO4 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | 3 | | |
| CO5 | 3 | 3 | 3 | 1 | 2 | 3 | 3 | 3 | 3 | | |
| | • | | (3) S-Stro | ng, (2) M | l-Medium | , (1) L-Lo |)W | • | | | |

ENTREPRENEURSHIP DEVELOPMENT SKILLS

Second Year SEC II Semester III

| | | x | | | | | | rs | | M | [arks | |
|-----------------------------|---|--------------------------------|--------------|-----------------------|--------------------|-------------|------------------------------|-----------------|--------|----------|---------------------|---------|
| Course Code | Title of the Course | Category | L | T | P | o | Credits | Inst. Hours | CIA | External | Total | |
| 23MCC3S2 | ENTREPRENEURSHIP DEVELOPMENT SKILLS | SEC | 2 | - | - | - | 2 | 2 | 25 | 75 | 100 | 0 |
| Course Objectives | To introduce student To impart knowledg patents and licensing To orient the student To enable students to To give inputs on var | e on in s on ne prepa | nnov ew v | vatio vento fea | on, ure sibl | its t | ypes, 1 ition. isiness | ole of | techn | ology | | ration, |
| UNIT I | Introduction: The Entrepreneur-Definite Entrepreneurial scene in In different communities-Case | idia; M | 1SN | ſE; | An | alys | sis of | entrep | reneur | | oreneur- owth in | 5 |
| UNIT II | Innovation in Business: Types of Innovation-Creat Design Thinking-The T Technological Innovation. | ing ar | | | | | | | | | | 5 |
| UNIT III | New Venture Creation: Identifying Opportunities of Generation of New Ideas Recognition, Seizing and Technical Feasibility of Production | s for Scree | Pro ning | duc g o | ets f C | and Oppo | Serv ortuniti | ices. les. F | Creati | ing, S | Shaping, | 5 |
| UNIT IV | Business Plan Preparation Benefits of a Business Plan- Plan-Guidelines for preparinand e-commerce Start-ups. I | Eleme ıg a Bı | ısin | ess i | Plaı | n-Fo | ormat a | | | | | 5 |
| UNIT V | Financing the New Ventur Capital Structure and work project. Role of Banks-Crec Industries-Incentives-Institu Entrepreneurship. | ing ca _l lit app | rais | al b | y b | ank | s. Insti | itution | al Fin | | o Small | 5 |
| Course Outc | omes | | | | | | | | | | | |
| Gain knowled Obtain know | On Completic ow about growth of entreprendige on Innovation, its types, reledge on new venture creation epare a business plan | eurshi | p in | Ind | ia | | | | atents | and lic | censing | |
| | dge on various types of financ | ing av | aila | ble | for | new | ventu | res. | | | | |

Reading List

| 1 | http://www.jimssouthdelhi.com/smBBA6/ED.pdf |
|---|--|
| 2 | https://www.cengage.com/highered |
| 3 | https://roadmapresearch.com/entrepreneurship-beyond-curriculum |
| 4 | The International Journal of Entrepreneurship and Innovation |

References Books

- 1. Reddy, N., Entrepreneurship: Text and Cases, Cengage Learning, 2010.
- 2. Roy, R., Entrepreneurship, 2nd Edition, Oxford University Press, 2011.
- 3. Barringer, B., Entrepreneurship: Successfully Launching New Ventures, 3rd Edition, Pearson, 2011. 4. Bassant, J., and Tidd, J., Innovation and Entrepreneurship, 2nd Edition, John Willy & amp: Sons,
- 4. Bassant, J., and Tidd, J., Innovation and Entrepreneurship, 2nd Edition, John Willy & amp: Sons, 2011.
- 5. Desai, V., Small Scale Industries and Entrepreneurship, Himalaya Publishing House, 2011.
- 6. Entrepreneurship: Successfully Launching New Ventures, Global Edition, 6th Edition Bruce R. Barringer, Texas A & amp: M University. R. Duane <u>Ireland.@2018</u> Pearson.

Mapping of Course Outcomes with POs and PSOs

| CO | | | P | O_{S} | | | | PSO _S | |
|-----|---|---|------------|-----------|----------|----------|---|------------------|---|
| CO1 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 |
| CO2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 |
| CO3 | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 |
| CO5 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | |
| | | | (3) S-Stro | ng, (2) M | -Medium, | (1) L-Lo | W | | |

INTERNSHIP / INDUSTRIAL ACTIVITIES III – Semester

| | | | | | | | | S | | Mark | .S |
|----------------------|---|----------|---|---|---|---|---------|------------|-----|----------|-------|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hour | CIA | External | Total |
| 23MCC3I/ 23MCC3IA | ❖ INTERNSHIP / INDUSTRIAL ACTIVITIES | | - | - | - | 1 | 2 | 1 | 25 | 75 | 100 |

[❖] The students are submitting the Internship / Industrial activities report about their internship training learned 30 days after completed the first year.

M.Com., Computer Applications Second Year Core – XI Semester IV

CORPORATE AND ECONOMIC LAWS

| | | A | | | | | | S | | N | Iarks |
|------------------------|---|--|---|--|--------------------------------------|---------------------------------------|-----------------------------------|--------------------------------|---------------------------------|--|--|
| Course Code | Title of the Course | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total |
| 23MCC4C1 | CORPORATE AND ECONOMIC LAWS | Core | 6 | - | - | - | 4 | 6 | 25 | 75 | 100 |
| Learning Objectives | To analyse current and carcurrency under FEMA Act To understand unethical consumer disputes under Co To understand the procedured Copyright and Patents Act To evaluate offences and purpose Money Laundering Act To explain the registration a | compe mpeti are for anishn | titiv tion r ol | ve p Ac otain | orac et an ning | tice d C g pa oney | s an onsu itent | nd fo nmer s an nder | orum Prot d co ing u | s for ection pyrigh | redressal of Act nt under The Prevention of |
| UNIT I | Foreign Exchange Management Account transactions — Capital A surrender of foreign currency — R foreign currency or foreign coins — | Act, ccoun temitt | 199 t tr anc | 9: ansi | Intr acti f as | odu ons sets | ction – F i –] | n – Reali Poss | satio essio | n, rep n and | atriation and retention of |
| UNIT II | Competition Act, 2002 and Consumer Competition Act, 2002: Objective – Dominant Position - Regulation of Duties, Powers and Functions of Consumer Protection Act, 2019 Redressal Commissions - Consumer Complaints – Appeal against orders. | Proh coml mmis O: Obj er pro | ibit oina sion ects | ion itior 1 - A s; Ri | of Ans - Applight | Agro Co ella s of | eeme mpe te Tr | ents, tition ibun sum | n Co: al. ers – | mmiss Cons | sion of India: umer Dispute |
| UNIT III | Law relating to intellectual proper Law relating to intellectual proper Works in which copyright subsist - Assignment of copyright - Disputes copyright - Registration of copyright The Patents Act, 1970: Inventions rand examination of applications - patents. Trademarks Act, 1999: Co of registration - Effect of registration | rty rig Owne S with t - Inf not pat Grant nditio | hts: rsh res ring ent of | Intip of specific periods in the specific period periods in the specific period period period periods in the specific period period periods in the specific period period period periods in the specific period period period periods in the specific period period period period period periods in the specific period peri | f co et to ent ents ents | opyr o ass of c Appl s an | ight signr copyr icati d rig tion | and nent right ons ghts | the ri of c for p conf | ghts on the second of the seco | of the owner - ght - Term of - Publication - Register of |
| UNIT IV | Prevention of Money Laundering Prevention of Money Laundering A for money laundering –Attachmen Banking Companies, Financial Inst Seizure – Appellate Tribunal. | Act, 20 act, 20 nt, ad | 200 : 02: jud | 2 Offication | enc ion | e of | mo: | nfisc | ation | ı - O | bligations of |
| UNIT V | Real Estate (Regulation and Develor Real Estate (Regulation and Develor the Act - Registration of Real Estate Functions and duties of promoter — and adjudication — Specimen agree and the allottee. | opmen tate P Righ | t) / roje ts a | Act, ect - nd o | 201 - R duti | l6: egis es o | Intro strati of Al | on c lotte | of Re | al Es Offen | tate agents – ces, penalties |

| | e Outcomes ts will be able to: |
|------|--|
| CO 1 | Recall important provisions of FEMA |
| CO 2 | Evaluate the provisions of the Competition Act, 2002 and Consumer Protection Act to govern commercial competition and protect a consumer |
| CO 3 | Recall the process relating to obtaining copyrights and patents. |
| CO 4 | Examine the provisions of Money Laundering Act |
| CO 5 | Analyse the provisions relating to regulation of real estate. |

- 1. MunishBandari (2022), A Textbook on Corporate and Economic Laws, 33rd 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, 7th 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, 15th 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

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PSOs | | | | | | |
|-----|---|---|------|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 |
| CO2 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 |
| CO3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| CO5 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 |

Strong - 3

Medium - 2

Low - 1

M.Com., Computer Applications Second Year Core – XII Semester IV

HUMAN RESOURCE ANALYTICS

| | | 5 | | | | | Ø | urs | | | Marks |
|-----------------|--|--|---------------------|--------------|------|-------------|--------------|-------------|--------------|----------|-------------------------------------|
| Cour Cod | I ifle at the Caurse | Category | L | Т | P | o | Credits | Inst. Hours | CIA | External | Total |
| 23MCC | HUMAN RESOURCE ANALYTICS | Core | 6 | - | - | - | 4 | 6 | 25 | 75 | 100 |
| Learn Object | To illustrate the evolution, types and design of HR metrics To deal with data collection and transformation To adopt tools and techniques for predictive modelling | | | | | | | | | | |
| | | Course | | | | | | | | | |
| UNIT | Introduction to Human Resource Analytics Human Resource Analytics: Introduction –Concept – Evolution - Importance – Benefits – Challenges - Types of HR Analytics – HR Analytics Framework and Models. | | | | | | | | | | |
| UNIT | Business Process and HR Analytics: Introduction Data Driven Decision Making in | | | | | | | | | | |
| UNIT | Introduction to HR Metrics HR Metrics: Introduction - Historical Evalution of HR metrics- Importance Types of | | | | | | | | | | |
| UNIT | IV HR Analytics and Data HR Analytics and Data:Intro Human Resources – Proces into HR information – HR R | s of data | coll | ecti | on | for | HR | Ana | lytics | s – Tr | ansforming data |
| UNIT | HR Analytics and Predicti HR Analytics and Predicti | ve Model ve Model e analytic s - Predic | ling ling too | : Ir ls a | ntro | duc tech | tion miqu | – H | R Pr Info | edicti | ve Modelling – on for Predictive |
| | Outcomes s will be able to: | | | | | | | | | | |
| CO 1 | Examine the concept of human re | source an | alyti | cs | | | | | | | |
| CO 2 | Apply the HR tools and techniques in decision making | | | | | | | | | | |
| CO 3 | Examine the different types of HR metrics and their relative merits | | | | | | | | | | |
| CO 4 | Collect and transform data leading | g to HR re | por | ting | | | | | | | |
| CO 5 | Build models for predictive analy | sis | | | | | | | | | |

- 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, 1st 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", 7th 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

Note: Latest edition of the books may be used

Mapping of course outcomes with POs and PSOs

| | | | PSOs | | | | | | |
|-----|---|---|------|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |

Strong - 3 -2 Low - 1

Core 13 Project with viva-voce

Second Year Core-XIII Semester IV

| | | | | | | | | S | Marks | | | |
|-------------|------------------------|----------|----|---|---|---|---------|------------|-------|----------|-------|--|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hour | CIA | External | Total | |
| 23MCC4PR | Project with Viva-voce | Core | 10 | - | - | 1 | 6 | 10 | 50 | 150 | 200 | |

M.Com., Computer Applications Second Year Elective – VI A Semester IV

CYBER AND DATA SECURITY

| | | | | | S | | N | Aarks | | | |
|--|--|------------|-----|------|------|-----|---------|---|------|----------|---------------|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MCC4E1 | CYBER AND DATA SECURITY | DSE-6 | 4 | - | - | - | 3 | 4 | 25 | 75 | 100 |
| Learning Objectives | To understand threats and risks in cybersecurity landscape To interpret cybersecurity framework and regulations To examine data security and integrity regulations To discuss network security management To recall cybersecurity disasters | | | | | | | | | | |
| 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 Bigdata, multiple data source storage requirements, Security | es, data | div | ersi | ty, | Dat | a (d | is)oı | gani | zation | , Unique data |
| UNIT IV | storage requirements, Security tools, Inflexible reporting and query systems. 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, deniservice attacks, information disclosures, natural and man-made cybersecurity disast the components of a cybersecurity contingency planning program, continguistrategies including data backup and recovery and continuity of cybersecurity operations, the components and structure of an effective cybersecurity disaster record program, the components and structure of an effective cybersecurity incident responsible to the components of the components and structure of the cybersecurity incident responsible to the components of the components and structure of the cybersecurity incident responsible to the components of the cybersecurity incident responsible to | | | | | | | | urity disasters, , contingency cybersecurity saster recovery | | | |
| Students will | | | | | | | | | | | |
| | evelop plans to mitigate risks ar | nd threats | to | cyb | erse | cur | ity | | | | |

| CO 2 | Solve vulnerabilities in cybersecurity frameworks |
|------|--|
| CO 3 | Solve issues in integrity issues in cybersecurity |
| CO 4 | Implement radical changes in cybersecurity management |
| CO 5 | Formulate strategies to overcome cybersecurity disasters |

- 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. Kennetch 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
- 2. http://www.uptti.ac.in/classroom-content/data/cyber%20security%20unit-3.pdf

Note: Latest edition of the books may be used.

Mapping of course outcomes with POs and PSOs

| | | | PSOs | | | | | | |
|-----|---|---|------|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 |
| CO2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 |
| CO3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 |
| CO4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| CO5 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 |

Strong - 3 Medium - 2 Low - 1

Second Year Elective – VI B Semester IV

E-COMMERCE

| Course Code Title of the Course DSE-6 | - Advantages | | | | | | |
|---|--|--|--|--|--|--|--|
| LEARNING OBJECTIV To apply the functions of Windows operating system To apply the advance functions of MS word ES To apply the functions of MS excel To understand the concept of E-Commerce and Electronic payments Course Units E-Commerce and Electronic Payment Systems What is Electronic Commerce - Brief history of Electronic Commerce - and Limitations of Electronic Commerce - Types of Electronic commerce Electronic Commerce - Key questions for management - Overview of the | repreneur ats - Advantages e - Integrating | | | | | | |
| LEARNING OBJECTIV ► To apply the functions of Windows operating system ➤ To apply the advance functions of MS word ➤ To apply the functions of MS excel ➤ To understand the concept of E-Commerce and Electronic payments Course Units E-Commerce and Electronic Payment Systems What is Electronic Commerce - Brief history of Electronic Commerce - and Limitations of Electronic Commerce - Types of Electronic commerce Electronic Commerce - Key questions for management - Overview of the | - Advantages | | | | | | |
| UNIT I E-Commerce and Electronic Payment Systems What is Electronic Commerce - Brief history of Electronic Commerce - and Limitations of Electronic Commerce - Types of Electronic commerce Electronic Commerce - Key questions for management - Overview of the | e - Integrating | | | | | | |
| What is Electronic Commerce - Brief history of Electronic Commerce - and Limitations of Electronic Commerce - Types of Electronic commerce Electronic Commerce - Key questions for management - Overview of the | e - Integrating | | | | | | |
| medium – Electronic Commerce and Banking. | | | | | | | |
| 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, factors, Models of e retailing, Features of e retailing. E services: Cate services, Web-enabled services, matchmaking services, Information-sel web, e entertainment, Auctions and other specialized services. Business Electronic Commerce | egories of e- elling on the | | | | | | |
| E-security and Web based business Security in the cyberspace - Designing for security -Virus -Security Property Recovery - Encryption - Business-to-Business Electronic Commerce - I Extranets - Intranets and Supply Chain Management - Legal and Ethical i studies. | Intranets and | | | | | | |
| 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, Candid Ethical principles Privacy and Information Rights: Information collected at E- Commerce Websites, The Concept of Privacy, Legal protections Intellectual Propert Rights: Types of Intellectual Property protection, Governance. | | | | | | | |
| Course Outcomes Students will be able to: | | | | | | | |
| CO 1 Understand the hardware and software of a system | | | | | | | |
| CO 2 Apply the functions of Windows operating system CO 3 Apply the advance functions of MS word | | | | | | | |
| CO 3 Apply the advance functions of MS word CO 4 Apply the functions of MS excel | | | | | | | |
| CO 5 Understand the concept of E-Commerce and Electronic payments | | | | | | | |

- 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. Anita Agrawal, Rahul Kotian, TusharAgarwal and VijalakshmiKannan, (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

Mapping of course outcomes with POs and PSOs

| | | | | PSOs | | | | | |
|-----|---|---|---|------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| CO1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| CO2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| CO3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Strong - 3 Medium - 2 Low - 1

ADVANCED EXCEL

Second Year AEC III Semester IV

| | | | | | | | | Š | - | Marks | S |
|------------------------|--|-----------------------------------|----------------------------------|-----------------------------|------------------------|-------|---------|-------------|---------|------------------|--------|
| Course Code | Title of the Course | Category | L | Т | P | O | Credits | Inst. Hours | CIA | External | Total |
| 23MCC4S1 | ADVANCED EXCEL | AEC | 2 | - | - | - | 2 | 2 | 25 | 75 | 100 |
| Learning Objectives | Know the basics of Advanced Excel is different from a Understand how to form which are available in A Get the knowledge abouthers. Perform the statistical, Excel. | other venant the advance ut creat | ersion cells ed Ex ting | ns c s an xcel cha | of Ex d di rts a | ccel. | ent typ | es of p | oasting | g techn kbook | iques |
| UNIT I | Introduction to Advanced Exce | | | _ | | | | | | | |
| UNIT II | Paste and Paste Special Technic | | | | | | | | tecting | g Exce | :1 |
| UNIT III | Creating Charts and Templates | | | | | | | ons | | | |
| UNIT IV | Statistical Functions - Mathema | | | | | | | | | | |
| UNIT V | What if Analysis and logical Workbooks | functio | ns i | n E | xcel | - \$ | Sorting | , Filte | ring a | nd Pri | inting |

Outcomes

Students will above to

- CO1 Details of advance excel
- CO2 Formatting cells and tools
- CO3 Creating charts and templates
- CO4 Analysis the mathematics and financial function
- CO5 Know about the logical function of excel

Books for Study

- 1. Michael Alexander, Richard Kusleika, John Walkenback, Microsoft Excel 2019 Bible,
- 2. Kindle Edition, 2019.
- 3. McFedries, Microsoft Excel 2019 Formulas and Functions (Business Skills), Kindle Edition,
- 4. 2019.

Books for Reference

- 1. Wayne L. Winston, Microsoft Excel 2013: Data Analysis and Business Modeling, Prentice
- 2. Hall of India Learning, 2011.
- 3. Conrad Carlberg, Statistical Analysis: Microsoft Excel 2013, Pearson Education, 2014.

Related Online Contents

- 1. https://www.youtube.com/watch?v=zGm7oOsxvyM
- 2. https://www.youtube.com/watch?v=GTbd4y1CtrU
- **3.** https://www.youtube.com/embed/WU4LHrf8yvg

Mapping of Course Outcomes with POs and PSOs

| CO | | | | PSO s | | | | | | | | |
|-----|---------------------------------------|---|---|--------------|---|---|---|---|---|--|--|--|
| CO1 | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | | | |
| CO2 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | | | |
| CO3 | 2 | 3 | 1 | 1 | 3 | 3 | 1 | 1 | 3 | | | |
| CO4 | 1 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | | | |
| CO5 | 3 | 1 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | | | |
| | (3) S-Strong, (2) M-Medium, (1) L-Low | | | | | | | | | | | |

EMPLOYABILITY SKILLS

Second Year SEC III Semester IV

| Course Code | Title of the Course | | | Т | P | o | Credits | Inst. Hours | Marks | | |
|----------------------|---|----------|------|-------|---|---|---------|-------------|-------|----------|-------|
| | | | L | | | | | | CIA | External | Total |
| 23MCC4S2 | EMPLOYABILITY SKILLS | | 2 | - | - | - | 2 | 2 | 25 | 75 | 100 |
| Course Objectives | To Learn about the employability skills To understand dimensions of task oriented skills To study on critical problem-solving techniques To develop employability skills To understand the logical and reasoning skills | | | | | | | | | | |
| UNIT I | Introduction to employability skills: Meaning-definition-Hard skills and soft skills-Employability skills and vocational skills-Employability and employment-Employability attributes. | | | | | | | | | | |
| UNIT II | Unpacking Employability Skills: Embedded employability skills-Dimensions of competency-Task skills-Task Management skills-Contingency Management skills-Job/Role Environment skills. | | | | | | | | | | |
| UNIT III | Inter – Relationships of employability skills: Communication-Team work-Problem solving-Initiative and Enterprise-Planning and Organizing-Self management-Learning-Technology. | | | | | | | | | | |
| UNIT IV | Resume writing: Meaning-Features of good resume-Model (Exercise). Etiquettes-Dress, Cleanliness, Etiquettes to be followed inside the employment seeking process. | | | | | | | | | | |
| UNIT V | Arithmetic and Logical Reasoning S | kills-E | Exer | cise. | | | | | | | |
| Course Outo | | | | | | | | | | | 1 |
| Students wil | | | | | | | | | | | |
| CO1 | Acquire employability skills | | | | | | | | | | |
| CO2 CO3 | Understand dimensions of task oriented skills | | | | | | | | | | |
| CO3 | Study on critical problem-solving techniques Develop employability skills | | | | | | | | | | |
| CO5 | Understand the logical and reasoning skills | | | | | | | | | | |
| Reading List | charitana me rogicar and reasonni | <u> </u> | | | | | | | | | |

Reading List

- 1. https://www.jobjumpstart.gov.au/article/what-are-employability-skills
- 2. https://www.simplilearn.com/why-are-emloyability-skills-important-article
- 3. https://blog.hubspot.com/marketing/employability-skills
- 4. https://www.indeed.com/career.advice/finding-a-job/employability-skills

References Books

- 1. Soft Skills, Dr.K.Alex
- 2. Winning Interview Skills, Complied & Edited by J.K. Chopra.
- 3 A Modern Approach to Verbal and Non-Verbal Reasoning. R.S. Aggarwal.
- 4. Fafinski, S., Finch, Employability Skills for Law Students. United Kingdom: OUP Oxford.
- 5. Trought, F. (2017). Brilliant Employability Skills: How to Stand Out from the Crowed in the Graduate Job Market. United Kingdom: Pearson Education Limited.
- 6. Chaita, M.V. (2016). Developing Graduate Employability Skills: Your Pathway to Employment United States: Universal Publishers.

Mapping of Course Outcomes with POs and PSOs

| CO | PO_S | | | | | PSO _S | | | |
|---------------------------------------|--------|---|---|---|---|------------------|---|---|---|
| CO1 | 3 | 2 | 3 | 3 | 1 | 3 | 1 | 1 | 3 |
| CO2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 2 |
| CO3 | 2 | 2 | 1 | 1 | 2 | 1 | 3 | 3 | 1 |
| CO4 | 3 | 1 | 3 | 2 | 3 | 3 | 2 | 2 | 3 |
| CO5 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 2 |
| (3) S-Strong, (2) M-Medium, (1) L-Low | | | | | | | | | |