

**FATIMA COLLEGE (AUTONOMOUS)**



**Re-Accredited with “A++” Grade by NAAC (IV<sup>th</sup> Cycle)  
Maryland, Madurai- 625 018, Tamil Nadu, India.**

**NAME OF THE DEPARTMENT : COMMERCE IN COMPUTER  
APPLICATION**

**NAME OF THE PROGRAMME : PG IN COMMERECE IN  
COMPUTER APPLICATIONS  
Administration**

**PROGRAMME CODE : PSCC**

**ACADEMIC YEAR : 2023-24**

## 1.2.1 New Courses Introduced

### PSCC

Department of Commerce with CA



2023-2024

Minutes of Meeting of Board of Studies  
in Department of Commerce with Computer  
Applications [M.Com CA] held at 10.00 am  
on 5-4-2023 in Fatima College, Madurai-18.

### Members Present

1. Dr. M. Arasammal - Head of the Department  
M. Arasammal
2. Dr. A. Pani, - University Nominee.  
Assistant Professor,  
Department of Commerce, Pani  
Madurai Kamaraj University, 5/4/2023  
Abgarkovil Road, Madurai
3. Dr. M. Parveen, - Subject Expert  
Head & Professor, Absent  
Department of Information Technology,  
Cauvery College for Women (Autonomous)  
Trichy,
4. Dr. S. Valli Devasena, - Subject Expert  
Assistant Professor, S. Valli Devasena  
Department of Commerce, 5-4-21  
Mother Teresa University,  
Research & Extension Centre,  
Keelakurukudi, Madurai.

5. Mrs. G. Shri Hasi Priya - Industrialist  
Lead HR Recruiter  
12, CAS Colony, 2nd Cross Street, Opposite to Theekathir,  
Madurai.

6. Ms. S. Kaleeswari. - Alumnae.  
Assistant Professor.  
Department of Commerce with CA,  
Mangayarkarasi Arts and Science College  
Madurai.

7. Dr. K. Sangeetha,  
Assistant Professor,  
Dean of Academic Affairs.

#### Staff Members.

1. Mrs. N. Jennifer Sharon Sumathi Alwar
2. Mrs. M. Priya M. P. J.
3. Dr. S. Maria Nisha S.

1. Action Taken Report for 2022-2023.
  - 1.a. Common Suggestions.

| S.No | Suggestion offered                                   | Action Taken. |
|------|--|---------------|
| 1.   | Revise the syllabus of Investment Management Course. | Implemented.  |

1.b - Change of Course Title - Nil

1.c - New Courses Introduced.

| S.No | Course Code | Course Title                    | Relevance to <sup>+</sup> |   |   |   | Scope for <sup>+</sup> |      |    | Need for Introduction.   |
|------|-------------|---------------------------------|---------------------------|---|---|---|------------------------|------|----|--------------------------|
|      |             |                                 | L                         | R | N | G | Emp                    | Ente | SD |                          |
| 1.   | 22CA2EDC    | Financial Accounting & Taxation |                           |   | ✓ |   | ✓                      |      |    | To update the curriculum |
| 2.   | 22PNCPE4    | Digital Commerce                |                           |   |   | ✓ | ✓                      |      |    | To update the curriculum |
| 3.   | 22PARCA     | Advanced HTML5                  |                           |   |   | ✓ | ✓                      |      |    | To update the curriculum |

1.d - Revised Courses

| S.No | Course Code | Course Title                     | No. of Title of units revised with the Revised Content | % of Revision | Need for Revision | Relevance to <sup>+</sup> | Scope for <sup>+</sup> |   |   |   |
|------|-------------|----------------------------------|--|---------------|-------------------|---------------------------|------------------------|---|---|---|
|      |             |                                  | Specified if it is not the whole unit                  |               |                   |                           | L                      | R | N | G |
| 1.   | 19PNC10A3   | Marketing Principles & Practices | Unit 2: Evolution of Modern                            | 10%           |                   |                           |                        |   | ✓ | ✓ |

| S.No | Course Code | Course Title  | No. of Units Revised   | % of Revision | Need for Revision | Relevance To* | Supps for # |
|------|-------------|---|--|---------------|-------------------|---------------|-------------|
|      |             |   | With the Revised content specified if it is not the whole unit   |               |                   | L R N C       | Emp Est ID  |
| 1.   | 19PH2CA7    | Marketing Concept, Factors, Implementation, Social Marketing are added. |  |               |                   |               |             |
| 2.   | 19PH2CA7    | Advanced Cost Accounting  | Unit III: EOB, Profit on incomplete Contracts, Escalation clause, are excluded   | 10%           |                   |               | ✓ ✓         |
| 3.   | 21PA1CA4    | Programming in C++ Lab 3<br>(Theory & Practical)                        | Unit II: Implicit conversion is excluded<br>Unit III: Returning object, const Member function<br>Pointers to member, local classes are excluded<br>Unit IV: Some other operator overloading are removed. | 10%           |                   |               | ✓ ✓         |



| S.No | Course Code | Course Title          | No & Title of Units Revised with Revised content specified if it innot the whole unit  | % of Revision | Need for Revision | Relevance to* |   |   |   |     | Scope for# |    |
|------|-------------|-----------------------|--|---------------|-------------------|---------------|---|---|---|-----|------------|----|
|      |             |                       |  |               |                   | L             | R | N | G | Emp | Ent        | SD |
|      |             |                       | overloading<br>Binary operators<br>using friend<br>are included  |               |                   |               |   |   |   |     |            |    |
| 4.   | 19PBC011    | Direct Taxes          | Unit IV:<br>Capital gain<br>Exempt from<br>tax - sec 54, 54B<br>54D, 54EC &<br>54F are added   | 11%           |                   |               |   |   |   |     |            |    |
| 5.   | 19PBC011    | Investment Management | Unit II:<br>Risk & Return<br>are removed<br>Unit III:<br>Measuring<br>returns, improved<br>technique are<br>removed<br>Unit IV:<br>Types of<br>Mutual<br>funds are<br>included | 10%           |                   |               |   |   |   |     |            |    |

2. Updation of open Educational Resources in the list of references of each course. Nil

3. Revision of Courses for 2023-2024.

| S.No | Course Code | Course Title           | No of Title of units Revised with the Revised Content if it is not the whole unit   | % of Revision | Need for Revision | Revised To        | Scope As # |
|------|-------------|------------------------|---|---------------|-------------------|-------------------|------------|
| 1.   | 19PAC011    | Direct Taxes           | Unit IV & V are separated as Unit III, IV & V. Unit V is included as Dynamics   | 12%           |                   | L R N/A Exp En SP | ✓ ✓        |
| 2.   | 19PAC041    | Investment Management  | Unit 1: Crypto Currency & Blockchain are included. The order of units have been changed.  | 10%           |                   |                   | ✓ ✓        |
| 3.   | 19PAC015    | Women Entrepreneurship | Unit 1: Comparison of entrepreneur & small business & management of enterprises. Unit 2: Micro & Macro Unit, Chara, Scope, obj & Package are removed. | 17%           |                   |                   | ✓ ✓        |



#### 4. New Courses Introduced.

##### Core Courses Introduced (Part II)

| S.No | Course Code | Course Title               | Relevance to* |   |   |   | Scope for* |    | Need for Introduction          |
|------|-------------|----------------------------|---------------|---|---|---|------------|----|--------------------------------|
|      |             |                            | 1             | 2 | 3 | 4 | Employment | SD |                                |
| 1.   | CC1         | Business Finance           |               |   | ✓ |   | ✓          |    | To update the Curriculum       |
| 2.   | CC2         | Digital Marketing          |               |   |   |   | ✓          | ✓  | To update the Curriculum       |
| 3.   | CC3         | Database Management System |               |   |   |   | ✓          | ✓  | Suggestions given by the Board |
| 4.   | CC4         | International Business     |               |   |   |   | ✓          | ✓  | To update the Curriculum       |
| 5.   | CC5         | Corporate Accounting       |               |   | ✓ |   | ✓          |    | To update the Curriculum       |
| 6.   | CC6         | Programming in C++         |               |   |   |   | ✓          | ✓  | Suggestions given by the Board |

Page: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

### Elective Courses Introduced (part I)

| S.No | Generic/<br>Discipline                        | Course<br>code | Course Title                   | Relevant to |   |   |    |     |     | Scope for | Need for<br>Introduction   |
|------|---|----------------|--------------------------------|-------------|---|---|----|-----|-----|-----------|----------------------------|
|      |   |                |                                | L           | R | N | Gr | Emp | Ent |           |                            |
| 1.   | Discipline<br><small>Spec. with Sem-I</small> | EC1-A          | Introduction to Industry 4.0   |             |   |   |    | ✓   | ✓   |           | To update the curriculum   |
| 2.   | Discipline                                    | EC1-B          | Data Mining & Data Warehousing |             |   |   |    | ✓   | ✓   |           | To update the curriculum   |
| 3.   | Discipline                                    | EC2-A          | Enterprise Resource Planning   |             |   | ✓ |    |     |     | ✓         | Suggestions given by Board |
| 4.   | Discipline                                    | EC2-B          | Cost Accounting                |             |   | ✓ |    |     | ✓   |           | To update the curriculum   |
| 5.   | <small>Sem-II</small><br>Generic              | EC3-A          | Banking & Insurance            |             |   | ✓ |    |     |     | ✓         | Suggestions given by Board |
| 6.   | Generic                                       | EC3-B          | Technology in Banking          |             |   |   |    | ✓   |     | ✓         | To update the curriculum   |
| 7.   | Discipline                                    | EC4-A          | Financial Analytics - I        |             |   | ✓ |    |     |     | ✓         | Suggestions given by Board |
| 8.   | Discipline                                    | EC4-B          | Big Data Analytics             |             |   |   |    | ✓   | ✓   |           | To update the curriculum   |

### Rubrics for Project:

| S.No | C1-20 Marks                 | C2-20 Marks                 | CIA Total-40 Marks | External-60 Marks                    |
|------|-----------------------------|-----------------------------|--------------------|--------------------------------------|
| 1.   | Co-operation & Presentation | Content & Critical Thinking | 40 Marks           | Content, Tools<br>Presentation, Viva |

### Rubrics for Internship:

| S.No | C1-20 Marks       | C2-20 Marks  | CIA Total-40 Marks | External-60 Marks                        |
|------|-------------------|--------------|--------------------|--|
| 1.   | Report Submission | Presentation | 40 Marks           | Content, Attendance<br>Punctuality, Viva |

## Skill Enhancement/Foundation/Ability Enhancement course (Part II)

| S.No | SEC/FCI/AECC with Semester | Course Code | Course Title               | Relevance To* |   |   |   | Scope For* |     |    | Need for Introduction          |
|------|----------------------------|-------------|----------------------------|---------------|---|---|---|------------|-----|----|--------------------------------|
|      |                            |             |                            | L             | R | N | G | Emp        | Ent | SD |                                |
| 1.   | SEC                        | SEC-1       | Advanced Excel             |               |   |   |   | ✓          | ✓   |    | To update the curriculum       |
| 2.   | AECC                       | AECC-1      | Soft Skill-1               |               |   |   |   | ✓          | ✓   |    | Suggestions given by the Board |
| 3.   | SEC                        | SEC-2       | Stress and Time Management |               |   |   | ✓ |            |     | ✓  | To update the Curriculum       |
| 4.   | AECC                       | AECC-2      | Soft Skill-2               |               |   |   |   | ✓          | ✓   |    | To update the curriculum       |

## Value-Added Course - Certificate/Diploma/Advanced Diploma

| S.No | Course Code | Course Title | MOU with Industry/Organisation | Skills Sharpened | Course outcome |
|------|-------------|--------------|--------------------------------|------------------|----------------|
| -    | -           | -            | Nil.                           | -                | -              |

\*L - Local, \*R - Regional, \*N - National, \*G - Global

#Emp - Employability, #Ent - Entrepreneurship, #SD - Skill Development



## Skill-Embedded Certificate/Diploma/Advanced Diplomas

| S.No | Course Code | Course Title | MOU with Industry/ Organisation | Skills Sharpened | Course Outcome |
|------|-------------|--------------|---------------------------------|------------------|----------------|
| -    | -           | -            | Nil                             | -                | -              |

Approval of Ph.D course work syllabus :- Nil.

Details of Active MOU - Nil.

Other Suggestions:

It is suggested to have TANSCH courses for all semester with minor changes.

Dr. M. Arasammal

Dr. A. Rani

Dr. S. Valli Devasana

Mrs. G. Shri Hari Priya

Ms. S. Kaleeswari

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M. Priya

Dr. S. Maria Nisha

05/04

**FATIMA COLLEGE (AUTONOMOUS), MADURAI-18**

**DEPARTMENT OF COMMERCE WITH CA**

*For those who joined in June 2019 onwards*

**PROGRAMME CODE : PSCC**

| COURSE CODE                    | COURSE TITLE  | CREDIT    | HRS / WK  | CIA Mks | ESE Mks | TOT. MKs |
|--------------------------------|---|-----------|-----------|---------|---------|----------|
| <b>SEMESTER – I</b>            |   |           |           |         |         |          |
| 23PG1K1                        | Business Finance  | 5         | 6         | 40      | 60      | 100      |
| 23PG1K2                        | Digital Marketing   | 5         | 6         | 40      | 60      | 100      |
| 23PG1K3                        | Banking and Insurance   | 4         | 6         | 40      | 60      | 100      |
| 23PG1KE1<br>or<br><br>23PG1KE2 | Elective I A -<br>Introduction to Industry<br>4.0(or)<br><br>I B - Big Data Analytics         | 3         | 5         | 40      | 60      | 100      |
| 23PG1KE3<br>or<br>23PG1KE4     | Elective II A-Enterprise<br>Resource Planning<br>(or)<br>II B - Database<br>Management System | 3         | 5         | 40      | 60      | 100      |
| 23PG1KAE                       | EDC - Electronic<br>Banking   | 1         | 2         | 40      | 60      | 100      |
| <b>Total</b>                   |   | <b>21</b> | <b>30</b> |         |         |          |
| <b>SEMESTER – II</b>           |   |           |           |         |         |          |
| 23PG2K4                        | Core IV - Strategic Cost<br>Management  | 5         | 6         | 40      | 60      | 100      |
| 23PG2K5                        | Core V - Corporate<br>Accounting  | 5         | 6         | 40      | 60      | 100      |



| COURSE CODE                | COURSE TITLE   | CREDIT    | HRS / WK  | CIA Mks | ESE Mks | TOT. MKs |
|----------------------------|--|-----------|-----------|---------|---------|----------|
| 23PG2K6                    | Core VI - Setting up of Business Entities  | 4         | 6         | 40      | 60      | 100      |
| 23PG2KE5<br>or<br>23PG2KE6 | Elective III A - Data Mining and Data Interpretation<br><br>(or) III B - Technology in Banking   | 3         | 4         | 40      | 60      | 100      |
| 23PG2KE7<br>or<br>23PG2KE8 | Elective IV A - Financial Analytics (Practical)<br><br>(or) IV B - Management Information System | 3         | 4         | 40      | 60      | 100      |
| 23PG2KAE                   | EDC-Financial Accounting & Tally   | 2         | 4         | 40      | 60      | 100      |
| <b>Total</b>               |  | <b>22</b> | <b>30</b> |         |         |          |

**I M.Com CA**  
**SEMESTER –I**  
*For those who joined in 2023 onwards*

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| <b>PROGRAM<br/>ME CODE</b> | <b>COURSE<br/>CODE</b> | <b>COURSE TITLE</b>         | <b>CATEGO<br/>RY</b>            | <b>HRS/WEEK</b> | <b>CREDITS</b> |
|----------------------------|------------------------|-----------------------------|---------------------------------|-----------------|----------------|
| <b>PSCC</b>                | <b>23PG1K1</b>         | <b>BUSINESS<br/>FINANCE</b> | <b>Theory &amp;<br/>Problem</b> | <b>6</b>        | <b>5</b>       |

### **COURSE DESCRIPTION**

This course emphasises on the major decisions made by the financial executive of an organization like capital structure strategies, ideal cost of capital, optimal cash management and effective dividend policies.

### **COURSE OBJECTIVES**

- 1 To outline the fundamental concepts in finance
- 2 To estimate and evaluate risk in investment proposals
- 3 To evaluate leasing as a source of finance and determine the sources of startup financing
- 4 To examine cash and inventory management techniques
- 5 To appraise capital budgeting techniques for MNCs

### **Units**

#### **UNIT –I INTRODUCTION TO BUSINESS FINANCE AND TIME VALUE OF MONEY (18 HRS.)**

Business Finance: Meaning, Objectives, Scope -Time Value of money: Meaning, Causes – Compounding – Discounting – Sinking Fund Deposit Factor – Capital Recovery Factor – Multiple Compounding– Effective rate of interest – Doubling period (Rule of 69 and Rule of 72) – Practical problems.

#### **UNIT –II RISK MANAGEMENT ( 18 HRS.)**

Risk and Uncertainty: Meaning – Sources of Risk – Measures of Risk – Measurement of Return – General pattern of Risk and Return – Criteria for

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evaluating proposals to minimise Risk (Single Asset and Portfolio) – Methods of Risk Management – Hedging currency risk.

**UNIT –III STARTUP FINANCING AND LEASING (18 HRS.)**

**Startup Financing:** Meaning, Sources, Modes (Bootstrapping, Angel investors, Venture capital fund) - Leasing: Meaning – Types of Lease Agreements – Advantages and Disadvantages of Leasing – Financial evaluation from the perspective of Lessor and Lessee.

**UNIT – CASH, RECEIVABLE AND INVENTORY MANAGEMENT (18 HRS.)**

Cash Management: Meaning, Objectives and Importance – Cash Cycle – Minimum Operating Cash – Safety level of cash – Optimum cash balance - Receivable Management: Meaning – Credit policy – Controlling receivables: Debt collection period, Ageing schedule, Factoring – Evaluating investment in accounts receivable - Inventory Management: Meaning and Objectives – EOQ with price breaks – ABC Analysis.

**UNIT –V MULTI NATIONAL CAPITAL BUDGETING (18 HRS.)**

Multi National Capital Budgeting: Meaning, Steps involved, Complexities, Factors to be considered – International sources of finance – **Techniques to evaluate multi-national capital expenditure proposals:** Discounted Pay Back Period, NPV, Profitability Index, Net Profitability Index and Internal Rate of Return – Capital rationing -Techniques of Risk analysis in Capital Budgeting.

**UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Dividend Decision – **Factors affecting Dividend Decision(Self Study)** – Walter’s model, Gordon’s model, MM Hypothesis.

**TEXT BOOK:**

1. Maheshwari S.N., (2019), “Financial Management Principles and Practices”, 15<sup>th</sup> Edition, Sultan Chand & Sons, New Delhi.
2. Khan M.Y & Jain P.K, (2011), “Financial Management: Text, Problems and Cases”, 8<sup>th</sup> Edition, McGraw Hill Education, New Delhi.
3. Prasanna Chandra, (2019), “Financial Management, Theory and Practice”, 10<sup>th</sup> Edition, McGraw Hill Education, New Delhi.
4. Apte P.G, (2020), “International Financial Management” 8<sup>th</sup> Edition, Tata McGraw Hill, New Delhi.

**REFERENCES**

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

**Digital Open Educational Resources (DOER) :**

1. <https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAIQw7AJahcKEwjo>
2. <https://www.bankrate.com/investing/time-value-of-money>

**COURSE CONTENTS & LECTURE SCHEDULE:**

| Module No.  | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|---|--|-----------------|-------------------|-----------------------|
| <b>UNIT -1 INTRODUCTION TO FINANCIAL MANAGEMENT</b> |  |                 |                   |                       |
| 1.1   | Business Finance: Meaning, <b>Objectives, Scope</b> (Self Study)   | 1               | Lecture           | PPT & White board     |
| 1.2   | Time Value of money: Meaning, Causes   | 1               | Lecture           | White board           |
| 1.3   | Compounding  | 2               | Chalk & Talk      | Black Board           |
| 1.4   | Discounting – Sinking Fund Deposit Factor – Capital Recovery Factor  | 3               | Chalk & Talk      | Black Board           |
| 1.5   | Multiple Compounding– Effective rate of interest – Doubling period (Rule of 69 and Rule of 72) – Practical problems. | 3               | Chalk & Talk      | Black Board           |
| <b>UNIT -2 Risk Management</b>                      |  |                 |                   |                       |
| 2.1   | Risk and Uncertainty: Meaning  | 2               | Lecture           | Green Board<br>Charts |
| 2.2   | Sources of Risk  | 2               | Chalk & Talk      | Black Board           |

| <b>Module No.</b>                               | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|---|---|------------------------|--------------------------|----------------------|
| 2.3   | Measures of Risk  | 3                      | Chalk & Talk             | Black Board          |
| 2.4   | Measurement of Return   | 2                      | Chalk & Talk             | Black Board          |
| 2.5   | General pattern of Risk and Return  | 2                      | Lecture                  | Green Board Charts   |
| 2.6   | Criteria for evaluating proposals to minimise Risk (Single Asset and Portfolio) | 3                      | Lecture                  | Green Board Charts   |
| 2.7   | Methods of Risk Management  | 2                      | Lecture                  | Green Board Charts   |
| 2.8   | Hedging currency risk   | 2                      | Chalk & Talk             | Black Board          |
| <b>UNIT -3      StartupFinancingand Leasing</b> |   |                        |                          |                      |
| 3.1   | Startup Financing: Meaning, Sources   | 2                      | Lecture                  | Green Board Charts   |
| 3.2   | Modes (Bootstrapping, Angel investors, Venture capital fund)                    | 3                      | Chalk & Talk             | Black Board          |
| 3.3   | Leasing: Meaning – Types of Lease Agreements                                    | 2                      | Chalk & Talk             | Black Board          |
| 3.4   | Lease Agreements  | 2                      | Chalk & Talk             | Black Board          |
| 3.5   | Advantages and Disadvantages of Leasing   | 2                      | Chalk &Talk              | Black Board          |
| 3.6   | Financial evaluation from the perspective of Lessor and Lessee.                 | 3                      | Chalk &Talk              | Black Board          |



| <b>Module No.</b>  | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--|--|------------------------|--------------------------|----------------------|
| <b>UNIT -4 Cash, Receivable and Inventory Management</b> |  |                        |                          |                      |
| 4.1  | Cash Management: Meaning, Objectives                             | 2                      | Lecture                  | Green Board Charts   |
| 4.2  | Importance   | 2                      | Chalk & Talk             | Black Board          |
| 4.3  | Cash Cycle – Minimum Operating Cash                              | 2                      | Chalk & Talk             | Black Board          |
| 4.4  | Safety level of cash – Optimum cash balance                      | 3                      | Chalk & Talk             | Black Board          |
| 4.5  | Receivable Management: Meaning – Credit policy                   | 2                      | Chalk & Talk             | Black Board          |
| 4.6  | Controlling receivables: Debt collection period, Ageing schedule | 3                      | Chalk & Talk             | Black Board          |
| 4.7  | Factoring – Evaluating investment in accounts receivable         | 2                      | Chalk & Talk             | Black Board          |
| 4.8  | Inventory Management: Meaning and Objectives                     | 2                      | Chalk & Talk             | Black Board          |
| 4.9  | EOQ with price breaks – ABC Analysis.                            | 2                      | Chalk & Talk             | Black Board          |
| <b>UNIT -5 Multi National Capital Budgeting</b>          |  |                        |                          |                      |
| 5.1  | Multi National Capital Budgeting: Meaning, Steps involved        | 2                      | Lecture                  | Green Board          |
| 5.2  | Complexities   | 2                      | Chalk & Talk             | Black Board          |

| Module No.               | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|--------------------------|---|-----------------|-------------------|---------------|
| 5.3                      | Factors to be considered – International sources of finance   | 2               | Chalk & Talk      | Black Board   |
| 5.4                      | Techniques to evaluate multi-national capital expenditure proposals: Discounted Pay Back Period                             | 2               | Chalk & Talk      | Black Board   |
| 5.5                      | NPV, Profitability Index  | 3               | Chalk & Talk      | Black Board   |
| 5.6                      | Net Profitability Index   | 3               | Chalk & Talk      | Black Board   |
| 5.7                      | Internal Rate of Return   | 2               | Chalk & Talk      | Black Board   |
| 5.8                      | Capital rationing -Techniques of Risk analysis in Capital Budgeting.  | 2               | Chalk & Talk      | Black Board   |
| <b>UNIT –VI DYNAMISM</b> |   |                 |                   |               |
| 6.1                      | Dividend Decision – <b>Factors affecting Dividend Decision(Self Study)</b> – Walter’s model, Gordon’s model, MM Hypothesis. | 2               | Seminar           | PPT           |

| Levels | C1      | C2               | C3     | C4           | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|---------|------------------|--------|--------------|------------------------|-------------------------|-----------|-----------------|
|        | Seminar | Better of W1, W2 | M1+M2  | MID-SEM TEST |                        |                         |           |                 |
|        | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks       | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2     | 5       | -                | -      | 2 ½          | -                      |                         | -         | -               |

|                |   |   |    |     |    |   |    |       |
|----------------|---|---|----|-----|----|---|----|-------|
| K3             | - | 5 | 4  | 2 ½ | 5  |   | 5  | 12.5  |
| K4             | - | - | 3  | 5   | 12 |   | 12 | 30 %  |
| K5             | - | - | 3  | 5   | 9  |   | 9  | 22.5  |
| Non Scholastic | - | - | -  | -   | 9  |   | 9  | 22.5  |
| Total          | 5 | 5 | 10 | 15  | 35 | 5 | 40 | 100 % |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

### EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

#### PG CIA Components

|           |                      | Nos |          |
|-----------|----------------------|-----|----------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - 5 Mks  |
| <b>C6</b> | - Attendance         |     | - 5 Mks  |

***\*The best out of two will be taken into account***

## COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES  |
|------|--|
| CO 1 | Explain important finance concepts   |
| CO 2 | Apply the measurement of leverage to enhance the earnings of company and to evaluate the capital structure theories. |
| CO 3 | Compare the firm's performances by applying various cost of capital methods.   |
| CO 4 | Understand and acquire knowledge about Receivable management.  |
| CO 5 | Evaluate techniques of long term investment decision incorporating risk factor.                                      |

### Mapping COs Consistency with POs

| CO/<br>PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|-----------|-----|-----|-----|-----|-----|-----|
| CO1       | 3   | 3   | 1   | 3   | 3   | 3   |
| CO2       | 3   | 3   | 2   | 3   | 3   | 3   |
| CO3       | 2   | 2   | 1   | 2   | 2   | 2   |
| CO4       | 3   | 2   | 3   | 2   | 3   | 3   |
| CO5       | 3   | 2   | 3   | 2   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Dr.S.P.Savitha**

**Forwarded By**

*P. Sakunthala*

**Dr.P.Sakunthala**

**HOD'S Signature& Name**

**I M.Com CA  
SEMESTER –I**

***For those who joined in 2023 onwards***

| <b>PROGRAM<br/>ME CODE</b> | <b>COURSE<br/>CODE</b> | <b>COURSE TITLE</b>          | <b>CATEGO<br/>RY</b> | <b>HRS/WEEK</b> | <b>CREDITS</b> |
|----------------------------|------------------------|------------------------------|----------------------|-----------------|----------------|
| <b>PSCC</b>                | <b>23PG1K2</b>         | <b>DIGITAL<br/>MARKETING</b> | <b>THEORY</b>        | <b>5</b>        | <b>3</b>       |

**COURSE DESCRIPTION**

This course emphasises on the emerging trend in Marketing, it also paves way to inculcate business decisions by gaining skills to market a product and learn the latest trends to help secure a job in top companies.

**COURSE OBJECTIVES**

1. To assess the evolution of digital marketing
2. To appraise the dimensions of online marketing mix
3. To infer the techniques of digital marketing
4. To analyse online consumer behaviour
5. To interpret data from social media and to evaluate game based marketing

**UNITS**

**UNIT I INTRODUCTION TO DIGITAL MARKETING**

**(16 HRS)**

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Digital Marketing – Transition from traditional to digital marketing – Rise of internet – Growth of e-concepts – Growth of e-business to advanced e-commerce – Emergence of digital marketing as a tool – Digital marketing channels – Digital marketing applications, benefits and limitations – Factors for success of digital marketing – Emerging opportunities for digital marketing professionals. (Self Study).

## **UNIT II ONLINE MARKETING MIX (18 HRS)**

Online marketing mix – E-product – E-promotion – E-price – E-place – Consumer segmentation – Targeting – Positioning – Consumers and online shopping issues – Website characteristics affecting online purchase decisions – Distribution and implication on online marketing mix decisions. (Self Study).

## **UNIT III DIGITAL MEDIA CHANNELS (18 HRS)**

Digital media channels – Search engine marketing – ePR – Affiliate marketing – Interactive display advertising – Opt-in-email marketing and mobile text messaging, Invasive marketing – **Campaign management using – Facebook, Twitter, Corporate Blogs(Self Study).** – Advantages and disadvantages of digital media channels – Metaverse marketing.

## **UNIT IV ONLINE CONSUMER BEHAVIOUR (18 HRS)**

Online consumer behavior – Cultural implications of key website characteristics – Dynamics of online consumer visit – **Models of website visits – Web and consumer decision making process (Self Study)** – Data base marketing – Electronic consumer relationship management – Goals – Process – Benefits – Role – Next generation CRM.

## **UNIT V ANALYTICS AND GAMIFICATION (18 HRS)**

Digital Analytics – Concept – Measurement framework – Demystifying web data - Owned social metrics – Measurement metrics for Facebook, Twitter, YouTube, Slide Share, Pinterest, Instagram, Snapchat and LinkedIn – Earned social media metrics - **Digital brand analysis – Meaning – Benefits – Components (Self Study)** – Brand share dimensions – Brand audience

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dimensions – Market influence analytics – Consumer generated media and opinion leaders – Peer review – Word of mouth – Influence analytics – Mining consumer generated media – Gamification and game based marketing – Benefits – Consumer motivation for playing online games.

#### **UNIT VI DYNAMISM (Evaluation Pattern – CIA only)**

Future of Marketing – New Innovation and Products.

#### **TEXT BOOK:**

1. Puneet Singh Bhatia, (2019) “Fundamentals of Digital Marketing”, 2<sup>nd</sup> 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” 3<sup>rd</sup> 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.

#### **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” 2<sup>nd</sup> Edition, Oxford University Press, London.

**Digital Open Educational Resources (DOER) :**

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>

**COURSE CONTENTS & LECTURE SCHEDULE:**

| Module No.                                       | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids     |
|--|---|-----------------|-------------------|-------------------|
| <b>UNIT -1 INTRODUCTION TO DIGITAL MARKETING</b> |   |                 |                   |                   |
| 1.1  | Digital Marketing – Transition from traditional to digital marketing – Rise of internet – Growth of e-concepts              | 4               | Lecture           | PPT & White board |
| 1.2  | Growth of e-business to advanced e-commerce – Emergence of digital marketing as a tool                                      | 4               | Lecture           | White board       |
| 1.3  | Digital marketing channels – Digital marketing applications, benefits and limitations                                       | 4               | Lecture           | PPT & White board |
| 1.4  | <b>Factors for success of digital marketing – Emerging opportunities for digital marketing professionals. (Self Study).</b> | 4               | Lecture           | PPT & White board |



| Module No.                            | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|---------------------------------------|--|-----------------|-------------------|-----------------------|
| <b>UNIT -2 ONLINE MARKETING MIX</b>   |  |                 |                   |                       |
| 2.1                                   | Online marketing mix   | 2               | Lecture           | Green Board<br>Charts |
| 2.2                                   | E-product – E-promotion  | 2               | Chalk & Talk      | Black Board           |
| 2.3                                   | E-price – E-place  | 3               | Chalk & Talk      | Black Board           |
| 2.4                                   | Consumer segmentation – Targeting  | 3               | Chalk & Talk      | Black Board           |
| 2.5                                   | Positioning – Consumers and online shopping issues                                   | 3               | Lecture           | Green Board<br>Charts |
| 2.6                                   | <b>Website characteristics affecting online purchase decisions (Self Study)</b>      | 2               | Lecture           | Green Board<br>Charts |
| 2.7                                   | <b>Distribution and implication on online marketing mix decisions. (Self Study).</b> | 3               | Lecture           | Green Board<br>Charts |
| <b>UNIT -3 DIGITAL MEDIA CHANNELS</b> |  |                 |                   |                       |
| 3.1                                   | Digital media channels   | 3               | Lecture           | Green Board<br>Charts |
| 3.2                                   | Search engine marketing – ePR  | 3               | Chalk & Talk      | Black Board           |
| 3.3                                   | Affiliate marketing – Interactive display advertising                                | 3               | Chalk & Talk      | Black Board           |
| 3.4                                   | Opt-in-email marketing and mobile text messaging, Invasive marketing                 | 3               | Chalk & Talk      | Black                 |

| Module No.                                | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|---|---|-----------------|-------------------|-----------------------|
|   |   |                 |                   | Board                 |
| 3.5                                       | <b>Campaign management using – Facebook, Twitter, Corporate Blogs(Self Study)</b> | 3               | Chalk & Talk      | Black Board           |
| 3.6                                       | Advantages and disadvantages of digital media channels – Metaverse marketing      | 3               | Chalk & Talk      | Black Board           |
| <b>UNIT -4 ONLINE CONSUMER BEHAVIOUR</b>  |   |                 |                   |                       |
| 4.1                                       | Online consumer behavior  | 2               | Lecture           | Green Board<br>Charts |
| 4.2                                       | Cultural implications of key website characteristics                              | 2               | Chalk & Talk      | Black Board           |
| 4.3                                       | Dynamics of online consumer visit   | 2               | Chalk & Talk      | Black Board           |
| 4.4                                       | <b>Models of website visits (Self Study)</b>                                      | 2               | Chalk & Talk      | Black Board           |
| 4.5                                       | <b>Web and consumer decision making process (Self Study)</b>                      | 2               | Chalk & Talk      | Black Board           |
| 4.6                                       | Data base marketing   | 2               | Chalk & Talk      | Black Board           |
| 4.7                                       | Electronic consumer relationship management                                       | 2               | Chalk & Talk      | Black Board           |
| 4.8                                       | Goals – Process – Benefits  | 2               | Chalk & Talk      | Black Board           |
| 4.9                                       | Role – Next generation CRM  | 2               | Chalk & Talk      | Black Board           |
| <b>UNIT -5 ANALYTICS AND GAMIFICATION</b> |   |                 |                   |                       |



| Module No.              | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|-------------------------|--|-----------------|-------------------|---------------|
| 5.1                     | Digital Analytics – Concept – Measurement framework – Demystifying web data - Owned social metrics   | 2               | Lecture           | Green Board   |
| 5.2                     | Measurement metrics for Facebook, Twitter, YouTube, Slide Share, Pinterest, Instagram, Snapchat and LinkedIn – Earned social media metrics   | 4               | Chalk & Talk      | Black Board   |
| 5.3                     | <b>Digital brand analysis – Meaning – Benefits – Components (Self Study)</b>   | 4               | Chalk & Talk      | Black Board   |
| 5.4                     | Brand share dimensions – Brand audience dimensions – Market influence analytics – Consumer generated media and opinion leaders – Peer review – Word of mouth – Influence analytics | 4               | Chalk & Talk      | Black Board   |
| 5.5                     | Mining consumer generated media – Gamification and game based marketing – Benefits – Consumer motivation for playing online games.   | 4               | Chalk & Talk      | Black Board   |
| <b>UNIT VI DYNAMISM</b> |  |                 |                   |               |
| 6.1                     | Future of Marketing – New Innovation and Products.   |                 | Chalk & Talk      | Black Board   |

| Levels | C1 | C2 | C3 | C4 | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total |  |
|--------|----|----|----|----|------------------------|-------------------------|-----------|--|
|--------|----|----|----|----|------------------------|-------------------------|-----------|--|

|                   | Seminar<br>5 Mks. | Better<br>of<br>W1,<br>W2<br>5Mks. | M1+M2<br>10 Mks | MID<br>-<br>SEM<br>TEST<br>15<br>Mks | 35 Mks. | 5 Mks. | 40Mks. | % of<br>Assessment |
|-------------------|-------------------|------------------------------------|-----------------|--------------------------------------|---------|--------|--------|--------------------|
| K2                | 5                 | -                                  | -               | 2 ½                                  | -       |        | -      | -                  |
| K3                | -                 | 5                                  | 4               | 2 ½                                  | 5       |        | 5      | 12.5 %             |
| K4                | -                 | -                                  | 3               | 5                                    | 12      |        | 12     | 30 %               |
| K5                | -                 | -                                  | 3               | 5                                    | 9       |        | 9      | 22.5%              |
| Non<br>Scholastic | -                 | -                                  | -               | -                                    | 9       |        | 9      | 22.5 %             |
| Total             | 5                 | 5                                  | 10              | 15                                   | 35      | 5      | 40     | 100 %              |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

### EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON -<br>SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|---------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6                  | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                   | 40    | 60  | 100   |

#### • PG CIA Components

Nos

**C1** - Test (CIA 1) 1 - 10 Mks

|           |                      |     |   |        |
|-----------|----------------------|-----|---|--------|
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b>  | <b>COURSE OUTCOMES</b>                    |
|-------------|---|
| <b>CO 1</b> | Explain the dynamics of digital marketing |
| <b>CO 2</b> | Examine online marketing mix              |
| <b>CO 3</b> | Compare digital media channels            |
| <b>CO 4</b> | Interpret online consumer behaviour       |
| <b>CO 5</b> | Analyse social media data                 |

### **Mapping COs Consistency with POs**

| <b>CO/<br/>PO</b> | <b>PO1</b> | <b>PO2</b> | <b>PO3</b> | <b>PO4</b> | <b>PO5</b> | <b>PO6</b> |
|-------------------|------------|------------|------------|------------|------------|------------|
| <b>CO1</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO2</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO3</b>        | 3          | 3          | 2          | 2          | 3          | 2          |
| <b>CO4</b>        | 3          | 3          | 2          | 2          | 3          | 3          |
| <b>CO5</b>        | 3          | 3          | 1          | 3          | 3          | 2          |

**Note:** ♦ Strongly Correlated – **3**      ♦ Moderately Correlated – **2**

♦ Weakly Correlated -1

**COURSE DESIGNER:**

Ms.M.Fanny

**Forwarded By**

*P. Sakunthala*

**Dr.P.Sakunthala**

**HOD'S Signature& Name**

**I M.Com CA  
SEMESTER -I**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE             | CATEGOR<br>Y | HRS/WE<br>EK | CREDITS |
|--------------------|----------------|--------------------------|--------------|--------------|---------|
| PSCC               | 23PG1K3        | BANKING AND<br>INSURANCE | Theory       | 6            | 4       |

**COURSE DESCRIPTION**

This course aims to equip student a broad understanding of banking and insurance, with current developments in the banking industry with respect to the application of practical knowledge about latest terminology about banking and insurance.

**COURSE OBJECTIVES**

Provide students with a clear understanding of the concept of banking and insurance

**UNIT -I INTRODUCTION TO BANKING**

**[18 HRS]**

Banking: Brief History of Banking - Rapid Transformation in Banking:  
Customer Shift - Fintech Overview - Fintech Outlook The Financial Disruptors

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- Digital Financial Revolution - New Era of Banking. Digital Banking – Electronic Payment Systems–**Electronic Fund Transfer System** – Electronic Credit and Debit Clearing – NEFT – RTGS –VSAT–SFMS–SWIFT.

## **UNIT – II CONTEMPORARY DEVELOPMENTS IN BANKING [18 HRS]**

Distributed Ledger Technology – Blockchain: Meaning - Structure of BlockChain - Types of Block Chain - Differences between DLT and Blockchain - Benefits of Blockchain and DLT-Unlocking the potential of Blockchain – Crypto currencies, Central Bank Digital Currency (CBDC) - Role of DLT in financial services - AI in Banking: Future of AI in Banking - Applications of AI in Banking - Importance of AI in banking - Banking reimaged with AI. Cloud banking - Meaning - Benefits in switching to Cloud Banking.

## **UNIT III INDIAN INSURANCE MARKET [18 HRS]**

History of Insurance in India – Definition and Functions of Insurance – Insurance Contract – Indian Insurance Market – Reforms in Insurance Sector -Insurance Organisation – Insurance organisation structure. Insurance Intermediaries: Insurance Broker – Insurance Agent - Surveyors and Loss Assessors - Third Party Administrators (Health Services) – Procedures - Code of Conduct.

## **UNIT IV CUSTOMER SERVICES IN INSURANCE [18 HRS]**

**Customer Service in Insurance** – Quality of Service - Role of Insurance Agents in Customer Service-Agent’s Communication and Customer Service – Ethical Behaviour in Insurance – Grievance Redressal System in Insurance Sector– Integrated Grievance Management System- Insurance Ombudsman - Insurance Regulatory and Development Authority of India Act (IRDA)– Regulations and Guidelines.

## **UNIT V RISK MANAGEMENT [18 HRS]**

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Risk Management and Control in banking and insurance industries –  
Methods of Risk Management – Risk Management by Individuals and  
Corporations – **Tools for Controlling Risk.**

## **UNIT VI – DYNAMISM**

E-Banking Trends in India: Evolution, Challenges And Opportunities

### **REFERENCES:**

#### **TEXT BOOKS**

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

#### **Digital Open Educational Resources (DOER) :**

1. [http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT\\_V3\\_N2\\_011.pdf](http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT_V3_N2_011.pdf)
2. <http://lawtimesjournal.in/e-banking-and-recent-trends-in-india/>

#### **Digital Open Educational Resources (DOER) :**

1. [http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT\\_V3\\_N2\\_011.pdf](http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT_V3_N2_011.pdf)
2. <http://lawtimesjournal.in/e-banking-and-recent-trends-in-india/>

### **3. COURSE CONTENTS & LECTURE SCHEDULE:**

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| <b>Module No.</b>                                     | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|---|--|------------------------|--------------------------|----------------------|
| <b>UNIT -1 INTRODUCTION TO BANKING</b>                |  |                        |                          |                      |
| 1.1   | Brief History of Banking - Rapid Transformation in Banking: Customer Shift Disruptors - Digital Financial Revolution   | 6                      | Chalk & Talk             | Black Board          |
| 1.2   | Fintech Overview - Fintech Outlook - New Era of Banking.Digital Banking – Electronic Payment Systems   | 6                      | Lecture                  | Black Board          |
| 1.3   | Electronic Fund Transfer System – Electronic Credit and Debit Clearing – NEFT – RTGS –VSAT–SFMS–SWIFT.   | 6                      | Lecture                  | PPT                  |
| <b>UNIT – II CONTEMPORARY DEVELOPMENTS IN BANKING</b> |  |                        |                          |                      |
| 2.1   | Distributed Ledger Technology – Blockchain: Meaning - Structure of BlockChain - Types of Block Chain - Differences between DLT and Blockchain                        | 6                      | Chalk & Talk             | Black Board          |
| 2.2   | Benefits of Blockchain and DLT – Crypto currencies, Central Bank Digital Currency (CBDC) - Role of DLT in financial services Unlocking the potential of Blockchain – | 6                      | Chalk &Talk              | Black Board          |

|   |  |   |              |             |
|---|--|---|--------------|-------------|
| 2.3   | AI in Banking: Future of AI in Banking - Applications of AI in Banking - Importance of AI in banking - Banking reimagined with AI. Cloud banking - Meaning - Benefits in switching to Cloud Banking. | 6 | Chalk & Talk | Black Board |
| <b>UNIT -3 INDIAN INSURANCE MARKE</b>         |  |   |              |             |
| 3.1   | History of Insurance in India – Definition and Functions of Insurance – Insurance Contract – Indian Insurance Market   | 6 | Chalk & Talk | Black Board |
| 3.2   | Reforms in Insurance Sector - Insurance Intermediaries: Insurance Broker – Insurance AgentInsurance Organisation – Insurance organisation structure.   | 6 | Chalk & Talk | Black Board |
| 3.3   | Surveyors and Loss Assessors - Third Party Administrators (Health Services) – Procedures - Code of Conduct.  | 6 | Chalk & Talk | Black Board |
| <b>UNIT -4 CUSTOMER SERVICES IN INSURANCE</b> |  |   |              |             |

|                                |   |   |              |             |
|--------------------------------|---|---|--------------|-------------|
| 4.1                            | Customer Service in Insurance<br>– Quality of Service - Role of Insurance Agents in Customer Service-Agent's Communication and Customer Service | 6 | Chalk & Talk | Black Board |
| 4.3                            | Grievance Redressal System in Insurance Sector –Insurance Ombudsman Integrated Grievance Management System                                      | 6 | Chalk & Talk | Black Board |
| 4.4                            | Insurance Regulatory and Development Authority of India Act (IRDA)– Regulations and Guidelines.   | 6 | Chalk & Talk | Black Board |
| <b>UNIT -5 RISK MANAGEMENT</b> |   |   |              |             |
| 5.1                            | Risk Management and Control in banking and insurance industries –   | 6 | Lecture      | PPT         |
| 5.2                            | Methods of Risk Management – Risk Management by Individuals and Corporations  | 6 | Lecture      | PPT         |
| 5.3                            | Tools for Controlling Risk.   | 6 | Lecture      | PPT         |
| <b>UNIT –6 DYNAMISM</b>        |   |   |              |             |
| 6.1                            | E-Banking Trends In India: Evolution, Challenges And Opportunities  | 2 | Discussion   | Black Board |

| Levels         | C1      | C2               | C3     | C4           | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|----------------|---------|------------------|--------|--------------|------------------------|-------------------------|-----------|-----------------|
|                | Seminar | Better of W1, W2 | M1+M2  | MID-SEM TEST |                        |                         |           |                 |
|                | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks       | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5       | -                | -      | 2 ½          | -                      |                         | -         | -               |
| K3             | -       | 5                | 4      | 2 ½          | 5                      |                         | 5         | 12.5            |
| K4             | -       | -                | 3      | 5            | 12                     |                         | 12        | 30 %            |
| K5             | -       | -                | 3      | 5            | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -       | -                | -      | -            | 9                      |                         | 9         | 22.5 %          |
| Total          | 5       | 5                | 10     | 15           | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

- **PG CIA Components**

|           |                      | <b>Nos</b> |          |
|-----------|----------------------|------------|----------|
| <b>C1</b> | - Test (CIA 1)       | 1          | - 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1          | - 10 Mks |
| <b>C3</b> | - Assignment         | 2 *        | - 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 *        | - 5 Mks  |
| <b>C5</b> | - Seminar            | 1          | - 5 Mks  |
| <b>C6</b> | - Attendance         |            | - 5 Mks  |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b> | <b>COURSE OUTCOMES</b>   |
|------------|--|
| CO 1       | Relate the transformation in banking from traditional to new age |
| CO 2       | Apply modern techniques of digital banking                       |
| CO 3       | Evaluate the role of insurance sector.                           |
| CO 4       | Examine the regulatory mechanism                                 |
| CO 5       | Assess risk mitigation strategies                                |

## **Mapping of COs with PSOs**

| CO/ PSO                                     | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 |
|---|-------|-------|-------|-------|-------|-------|
| CO1   | 3     | 2     | 2     | 3     | 2     | 2     |
| CO2   | 3     | 3     | 2     | 3     | 2     | 2     |
| CO3   | 3     | 3     | 3     | 3     | 2     | 2     |
| CO4   | 3     | 3     | 2     | 3     | 2     | 2     |
| CO5   | 3     | 3     | 2     | 3     | 2     | 2     |
| Weightage of course contributed to each PSO | 15    | 14    | 11    | 15    | 10    | 10    |

**Note:** ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**C.JoselynNithya**

**Forwarded By**

**Dr.P.Sakunthala**

*P. Sakunthala*

**HOD'S Signature& Name**



**I M.Com CA  
SEMESTER –I  
ELECTIVE –I A**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                       | CATEGO<br>RY | HRS/WEEK | CREDITS |
|--------------------|----------------|------------------------------------|--------------|----------|---------|
| PSCC               | 23PG1KE1       | INTRODUCTION<br>TO INDUSTRY<br>4.0 | Theory       | 5        | 3       |

**COURSE DESCRIPTION**

To introduce the concept of INDUSTRY 4.0 and enhance the knowledge in applications of big data and IoT for industrial growth and development.

**COURSE OBJECTIVES**

1. To enable the students to comprehend the change from industry 1.0 to 4.0
2. To gain knowledge on the challenges and future prospects of applying artificial intelligence
3. To learn the applications of big data for industrial growth and development
4. To understand the applications of IoT in various sectors
5. To understand why education has to be aligned with industry 4.0

**UNIT: I INTRODUCTION**

**(12 HRS)**

Industry: Meaning, Types - Industrial Revolution: Industrial Revolution 1.0 to 4.0: Meaning, Goals and Design Principles - Technologies of Industry 4.0 - Big Data – Artificial Intelligence (AI) – Industrial Internet of Things - Cyber Security – Cloud – Augmented Reality.

**UNIT II ARTIFICIAL INTELLIGENCE**

**(12**

**HRS)**

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Artificial Intelligence (AI): Need, History and Foundations -The AI - environment - Societal Influences of AI – Application Domains and Tools - Associated Technologies of AI - Future prospects of AI – Challenges of AI.

### **UNIT III BIG DATA**

**(12**

**HRS)**

Evolution - Data Evolution - Data : Terminologies - Essential of Big Data in Industry 4.0 - Big Data Merits and Limitations - Big Data Components : Big Data Characteristics - Big Data Processing Frameworks - Big Data Tools - Big Data Applications - Big Data Domain Stack : Big Data in Data Science – Big Data in IoT - Big Data in Machine Learning - Big Data in Databases - Big Data Usecases: Big Data in Social Causes - Big Data for Industry -Big Data Roles - Learning Platforms; Internet of Things (IoT) : Introduction to IoT – Architecture of IoT Technologies for IoT - Developing IoT Applications - Applications of IoT - Security in IoT.

### **UNIT IV APPLICATIONS OF IOT**

**(12 HRS)**

IoT in Manufacturing – Healthcare – Education – Aerospace and Defence – Agriculture – Transportation and Logistics – Impact of Industry 4.0 on Society: Impact on Business, Government, People - Tools for Artificial Intelligence - Big Data and Data Analytics - Virtual Reality - Augmented Reality –IoT - Robotics.

### **UNIT V INDUSTRY 4.0**

**(12 HRS)**

Education 4.0 – Curriculum 4.0 – Faculty 4.0 – Skills required for Future - Tools for Education – Artificial Intelligence Jobs in 2030 – Jobs 2030 - Framework for aligning Education with Industry 4.0.

### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

The industrial internet of things (IIoT) - Cyber-physical systems (CPS) - Smart manufacture - Smart factories - Cloud computing - Cognitive computing - Artificial intelligence.

**TEXT BOOK:**

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1. Seema Acharya J, Subhashini Chellappan, (2019) "Big Data and Analytics", 2nd Edition, Wiley Publication, New Delhi.
2. Russel S, Norvig P (2010), "Artificial Intelligence: A Modern approach", 3rd Edition, Prentice Hall, New York.
3. Pethuru Raj and Anupama C. Raman, (2017), "The Internet of Things: Enabling Technologies, Platforms, and Use Cases", Auerbach Publications

#### **REFERENCES:**

1. Judith Hurwitz, Alan Nugent, Fern Halper, Marcia Kaufman, "Big Data for Dummies", John Wiley & Sons, Inc.
2. Nilsson (2000), Artificial Intelligence: A new synthesis, Nils J. Harcourt Asia PTE Ltd.

#### **Digital Open Educational Resources (DOER) :**

1. [https://sist.sathyabama.ac.in/sist\\_coursematerial/uploads/SEEA1403.pdf](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://library.oapen.org/bitstream/handle/20.500.12657/43836/external_content.pdf?sequence=1)
3. [https://www.vssut.ac.in/lecture\\_notes/lecture1428643004.pdf](https://www.vssut.ac.in/lecture_notes/lecture1428643004.pdf)

### **COURSE CONTENTS & LECTURE SCHEDULE**

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| Module No.                             | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|--|---|-----------------|-------------------|---------------|
| <b>UNIT -1 Introduction</b>            |   |                 |                   |               |
| 1.1                                    | Meaning, Types  | 1               | Chalk & Talk      | Black Board   |
| 1.2                                    | Industrial Revolution 1.0 to 4.0                            | 1               | Lecture           | PPT           |
| 1.3                                    | Goals and Design Principles                                 | 1               | Chalk & Talk      | Black Board   |
| 1.4                                    | Technologies of Industry 4.0                                | 1               | Chalk & Talk      | Black Board   |
| 1.5                                    | Big Data  | 1               | Chalk & Talk      | Black Board   |
| 1.6                                    | Artificial Intelligence (AI)                                | 1               | Chalk & Talk      | Black Board   |
| 1.7                                    | Industrial Internet of Things                               | 1               | Chalk & Talk      | Black Board   |
| 1.8                                    | Cyber Security  | 1               | Chalk & Talk      | Black Board   |
| 1.9                                    | Cloud   | 1               | Chalk & Talk      | Black Board   |
| 1.10                                   | Augmented Reality.  | 1               | Chalk & Talk      | Black Board   |
| <b>UNIT -2 Artificial Intelligence</b> |   |                 |                   |               |
| 2.1                                    | Artificial Intelligence (AI), Need, History and Foundations | 2               | Chalk & Talk      | Black Board   |
| 2.2                                    | The AI – environment  | 2               | Chalk & Talk      | Black Board   |
| 2.3                                    | Societal Influences of AI                                   | 2               | Chalk & Talk      | Black Board   |
| 2.4                                    | Application Domains and Tools                               | 2               | Lecture           | PPT           |
| 2.5                                    | Associated Technologies of AI                               | 2               | Lecture           | PPT           |

|   |  |          |              |             |
|---|--|----------|--------------|-------------|
| 2.6   | Future prospects of AI – Challenges of AI.   | 2        | Lecture      | PPT         |
| <b>UNIT -3                      Big Data</b>            |  |          |              |             |
| 3.1   | Evolution - Data Evolution - Data : Terminologies  | 1        | Lecture      | PPT         |
| 3.2   | Essential of Big Data in Industry 4.0  | 2        | Chalk & Talk | Black Board |
| 3.3   | Big Data Merits and Limitations - Big Data Components  | 1        | Chalk & Talk | Black Board |
| 3.4   | Big Data Characteristics - Big Data Processing Frameworks  | 2        | Lecture      | PPT         |
| 3.5   | Big Data Tools - Big Data Applications - Big Data Domain Stack : Big Data in Data Science  | 2        | Lecture      | PPT         |
| 3.6   | Big Data in IoT - Big Data in Machine Learning - Big Data in Databases - Big Data Useases: Big Data in Social Causes - Big Data for Industry -Big Data Roles - Learning Platforms; | 2        | Lecture      | PPT         |
| 3.7   | Introduction to IoT – Architecture of IoT Technologies for IoT   | 2        | Chalk & Talk | Black Board |
| 3.8   | Developing IoT Applications - Applications of IoT - Security in IoT.   | 2        | Lecture      | PPT         |
| <b>UNIT -4                      Applications of IoT</b> |  |          |              |             |
| 4.1   | IoT in Manufacturing – Healthcare – Education  | <b>1</b> | Chalk & Talk | Black Board |
| 4.2   | Aerospace and Defence – Agriculture  | <b>1</b> | Chalk & Talk | Black Board |
| 4.3   | Transportation and Logistics   | <b>1</b> | Chalk & Talk | Black Board |
| 4.4   | Impact of Industry 4.0 on Society  | <b>1</b> | Lecture      | PPT         |

|  |   |          |              |             |
|--|---|----------|--------------|-------------|
| 4.5  | Impact on Business, Government,   | <b>1</b> | Chalk & Talk | Black Board |
| 4.6  | Tools for Artificial Intelligence   | <b>1</b> | Chalk & Talk | Black Board |
| 4.7  | Big Data and Data Analytics -   | <b>1</b> | Lecture      | PPT         |
| 4.8  | Virtual Reality   | <b>2</b> | Lecture      | PPT         |
| 4.9  | Augmented Reality   | <b>2</b> | Chalk & Talk | Black Board |
| 4.10   | IoT – Robotics  | <b>1</b> | Chalk & Talk | Black Board |
| <b>UNIT -5                      Industry 4.0</b> |   |          |              |             |
| 5.1  | Education 4.0 – Curriculum 4.0  | <b>2</b> | Chalk & Talk | Black Board |
| 5.2  | Faculty 4.0 – Skills required for Future  | <b>2</b> | Lecture      | PPT         |
| 5.3  | C Tools for Education opying, modifying and deleting tables   | <b>2</b> | Chalk & Talk | Black Board |
| 5.4  | Tools for Education   | <b>2</b> | Chalk & Talk | Black Board |
| 5.5  | Artificial Intelligence Jobs in 2030  | <b>2</b> | Lecture      | PPT         |
| 5.6  | Jobs 2030   | <b>1</b> | Lecture      | PPT         |
| 5.7  | Framework for aligning Education with Industry 4.0.   | <b>1</b> | Chalk & Talk | Black Board |
| <b>UNIT –VI DYNAMISM</b>                         |   |          |              |             |
| 6.1  | The industrial internet of things (IIoT) - Cyber-physical systems (CPS)                               | <b>2</b> | Seminar      | PPT         |
| 6.2  | Smart manufacture - Smart factories - Cloud computing - Cognitive computing - Artificial intelligence | <b>2</b> | Seminar      | PPT         |

| Levels         | C1                | C2                        | C3              | C4                       | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|----------------|-------------------|---------------------------|-----------------|--------------------------|------------------------|-------------------------|-----------|-----------------|
|                | Seminar<br>5 Mks. | Better of W1, W2<br>5Mks. | M1+M2<br>10 Mks | MID - SEM TEST<br>15 Mks | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5                 | -                         | -               | 2 ½                      | -                      |                         | -         | -               |
| K3             | -                 | 5                         | 4               | 2 ½                      | 5                      |                         | 5         | 12.5 %          |
| K4             | -                 | -                         | 3               | 5                        | 12                     |                         | 12        | 30 %            |
| K5             | -                 | -                         | 3               | 5                        | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -                 | -                         | -               | -                        | 9                      |                         | 9         | 22.5 %          |
| Total          | 5                 | 5                         | 10              | 15                       | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |



- **PG CIA Components**

|           |   | <b>Nos</b>         |     |          |
|-----------|---|--------------------|-----|----------|
| <b>C1</b> | - | Test (CIA 1)       | 1   | - 10 Mks |
| <b>C2</b> | - | Test (CIA 2)       | 1   | - 10 Mks |
| <b>C3</b> | - | Assignment         | 2 * | - 5 Mks  |
| <b>C4</b> | - | Open Book Test/PPT | 2 * | - 5 Mks  |
| <b>C5</b> | - | Seminar            | 1   | - 5 Mks  |
| <b>C6</b> | - | Attendance         |     | - 5 Mks  |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b>  | <b>COURSE OUTCOMES</b>  |
|-------------|---|
| <b>CO 1</b> | Discuss on the change from industry 1.0 to 4.0  |
| <b>CO 2</b> | Discover the challenges and future prospects of applying artificial intelligence              |
| <b>CO 3</b> | Apply big data for industrial growth and development  |
| <b>CO 4</b> | Apply IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Défense |
| <b>CO 5</b> | Appraise why education has to be aligned with industry 4.0                                    |

## **Mapping COs Consistency with POs**

| CO/<br>PO  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 |
|------------|-----|-----|-----|-----|-----|-----|-----|
| <b>CO1</b> | 2   | 2   | 3   | 2   | 3   | 3   | 3   |
| <b>CO2</b> | 2   | 3   | 3   | 2   | 3   | 3   | 3   |
| <b>CO3</b> | 2   | 3   | 3   | 2   | 3   | 3   | 3   |
| <b>CO4</b> | 2   | 3   | 3   | 2   | 3   | 3   | 3   |
| <b>CO5</b> | 2   | 3   | 3   | 2   | 3   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3  
 ♦ Weakly Correlated -1

♦ Moderately Correlated – 2

**COURSE DESIGNER:**  
**Mrs.N.Muthulakshmi**  
**Forwarded By**

**Dr.P.Sakunthala**

*P. Sakunthala*

**HOD'S Signature& Name**

**I M.Com CA  
SEMESTER –I  
ELECTIVE –I B**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                  | CATEGO<br>RY | HRS/WEEK | CREDITS |
|--------------------|----------------|-------------------------------|--------------|----------|---------|
| PSCC               | 23PG1KE2       | <b>BIG DATA<br/>ANALYTICS</b> | Theory       | 5        | 3       |

**COURSE DESCRIPTION**

Big Data Analytics includes Introduction to Big Data, Big Data Analytics, The Big Data Technology, Introduction to Hadoop environment with HDFS.

**COURSE OBJECTIVES**

1. To understand the various aspects of data science and applying them in health care
2. To learn the applications of big data for industrial growth and development
3. To understand the characteristics of 5 V's
4. To know the big data problems
5. To understand the Hadoop

**UNIT: I INTRODUCTION TO DATA SCIENCE**

**(12 HRS)**

Introduction to data science – Case Studies – Data Science in Biomedicine and Healthcare – Sequence Processing – Medical Image Analysis – Natural Language Processing – Network Modelling and Probabilistic Modelling

**UNIT II BIG DATA**

**(12**

**HRS)**

Big data: Meaning – Importance of Big Data – Example of Big Data – Source of Big Data - Machine -Generated Data - Advantages – Big Data generated by people – Organization of Generated Data - Integrating the data.

**UNIT III CHARACTERISTICS OF BIG DATA**

**(12**

**HRS)**

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Characteristics of big data volume – Variety –Velocity – Characteristics of Big Data – Veracity – Valence and Value – Getting value out of Big Data using 5-step process to structure your analysis.

#### **UNIT IV DATA SCIENCE: GETTING VALUE OUT OF BIG DATA (12 HRS)**

**Building a Big Data Strategy** – Happening of Big Data science – Five Components of Data Science. Steps in Data Science: Acquiring Data, Pre-processing and Exploring Data – Analysing Data – Communicating results – Turning insights into action

#### **UNIT V BIG DATA SYSTEMS AND HADOOP (12 HRS)**

Meaning of Distributed File System – Scalable Computing over the Internet – Programming Models for Big Data – Introduction to Hadoop systems – The Hadoop Distributed File System: A Storage System for Big Data – YARN: A Resource Manager for Hadoop – Map Reduce: Simple Programming for Big Results – When to Reconsider Hadoop? – Cloud Computing: An important Big Data enabler.

#### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Big Data Networks - Cybersecurity and Privacy in Big Data - Data Analytics for Social Impact - Data-driven Climate Sciences – Introduction to Machine Learning and Artificial Intelligence.

#### **TEXT BOOKS:**

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), SubhasiniChellappan, "Big Data Analytics", Wiley, USA

#### **REFERENCES:**

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.

#### **Digital Open Educational Resources (DOER) :**

1. <https://www.coursera.org/learn/big-data-introduction/home/welcome>
-

2. <https://www.coursera.org/learn/bioconductor?action=enroll&authMode=login>

## COURSE CONTENTS & LECTURE SCHEDULE

| Module No.  | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids     |
|---|--|-----------------|-------------------|-------------------|
| <b>UNIT I: INTRODUCTION TO DATA SCIENCE</b>                 |  |                 |                   |                   |
| 1.1   | Introduction to data science – Case Studies  | 4               | Chalk & Talk      | Black Board       |
| 1.2   | Data Science in Biomedicine and Healthcare – Sequence Processing                     | 4               | Lecture           | Black Board       |
| 1.3   | Natural Language Processing – Network Modelling and Probabilistic Modelling.         | 4               | Lecture           | Smart Board       |
| <b>UNIT II: BIG DATA</b>                                    |  |                 |                   |                   |
| 2.1   | Big data: Meaning – Importance of Big Data – Example of Big Data                     | 3               | Chalk & Talk      | Black Board       |
| 2.2   | Source of Big Data - Machine -Generated Data – Advantages                            | 3               | Chalk & Talk      | Black Board       |
| 2.3   | Big Data generated by people – Organization of Generated Data - Integrating the data | 3               | Chalk & Talk      | Black Board       |
| <b>UNIT III: Characteristics of Big Data</b>                |  |                 |                   |                   |
| 3.1   | Characteristics of big data volume – Variety –Velocity                               | 4               | Chalk & Talk      | Black Board       |
| 3.2   | Characteristics of Big Data – Veracity – Valence and Value                           | 4               | Chalk & Talk      | Black Board       |
| 3.3   | Getting value out of Big Data using 5-step process to structure your analysis.       | 4               | Chalk & Talk      | Black Board       |
| <b>UNIT IV: Data Science: Getting value out of Big Data</b> |  |                 |                   |                   |
| 4.1   | Building a Big Data Strategy   | 2               | Lecture           | PPT & Smart Board |
| 4.2   | Happening of Big Data science – Five Components of Data Science                      | 2               | Chalk & Talk      | Black Board       |
| 4.3   | Steps in Data Science: Acquiring Data  | 2               | Lecture           | PPT               |

|  |  |   |              |             |
|--|--|---|--------------|-------------|
| 4.4  | Pre-processing and Exploring Data – Analysing Data   | 3 | Chalk & Talk | Black Board |
| 4.5  | Communicating results – Turning insights into action   | 3 | Chalk & Talk | Black Board |
| <b>UNIT V: Big Data Systems and Hadoop</b> |  |   |              |             |
| 5.1  | Meaning of Distributed File System   | 3 | Chalk & Talk | Black Board |
| 5.2  | Scalable Computing over the Internet – Programming Models for Big Data   | 3 | Chalk & Talk | Black Board |
| 5.3  | Introduction to Hadoop systems – The Hadoop Distributed File System  | 3 | Chalk & Talk | Black Board |
| 5.4  | A Storage System for Big Data – YARN: A Resource Manager   | 3 | Chalk & Talk | Black Board |
| <b>UNIT –VI DYNAMISM</b>                   |  |   |              |             |
| 6.1  | Big Data Networks - Cybersecurity and Privacy in Big Data - Data Analytics for Social Impact - Data-driven Climate Sciences – Introduction to Machine Learning and Artificial Intelligence | 3 | Seminar      | PPT         |

|        | C1                | C2                        | C3              | C4                       | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|-------------------|---------------------------|-----------------|--------------------------|------------------------|-------------------------|-----------|-----------------|
| Levels | Seminar<br>5 Mks. | Better of W1, W2<br>5Mks. | M1+M2<br>10 Mks | MID - SEM TEST<br>15 Mks | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2     | 5                 | -                         | -               | 2 ½                      | -                      |                         | -         | -               |
| K3     | -                 | 5                         | 4               | 2 ½                      | 5                      |                         | 5         | 12.5 %          |
| K4     | -                 | -                         | 3               | 5                        | 12                     |                         | 12        | 30 %            |
| K5     | -                 | -                         | 3               | 5                        | 9                      |                         | 9         | 22.5%           |

|                |   |   |    |    |    |   |    |        |
|----------------|---|---|----|----|----|---|----|--------|
| Non Scholastic | - | - | -  | -  | 9  |   | 9  | 22.5 % |
| Total          | 5 | 5 | 10 | 15 | 35 | 5 | 40 | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### PG CIA Components

|           |                      | Nos |   |        |
|-----------|----------------------|-----|---|--------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - | 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***



## COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES                                    |
|------|--|
| CO 1 | Explain Characteristics and challenges of Big Data |
| CO 2 | Describe Big Data Analytics                        |
| CO 3 | Explain Data Science in Big Data Technologies      |
| CO 4 | Demonstrate Hadoop Environment                     |
| CO 5 | Describe HDFS in Hadoop Environment                |

### Mapping COs Consistency with POs

| CO/<br>PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|-----------|-----|-----|-----|-----|-----|-----|
| CO1       | 3   | 3   | 1   | 3   | 3   | 3   |
| CO2       | 3   | 3   | 2   | 3   | 3   | 3   |
| CO3       | 2   | 2   | 1   | 2   | 2   | 2   |
| CO4       | 3   | 2   | 3   | 2   | 3   | 3   |
| CO5       | 3   | 2   | 3   | 2   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Mrs.N.Muthulakshmi**

**Forwarded By**

**Dr.P.Sakunthala**



**HOD'S Signature& Name**

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**I M.Com CA**  
**SEMESTER –I**  
**Elective II A**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                       | CATEGO<br>RY | HRS/WEEK | CREDITS |
|--------------------|----------------|------------------------------------|--------------|----------|---------|
| PSCC               | 23PG1KE3       | ENTERPRISE<br>RESOURCE<br>PLANNING | THEORY       | 5        | 3       |

**COURSE DESCRIPTION**

The course provides an overview of Enterprise Resource Planning (ERP) software systems and their role within an organization. It introduces key concepts of integrated information systems and explains why such systems are valuable to businesses.

**COURSE OBJECTIVES**

1. To learn the history and growth of ERP
2. To understand the risks involved while using ERP
3. To gain knowledge on the various ERP technologies
4. To learn the dynamics of ERP marketplace
5. To choose appropriate ERP solutions or packages

**Units**

**UNIT I ENTERPRISE AN OVERVIEW**

**(12 HRS)**

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Business Functions and Business Processes - Integrated Management Information - Business Modelling - Integrated Data Model. Business Processes: Major Business Processes. Introduction to ERP: **Common ERP Myths** - **A Brief History of ERP - Reasons for the Growth of ERP Market (Self Study)**.

## **UNIT II RISK OF ERP**

**(12 HRS)**

People Issues - Process Risks - Technological Risks - Implementation Issues- Operation and Maintenance Issues - **Unique Risks of ERP Projects - Managing Risks on ERP Projects (Self Study)**. Benefits of ERP: Information Integration - Reduction of Lead Time - On-Time Shipment - Reduction in Cycle Time - Improved Resource Utilization - Better Customer Satisfaction - Improved Supplier Performance - Increased Flexibility - Reduced Quality Costs - Better Analysis and Planning Capabilities - Improved Information Accuracy and Decision Making Capability - Use of Latest Technology.

## **UNIT III ERP AND RELATED TECHNOLOGIES**

**(12 HRS)**

Business Process Reengineering (BPR) - **Business Intelligence (BI)** - Business Analytics (BA) - Data Warehousing- Data Mining - On - Line Analytical Processing (OLAP) - Product Life Cycle Management (PLM) - Supply Chain Management (SCM) - Customer Relationship Management (CRM) - **Geographic Information Systems (GIS)** - Intranets and Extranets. **Advanced Technology and ERP Security: Technological Advancements - Computer Crimes(Self Study)** - ERP and Security - Computer Security - Crime and Security.

## **UNIT IV ERP MARKET PLACE AND MARKET PLACE DYNAMICS (12 HRS)**

Market Overview - ERP Market Tiers.Market Place Dynamics - **Industry - Wise ERP Market Share - ERP: The Indian Scenario(Self Study)**. Business Modules of an ERP Package: Functional Modules of ERP Software: Integration of ERP, Supply Chain, and Customer Relationship Applications.

## **UNIT V ERP IMPLEMENTATION**

**(12 HRS)**

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Benefits of Implementing ERP - Implementation Challenges. ERP Implementation Life Cycle: Objectives of ERP Implementation - **Different Phases of ERP Implementation(Self Study)**- Reasons for ERP Implementation Failure. ERP Package Selection: ERP Package Evaluation and Selection - The Selection Process - ERP Packages: Make or Buy.

## **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

ERP Selection Process Demo.

### **TEXT BOOKS**

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.

### **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.

### **Digital Open Educational Resources (DOER)**

1. [https://mrcet.com/downloads/digital\\_notes/CSE/III%20Year/ERP%20Digital%20notes.pdf](https://mrcet.com/downloads/digital_notes/CSE/III%20Year/ERP%20Digital%20notes.pdf)
2. [https://mrcet.com/downloads/digital\\_notes/ME/III%20year/ERP%20Complete%20Digital%20notes.pdf](https://mrcet.com/downloads/digital_notes/ME/III%20year/ERP%20Complete%20Digital%20notes.pdf)
3. [https://www.vssut.ac.in/lecture\\_notes/lecture1428643004.pdf](https://www.vssut.ac.in/lecture_notes/lecture1428643004.pdf)

## **COURSE CONTENTS & LECTURE SCHEDULE:**

| Module No.                            | Topic | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|---------------------------------------|-------|-----------------|-------------------|---------------|
| <b>UNIT -1 ENTERPRISE AN OVERVIEW</b> |       |                 |                   |               |

| Module No.                 | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids      |
|----------------------------|--|-----------------|-------------------|--------------------|
| 1.1                        | Business Functions and Business Processes - Integrated Management Information  | 4               | Lecture           | PPT & White board  |
| 1.2                        | Business Modelling - Integrated Data Model   | 4               | Lecture           | White board        |
| 1.3                        | Business Processes: Major Business Processes. Introduction to ERP: Common ERP Myths  | 3               | Lecture           | PPT & White board  |
| 1.4                        | <b>A Brief History of ERP - Reasons for the Growth of ERP Market (Self Study)</b>  | 1               | Lecture           | PPT & White board  |
| <b>UNIT -2 RISK OF ERP</b> |  |                 |                   |                    |
| 2.1                        | People Issues - Process Risks - Technological Risks  | 2               | Lecture           | Green Board Charts |
| 2.2                        | Implementation Issues-Operation and Maintenance Issues - <b>Unique Risks of ERP Projects - Managing Risks on ERP Projects(Self Study)</b>                | 2               | Chalk & Talk      | Black Board        |
| 2.3                        | Benefits of ERP: Information Integration - Reduction of Lead Time - On-Time Shipment - Reduction in Cycle Time - Improved Resource Utilization           | 2               | Chalk & Talk      | Black Board        |
| 2.4                        | Better Customer Satisfaction - Improved Supplier Performance - Increased Flexibility - Reduced Quality Costs - Better Analysis and Planning Capabilities | 2               | Chalk & Talk      | Black Board        |
| 2.5                        | Improved Information Accuracy and Decision Making Capability   | 2               | Lecture           | Green Board Charts |

| Module No.  | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids      |
|---|--|-----------------|-------------------|--------------------|
| 2.6   | Use of Latest Technology   | 2               | Lecture           | Green Board Charts |
| <b>UNIT -3 ERP AND RELATED TECHNOLOGIES</b>               |  |                 |                   |                    |
| 3.1   | Business Process Reengineering (BPR) - Business Intelligence (BI) - Business Analytics (BA)                  | 2               | Lecture           | Green Board Charts |
| 3.2   | Data Warehousing- Data Mining - On - Line Analytical Processing (OLAP) - Product Life Cycle Management (PLM) | 2               | Chalk & Talk      | Black Board        |
| 3.3   | Supply Chain Management (SCM) - Customer Relationship Management (CRM)                                       | 2               | Chalk & Talk      | Black Board        |
| 3.4   | Geographic Information Systems (GIS) - Intranets and Extranets.  | 2               | Chalk & Talk      | Black Board        |
| 3.5   | <b>Advanced Technology and ERP Security: Technological Advancements - Computer Crimes(Self Study)</b>        | 2               | Chalk & Talk      | Black Board        |
| 3.6   | ERP and Security - Computer Security - Crime and Security.   | 2               | Chalk & Talk      | Black Board        |
| <b>UNIT -4 ERP MARKET PLACE AND MARKET PLACE DYNAMICS</b> |  |                 |                   |                    |
| 4.1   | Market Overview - ERP Market Tiers. Market Place Dynamics  | 3               | Lecture           | Green Board Charts |
| 4.2   | <b>Industry - Wise ERP Market Share - ERP: The Indian Scenario(Self Study)</b>                               | 2               | Chalk & Talk      | Black Board        |
| 4.3   | Business Modules of an ERP Package   | 2               | Chalk &Talk       | Black              |

| Module No.   | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|--|---|-----------------|-------------------|---------------|
|  |   |                 |                   | Board         |
| 4.4  | Functional Modules of ERP Software  | 2               | Chalk & Talk      | Black Board   |
| 4.5  | Integration of ERP, Supply Chain, and Customer Relationship Applications.                         | 3               | Chalk & Talk      | Black Board   |
| <b>UNIT -5 ERP IMPLEMENTATION</b>                        |   |                 |                   |               |
| 5.1  | Benefits of Implementing ERP - Implementation Challenges  | 2               | Lecture           | Green Board   |
| 5.2  | ERP Implementation Life Cycle: Objectives of ERP Implementation                                   | 4               | Chalk & Talk      | Black Board   |
| 5.3  | <b>Different Phases of ERP Implementation(Self Study)-</b> Reasons for ERP Implementation Failure | 4               | Chalk & Talk      | Black Board   |
| 5.4  | ERP Package Selection: ERP Package Evaluation and Selection - The Selection Process               | 4               | Chalk &Talk       | Black Board   |
| 5.5  | ERP Packages: Make or Buy.Course outcomes   | 4               | Chalk & Talk      | Black Board   |
| <b>UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)</b> |   |                 |                   |               |
| 6.1  | ERP Selection Process Demo  |                 | Seminar           | PPT           |

| Levels         | C1                | C2                        | C3              | C4                       | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|----------------|-------------------|---------------------------|-----------------|--------------------------|------------------------|-------------------------|-----------|-----------------|
|                | Seminar<br>5 Mks. | Better of W1, W2<br>5Mks. | M1+M2<br>10 Mks | MID - SEM TEST<br>15 Mks | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5                 | -                         | -               | 2 ½                      | -                      |                         | -         | -               |
| K3             | -                 | 5                         | 4               | 2 ½                      | 5                      |                         | 5         | 12.5 %          |
| K4             | -                 | -                         | 3               | 5                        | 12                     |                         | 12        | 30 %            |
| K5             | -                 | -                         | 3               | 5                        | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -                 | -                         | -               | -                        | 9                      |                         | 9         | 22.5 %          |
| Total          | 5                 | 5                         | 10              | 15                       | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |



- PG CIA Components**

|           |                      | <b>Nos</b> |          |
|-----------|----------------------|------------|----------|
| <b>C1</b> | - Test (CIA 1)       | 1          | - 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1          | - 10 Mks |
| <b>C3</b> | - Assignment         | 2 *        | - 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 *        | - 5 Mks  |
| <b>C5</b> | - Seminar            | 1          | - 5 Mks  |
| <b>C6</b> | - Attendance         |            | - 5 Mks  |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b>  | <b>COURSE OUTCOMES</b>                                       |
|-------------|--|
| <b>CO 1</b> | Recall the history and growth of ERP                         |
| <b>CO 2</b> | Appraise the risks involved while using ERP                  |
| <b>CO 3</b> | Select from among various ERP technologies                   |
| <b>CO 4</b> | Analyse the dynamics of ERP marketplace                      |
| <b>CO 5</b> | Distinguish and choose appropriate ERP solutions or packages |

## **Mapping COs Consistency with POs**

| <b>CO/<br/>PO</b> | <b>PO1</b> | <b>PO2</b> | <b>PO3</b> | <b>PO4</b> | <b>PO5</b> | <b>PO6</b> |
|-------------------|------------|------------|------------|------------|------------|------------|
| <b>CO1</b>        | 2          | 1          | 2          | 2          | 3          | 3          |
| <b>CO2</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO3</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO4</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO5</b>        | 3          | 3          | 2          | 3          | 3          | 3          |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Ms.M.Fanny**

**Forwarded By**

*P. Sakunthala*

**Dr.P.Sakunthala**

**HOD'S Signature& Name**

**I M.Com CA**

**SEMESTER –I**

**Elective II B**

***For those who joined in 2023 onwards***

| <b>PROGRAM<br/>ME CODE</b> | <b>COURSE<br/>CODE</b> | <b>COURSE TITLE</b>                       | <b>CATEGO<br/>RY</b>          | <b>HRS/<br/>WEEK</b> | <b>CREDITS</b> |
|----------------------------|------------------------|---|-------------------------------|----------------------|----------------|
| <b>PSCC</b>                | <b>23PG1KE4</b>        | <b>DATABASE<br/>MANAGEMENT<br/>SYSTEM</b> | <b>THEORY<br/>AND<br/>LAB</b> | <b>5</b>             | <b>3</b>       |

### **COURSE DESCRIPTION**

The course examines the principles of design and functions of the Relational Database Management Systems (DBMS). The course emphasizes the use of Relational DBMS as an office productivity tool. Other topics include Evolution of Database Management systems, Entity Relationships Modeling, Design of a Relational Model, Database Integrity Rules, and Normalization of Database Tables.

### **COURSE OBJECTIVES**

1. To introduce the basic concepts of Relational Database Management
  2. To understand designing databases and queries in SQL
-

3. To learn RDBMS
4. To up skill the functions and operators
5. To understand the constraints, locks and MySQL

### **UNIT I INTRODUCTION TO DATABASE SYSTEMS AND LINUX(12 HRS)**

Introduction to File and Database systems Database System Structure - Data Models Introduction to Network Models: ER Model, Relational Model - Introduction to Linux Operating System - Properties of Linux - Desktop Environment - Linux basics commands - Working with Files - Text Editors - I/O Redirections - Pipes, Filters, and Wildcards - Changing Access Rights

### **UNIT II SQL DEFINITION AND NORMALIZATION (12 HRS)**

**SQL – Data Definition - Queries in SQL** - Updates - Views - Integrity and Security. Relational Database design – Functional dependences and Normalization for relational databases (up to BCNF) - Query Forms.

### **UNIT III FILES AND RDBMS (12 HRS)**

Record Storage and Primary File Organization - Secondary Storage Devices - Operations on Files - Heap File - Sorted Files - Hashing Techniques - Index Structure for Files - Different Types of Indexes - B-Tree - B+Tree - Query Processing - Multimedia Databases - Basic Concepts and Applications - Indexing and Hashing - Text Databases - Overview of RDBMs - Advantages of RDBMs over DBMs – Introduction to Data Mining.

### **UNIT IV DATA DEFINITION AND MANIPULATION LANGUAGE (12 HRS)**

Data Definition Language - Data Manipulation Language - Transaction Control - Data Control Language Grant - Revoke Privilege Command - Set Operators - Joins- Kinds of Joins - Table Aliases - Sub queries - Multiple and Correlated Sub Queries - Functions - Single Row - Date, Character, Numeric, Conversion and Group Functions

### **UNIT V CONSTRAINTS AND MYSQL (12 HRS)**

Constraints - Domain, Equity, Referential Integrity Constraints - Locks - Types of Locks, Table Partitions - Synonym - Introduction to PL/SQL - Introduction - **MySQL as an RDBMS Tool** - Data types and Commands.

### **UNIT VI - DYNAMISM(Evaluation Pattern-CIA only)**

Parallel databases-distributed databases-Object oriented databases.

### **TEXT BOOKS**

1. Ramon A Mata-Toledo and Pauline K Cushman, “Database Management System”, Schaun’s Outlines, New York

2. Rajendra Prasad Mahapatra and GovindVerma, “Database Management System”, Khanna Publications, New Delhi.

### REFERENCE BOOKS

1. Abraham Silberschatz, Henry F Korth and S. Sudarshan, “Database System Concepts” McGraw–Hill, USA.
2. Ramakrishnan Raghu and Gehrke Johannes, “Database Management Systems”, McGraw–Hill, USA.

### Digital Open Educational Resources (DOER)

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](http://www.comptechdoc.org/os/linux/usersguide/linux_ugbasics.html).
3. <http://www.dummies.com/how-to/content/common-linux-commands.html>.

### COURSE CONTENTS & LECTURE SCHEDULE:

| Module No.   | Topic  | No. of Lectures | Content Delivery Method | Teaching Aids |
|--|--|-----------------|-------------------------|---------------|
| <b>UNIT -1 Introduction to File and Database systems</b> |  |                 |                         |               |
| 1.1  | Introduction to File and Database systems  | 1               | Chalk & Talk            | Black Board   |
| 1.2  | Database System Structure  | 2               | Chalk & Talk            | Black Board   |
| 1.3  | Database System Structure - Data Models Introduction to Network Models             | 2               | Lecture                 | Black Board   |
| 1.4  | ER Model, Relational Model   | 2               | Lecture                 | Black Board   |
| 1.5  | Introduction to Linux Operating System - Properties of Linux - Desktop Environment | 2               | Lecture                 | Black Board   |
| 1.6  | Linux basics commands  | 2               | Chalk & Talk            | Black Board   |

|   |   |   |              |             |
|---|---|---|--------------|-------------|
| 1.7                                     | Text Editors I/O Redirections                           | 2 | Chalk & Talk | Black Board |
| 1.8                                     | -Pipes, Filters, and Wildcards - Changing Access Rights | 2 | Chalk & Talk | Black Board |
| <b>UNIT -2 Introduction to SQL</b>      |   |   |              |             |
| 2.1                                     | SQL – Data Definition - Queries in SQL                  | 2 | Lecture      | Black Board |
| 2.2                                     | Updates - Views - Integrity and Security                | 2 | Lecture      | Black Board |
| 2.3                                     | Relational Database design                              | 2 | Lecture      | Black Board |
| 2.3                                     | Functional dependences                                  | 3 | Chalk & Talk | Black Board |
| 2.9                                     | Normalization for relational databases (up to BCNF      | 4 | Chalk &Talk  | Black Board |
| 3.0                                     | Query Forms.  | 2 | Chalk & Talk | Black Board |
| <b>UNIT-3 Primary File Organization</b> |   |   |              |             |
| 3.1                                     | Record Storage and Primary File Organization            | 2 | Chalk & Talk | Black Board |
| 3.2                                     | Secondary Storage Devices - Operations on Files         | 1 | Chalk & Talk | Black Board |
| 3.3                                     | Heap File - Sorted Files - Hashing Techniques           | 2 | Chalk & Talk | Black Board |
| 3.4                                     | Index Structure for Files                               | 2 | Chalk & Talk | Black Board |
| 3.5                                     | Different Types of Indexes - Query Processing           | 3 | Chalk & Talk | Black Board |
| 3.6                                     | Indexing and Hashing                                    | 2 | Chalk & Talk | Black Board |

|  |   |   |              |             |
|--|---|---|--------------|-------------|
| 3.7                                    | Overview of RDBMs                                     | 1 | Chalk & Talk | Black Board |
| 3.9                                    | Advantages of RDBMs over DBMs                         | 2 | Chalk & Talk | Black Board |
| <b>UNIT-4 Data Definition Language</b> |   |   |              |             |
| 4.0                                    | Data Definition Language - Data Manipulation Language | 3 | Chalk & Talk | Black Board |
| 4.1                                    | Data Control Language                                 | 3 | Chalk & Talk | Black Board |
| 4.2                                    | Grant - Revoke Privilege Command                      | 3 | Chalk & Talk | Black Board |
| 4.3                                    | Set Operators   | 2 | Chalk & Talk | Black Board |
| 4.0                                    | Joins- Kinds of Joins and Group Functions.            | 4 | Chalk & Talk | Black Board |
| <b>UNIT-5 Constraints</b>              |   |   |              |             |
| 4.1                                    | Constraints   | 3 | Chalk & Talk | Black Board |
| 4.2                                    | Domain, Equity, Referential Integrity Constraints     | 3 | Chalk & Talk | Black Board |
| 4.3                                    | Locks - Types of Locks                                | 3 | Chalk & Talk | Black Board |
| 4.4                                    | Introduction - MySQL as an RDBMS Tool                 | 3 | Chalk & Talk | Black Board |
| 4.5                                    | Data types and Commands.                              | 3 | Chalk & Talk | Black Board |

| Levels | C1 | C2 | C3 | C4 | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total |  |
|--------|----|----|----|----|------------------------|-------------------------|-----------|--|
|--------|----|----|----|----|------------------------|-------------------------|-----------|--|

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|                | Seminar | Better of W1, W2 | M1+M2  | MID - SEM TEST |         |        |        | % of Assessment |
|----------------|---------|------------------|--------|----------------|---------|--------|--------|-----------------|
|                | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks         | 35 Mks. | 5 Mks. | 40Mks. |                 |
| K2             | 5       | -                | -      | 2 ½            | -       |        | -      | -               |
| K3             | -       | 5                | 4      | 2 ½            | 5       |        | 5      | 12.5 %          |
| K4             | -       | -                | 3      | 5              | 12      |        | 12     | 30 %            |
| K5             | -       | -                | 3      | 5              | 9       |        | 9      | 22.5%           |
| Non Scholastic | -       | -                | -      | -              | 9       |        | 9      | 22.5 %          |
| Total          | 5       | 5                | 10     | 15             | 35      | 5      | 40     | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

- PG CIA Components

| Nos       |                      |     |          |
|-----------|----------------------|-----|----------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - 5 Mks  |
| <b>C6</b> | - Attendance         |     | - 5 Mks  |

***\*The best out of two will be taken into account***

## COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES                                  |
|------|--|
| CO 1 | Identify models and schemas in DBMS and LINUX    |
| CO 2 | Demonstrate Queries in SQL                       |
| CO 3 | Discuss handling files and databases             |
| CO 4 | Apply skills on functions and operators in RDBMS |
| CO 5 | Apply constraints and locks in SQL               |

## Mapping of COs with PSOs

| CO/PSO     | PSO 1    | PSO 2    | PSO 3    | PSO 4    | PSO 5    | PSO 6    |
|------------|----------|----------|----------|----------|----------|----------|
| <b>CO1</b> | <b>3</b> | <b>2</b> | <b>2</b> | <b>3</b> | <b>2</b> | <b>2</b> |
| <b>CO2</b> | <b>3</b> | <b>3</b> | <b>2</b> | <b>3</b> | <b>2</b> | <b>2</b> |
| <b>CO3</b> | <b>3</b> | <b>3</b> | <b>3</b> | <b>3</b> | <b>2</b> | <b>2</b> |
| <b>CO4</b> | <b>3</b> | <b>3</b> | <b>2</b> | <b>3</b> | <b>2</b> | <b>2</b> |



|   |           |           |           |           |           |           |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>CO5</b>  | <b>3</b>  | <b>3</b>  | <b>2</b>  | <b>3</b>  | <b>2</b>  | <b>2</b>  |
| <b>Weightage<br/>of course contr<br/>ibuted to each<br/>PSO</b> | <b>15</b> | <b>14</b> | <b>11</b> | <b>15</b> | <b>10</b> | <b>10</b> |

**Note:** ♦ Strongly Correlated – **3**                      ♦ Moderately Correlated – **2**  
 ♦ Weakly Correlated - **1**

**COURSE DESIGNER:**

**1. J.UMA**

**Forwarded By**

**Dr.P.Sakunthala**

*P. Sakunthala*

**HOD'S Signature & Name**

**I M.COM(CA)**

**SEMESTER –I**

*For those who joined in 2023 onwards*

| <b>PROGRAM<br/>ME CODE</b> | <b>COURSE<br/>CODE</b> | <b>COURSE TITLE</b>           | <b>CATEGORY</b> | <b>HRS/<br/>WEEK</b> | <b>CREDITS</b> |
|----------------------------|------------------------|-------------------------------|-----------------|----------------------|----------------|
| <b>PSCC</b>                | <b>23PG1KAE</b>        | <b>ELECTRONIC<br/>BANKING</b> | <b>Theory</b>   | <b>2</b>             | <b>1</b>       |

**COURSE DESCRIPTION**

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This course is designed to equip students with current developments in the banking industry with respect to the application of electronics in banking to promote self-service retail banking.

## **COURSE OBJECTIVES**

Provide students with a clear understanding of the concept of electronic banking (E-banking)

### **UNIT –I BANKER & CUSTOMER [6 HRS]**

Definition-General relationship -Application for opening account Forms used in banking service (Deposit, withdrawal, Demand Draft, Pay in slip)

### **UNIT – II E- BANKING: [6 HRS]**

Meaning – Services –Benefits – Opportunities – Risk management – Types of risk.

### **UNIT – III INTERNET BANKING: [6 HRS]**

Meaning – Internet banking Vs. Traditional banking – Mechanics – Services – Drawbacks – Major issues.

### **UNIT –IV MOBILE BANKING: [6HRS]**

Mobile Banking: Meaning – Definition – Features – Services – Registration.

### **UNIT –V RECENT TRENDS IN BANKING [6 HRS]**

NEFT-RTGS – ECS – EFT - Automatic Teller Machine (ATM)- IMPS-SWIFT

### **UNIT VI – DYNAMISM**

E-Banking Trends In India: Evolution, Challenges And Opportunities

## **REFERENCES:**

### **TEXT BOOKS**

Dr. S. Gurusamy, Banking Theory Law and Practice ,Tata McGraw – Hill, New Delhi, 20th Edition ( 2015).

### **Digital Open Educational Resources (DOER) :**

1. [http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT\\_V3\\_N2\\_011.pdf](http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT_V3_N2_011.pdf)
2. <http://lawtimesjournal.in/e-banking-and-recent-trends-in-india/>

### **Digital Open Educational Resources (DOER) :**

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1. [http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT\\_V3\\_N2\\_011.pdf](http://www.shanlaxjournals.in/pdf/MGT/V3N2/MGT_V3_N2_011.pdf)
2. <http://lawtimesjournal.in/e-banking-and-recent-trends-in-india/>

**COURSE CONTENTS & LECTURE SCHEDULE:**



| <b>Module No.</b> | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|-------------------|---|------------------------|--------------------------|----------------------|
| <b>UNIT -1</b>    |   |                        |                          |                      |
| 1.1               | Definition  | 2                      | Chalk & Talk             | Black Board          |
| 1.2               | General relationship  | 2                      | Lecture                  | Black Board          |
| 1.3               | Application for opening account Forms used in banking service (Deposit, withdrawal, | 2                      | Lecture                  | PPT                  |
| 1.4               | Demand Draft, Pay in slip)  | 2                      | Lecture                  | PPT                  |
|                   |   |                        |                          |                      |
| 2.1               | Meaning - Services  | 1                      | Chalk & Talk             | Black Board          |
| 2.2               | Benefits  | 1                      | Chalk & Talk             | Black Board          |
| 2.3               | Opportunities   | 1                      | Chalk & Talk             | Black Board          |
| 2.4               | Risk management   | 1                      | Chalk & Talk             | Black Board          |
| 2.5               | Types of risk.  | 2                      | Chalk & Talk             | Black Board          |
| <b>UNIT -3</b>    |   |                        |                          |                      |
| 3.1               | Meaning   | 1                      | Chalk & Talk             | Black Board          |
| 3.2               | Internet banking Vs. Traditional banking  | 1                      | Chalk & Talk             | Black Board          |
| 3.3               | Mechanics   | 1                      | Chalk & Talk             | Black Board          |
| 3.4               | Services  | 1                      | Chalk & Talk             | Black Board          |

|                           |  |   |              |             |
|---------------------------|--|---|--------------|-------------|
| 3.5                       | Drawbacks  | 1 | Chalk & Talk | Black Board |
| 3.6                       | Major issues.  | 1 | Chalk & Talk | Black Board |
| <b>UNIT -4</b>            |  |   |              |             |
| 4.2                       | Mobile Banking: Meaning , Definition                               | 1 | Chalk & Talk | Black Board |
| 4.3                       | Features   | 2 | Chalk & Talk | Black Board |
| 4.4                       | Services   | 2 | Chalk & Talk | Black Board |
| 4.5                       | Registration.  | 1 | Chalk & Talk | Black Board |
| <b>UNIT -5</b>            |  |   |              |             |
| 5.1                       | NEFT,RTGS, EFT-  |   | Lecture      | PPT         |
| 5.2                       | ECS ,Automatic Teller Machine (ATM                                 |   | Lecture      | PPT         |
| 5.3                       | IMPS   |   | Lecture      | PPT         |
| 5.4                       | SWIFT  |   | Lecture      | PPT         |
| <b>UNIT VI – DYNAMISM</b> |  |   |              |             |
| 6.1                       | E-Banking Trends In India: Evolution, Challenges And Opportunities |   | Seminar      | PPT         |

| Levels | C1      | C2               | C3    | C4             | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|---------|------------------|-------|----------------|------------------------|-------------------------|-----------|-----------------|
|        | Seminar | Better of W1, W2 | M1+M2 | MID - SEM TEST |                        |                         |           |                 |

|                       | 5 Mks. | 5Mks<br>. | 10 Mks | 15<br>Mks | 35 Mks. | 5 Mks. | 40Mks<br>. |        |
|-----------------------|--------|-----------|--------|-----------|---------|--------|------------|--------|
| K2                    | 5      | -         | -      | 2 ½       | -       |        | -          | -      |
| K3                    | -      | 5         | 4      | 2 ½       | 5       |        | 5          | 12.5 % |
| K4                    | -      | -         | 3      | 5         | 12      |        | 12         | 30 %   |
| K5                    | -      | -         | 3      | 5         | 9       |        | 9          | 22.5%  |
| Non<br>Scholasti<br>c | -      | -         | -      | -         | 9       |        | 9          | 22.5 % |
| Total                 | 5      | 5         | 10     | 15        | 35      | 5      | 40         | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON -<br>SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|---------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6                  | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                   | 40    | 60  | 100   |

### • PG CIA Components

#### Nos

|           |   |              |   |   |        |
|-----------|---|--------------|---|---|--------|
| <b>C1</b> | - | Test (CIA 1) | 1 | - | 10 Mks |
| <b>C2</b> | - | Test (CIA 2) | 1 | - | 10 Mks |

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|           |                      |     |         |
|-----------|----------------------|-----|---------|
| <b>C3</b> | - Assignment         | 2 * | - 5 Mks |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - 5 Mks |
| <b>C5</b> | - Seminar            | 1   | - 5 Mks |
| <b>C6</b> | - Attendance         |     | - 5 Mks |

*\*The best out of two will be taken into account*

### COURSE OUTCOMES

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

| NO. | COURSE OUTCOMES  |
|-----|--|
| CO1 | Equip Students With Modern And More Current Developments In The Banking Sector.                                      |
| CO2 | Facilitate The Operations And Practices Of Banking.  |
| CO3 | Precisely The Application Of The Internet, Computers And Other Electronically-Based Gadgets .                        |
| CO4 | Learn The Technology Essentials Contributing To Internet And Mobile Banking Risks.                                   |
| CO5 | Enable Participants To Gain Insight Knowledge Into Cheque Truncation And Electronic Settlement And Clearance System. |

### Mapping of COs with POs & PSOs

|     | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 | PSO6 |
|-----|------|------|------|------|------|------|
| CO1 | 3    | 3    | 2    | 2    | 2    | 2    |
| CO2 | 2    | 3    | 3    | 2    | 2    | 2    |
| CO3 | 2    | 3    | 3    | 2    | 2    | 3    |
| CO4 | 2    | 2    | 3    | 3    | 2    | 3    |

|     |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|
| CO5 | 2 | 3 | 3 | 2 | 2 | 3 |
|-----|---|---|---|---|---|---|

**Note:** ♦ Strongly Correlated – 3                      ♦ Moderately Correlated – 2  
 ♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Dr.S.P.Savitha**

**Forwarded By**

*P. Sumanthala*

**I M.COM(CA)**

**SEMESTER –II**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                    | CATEGOR<br>Y        | HRS/WEEK | CREDITS |
|--------------------|----------------|---------------------------------|---------------------|----------|---------|
| PSCC               | 23PG2K4        | STRATEGIC<br>COST<br>MANAGEMENT | Theory &<br>Problem | 6        | 5       |

**COURSE DESCRIPTION**

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Cost accounting is an essential management tool that can uncover profitability improvements and provide support for key business decisions. This course contains the essential tools needed to foster more profitable decision-making by management.

### **COURSE OBJECTIVES**

- To analyse the aspects of strategic and quality control management
- To analyse and select cost control techniques
- To apply activity based costing for decision making
- To utilise transfer pricing methods in cost determination
- To apply cost management techniques in various sectors

### **UNITS**

#### **UNIT –I INTRODUCTION TO STRATEGIC COST MANAGEMENT (18 HRS)**

Introduction to Strategic Cost Management (SCM) – Need for SCM – Differences between SCM and Traditional Cost Management - Value Chain Analysis: Meaning and steps - Quality Cost Management: Meaning of Quality and Quality Management – Cost of Quality –Indian Cost Accounting Standard 21 on Quality Control - Introduction to Lean System – Benefits of Lean System – Just in Time (JIT) – Kaizen Costing..

#### **UNIT II COST CONTROL AND REDUCTION (18 HRS)**

**Cost Management Techniques:** Cost Control: Meaning and Prerequisites - Cost Reduction: Meaning and Scope – Differences between Cost control and cost reduction - Pareto Analysis: Meaning, importance and applications - Target Costing: Meaning, steps and Principles – Life Cycle Costing: Meaning, Strategies for each stage of product life cycle, Benefits – Learning Curve: Meaning, Learning curve ratio and applications.

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### **UNIT III ACTIVITY BASED COST MANAGEMENT**

**(18 HRS)**

Activity Based Cost Management: Concept, Purpose, Stages, Benefits, Relevance in Decision making and its Application in Budgeting – Practical problems.

### **UNIT IV TRANSFER PRICING**

**(18 HRS)**

Transfer Pricing: Meaning, Benefits, Methods: Pricing based on cost, Market price on transfer price, Negotiated pricing and Pricing based on opportunity costs – Practical Problems.

### **UNIT V COST MANAGEMENT IN AGRICULTURE AND IT SECTOR(18 HRS)**

Agriculture Sector: Features, Cost Structure, Cost Management, Tools to measure the performance, Minimum Support Price and International Perspective – Information Technology Sector: Features, Cost Structure, Cost Management and International Perspective.

### **UNIT –VI DYNAMISM (Evaluation Pattern-CIA only)**

Fixed Costs, Explicit Costs, Social Costs, Implicit Costs, Social Costs, and Replacement Costs.

#### **TEXT BOOK:**

1. Ravi M Kishore (2018), “Strategic Cost Management”, 5<sup>th</sup> Edition, Taxmann Publications Pvt. Ltd, New Delhi.
2. Bandgar P. K., (2017), “Strategic Cost Management”, 1<sup>st</sup> Edition, Himalaya Publishing House Pvt Ltd, Mumbai.
3. Sexena V. K., (2020), “Strategic Cost Management and Performance Evaluation”, 1<sup>st</sup>

Edition, Sultan Chand & Sons, New Delhi

#### **REFERENCES:**

1. John K Shank and Vijay Govindarajan(2008), Strategic Cost Management, Simon & Schuster; Latest edition, UK
-

2. JawaharLal, (2015), “Strategic Cost Management”, 1<sup>st</sup> Edition, Himalaya Publishing House Pvt Ltd, Mumbai.)

3. Arora M. N., (2021), “A Text Book of Cost and Management Accounting”, 11<sup>th</sup> Edition, Vikas Publishing House Pvt. Ltd., New Delhi.

### **DIGITAL OPEN EDUCATIONAL RESOURCES:**

1.[https://www.accountingtools.com/articles/strategic-cost-management.html#:~:text=](https://www.accountingtools.com/articles/strategic-cost-management.html#:~:text=Strategic%20cost%20management%20is%20the,it%20or%20have%20no%20impact.)

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>

### **COURSE CONTENTS & LECTURE SCHEDULE:**

| <b>Module No.</b>  | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--|--|------------------------|--------------------------|----------------------|
| <b>UNIT -1 Introduction to Strategic Cost Management</b> |  |                        |                          |                      |
| 1.1  | Introduction to Strategic Cost Management (SCM) – Need for SCM   | 4                      | Discussion               | Black Board          |
| 1.2  | Need for SCM – Differences between SCM and Traditional Cost Management                                       | 3                      | Chalk & Talk             | Black Board          |
| 1.3  | Value Chain Analysis: Meaning and steps - Quality Cost Management: Meaning of Quality and Quality Management | 4                      | Lecture                  | LCD                  |

| <b>Module No.</b>                              | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--|--|------------------------|--------------------------|----------------------|
| 1.4  | Cost of Quality –Indian Cost Accounting Standard 21 on Quality Control - Introduction to Lean System | 4                      | Discussion               | Google classroom     |
| 1.5  | Benefits of Lean System – Just in Time (JIT) – Kaizen Costing..                                      | 3                      | Chalk & Talk             | Black Board          |
| <b>UNIT -2 Cost Control and Reduction</b>      |  |                        |                          |                      |
| 2.1  | Cost Management Techniques: Cost Control: Meaning and Prerequisites                                  | 3                      | Lecture                  | PPT & White board    |
| 2.2  | Cost Reduction: Meaning and Scope – Differences between Cost control and cost reduction              | 3                      | Chalk & Talk             | Green Board          |
| 2.3  | Pareto Analysis: Meaning, importance and applications  | 3                      | Chalk & Talk             | Black Board          |
| 2.4  | Target Costing: Meaning, steps and Principles  | 3                      | Chalk &Talk              | Black Board          |
| 2.5  | Life Cycle Costing: Meaning, Strategies for each stage of product life cycle, Benefits               | 3                      | Chalk & Talk             | Black Board          |
| 2.6  | Learning Curve: Meaning, Learning curve ratio and applications.                                      | 3                      | Chalk & Talk             | Black Board          |
| <b>UNIT – 3 Activity Based Cost Management</b> |  |                        |                          |                      |

| <b>Module No.</b>  | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--|---|------------------------|--------------------------|----------------------|
| 3.1  | Activity Based Cost Management: Concept, Purpose  | 6                      | Discussion               | PPT & White board    |
| 3.2  | Benefits, Relevance in Decision making and its Application in Budgeting                   | 6                      | Chalk &Talk              | Green Board          |
| 3.3  | Practical problems.   | 6                      | Chalk & Talk             | Black Board          |
| <b>UNIT – 4 Transfer Pricing</b>                             |   |                        |                          |                      |
| 4.1  | Transfer Pricing: Meaning, Benefits, Methods: Pricing based on cost                       | 6                      | Discussion               | PPT &White board     |
| 4.2  | Market price on transfer price, Negotiated pricing and Pricing based on opportunity costs | 6                      | Chalk & Talk             | Green Board          |
| 4.3  | Practical Problems.   | 6                      | Chalk & Talk             | Black Board          |
| <b>UNIT – 5 Cost Management in Agriculture and IT sector</b> |   |                        |                          |                      |
| 5.1  | Cost Management in Agriculture and IT sector  | 6                      | Lecture                  | PPT & White board    |
| 5.2  | Information Technology Sector: Features   | 6                      | Chalk & Talk             | Black Board          |
| 5.3  | Cost Structure, Cost Management and International Perspective.                            | 6                      | Lecture                  | Black Board          |

| Module No.              | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|-------------------------|---|-----------------|-------------------|---------------|
| <b>UNIT –6 DYNAMISM</b> |   |                 |                   |               |
| 6.1                     | Fixed Costs, Explicit Costs, Social Costs, Implicit Costs, Social Costs, and Replacement Costs. | 2               | Discussion        | Black Board   |

| Levels         | C1                | C2                        | C3              | C4                       | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|----------------|-------------------|---------------------------|-----------------|--------------------------|------------------------|-------------------------|-----------|-----------------|
|                | Seminar<br>5 Mks. | Better of W1, W2<br>5Mks. | M1+M2<br>10 Mks | MID - SEM TEST<br>15 Mks | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5                 | -                         | -               | 2 ½                      | -                      |                         | -         | -               |
| K3             | -                 | 5                         | 4               | 2 ½                      | 5                      |                         | 5         | 12.5 %          |
| K4             | -                 | -                         | 3               | 5                        | 12                     |                         | 12        | 30 %            |
| K5             | -                 | -                         | 3               | 5                        | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -                 | -                         | -               | -                        | 9                      |                         | 9         | 22.5 %          |
| Total          | 5                 | 5                         | 10              | 15                       | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |

|  |           |
|--|-----------|
|  | <b>40</b> |
|--|-----------|

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON – SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### • PG CIA Components

|           |                      | Nos |   |        |
|-----------|----------------------|-----|---|--------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - | 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***

## COURSE OUTCOMES

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

| NO. | COURSE OUTCOMES                                   |
|-----|---|
| CO1 | Discuss strategic cost management and QC          |
| CO2 | Choose the appropriate technique for cost control |
| CO3 | Utilise activity based costing in practice        |
| CO4 | Adopt transfer pricing methods                    |

|     |  |
|-----|--|
| CO5 | Build cost structure for Agriculture and IT sector |
|-----|--|

### Mapping of COs with POs & PSOs

|     | POs |   |   |   |   |   | PSOs |   |   |
|-----|-----|---|---|---|---|---|------|---|---|
|     | 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 |

**Note:** ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

*P. Sakunthala*

**Dr.P.Sakunthala**

**Forwarded By**

*P. Sakunthala*

**I M.Com CA**

**SEMESTER –II**

***For those who joined in 2023 onwards***



| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE            | CATEGO<br>RY        | HRS/WEEK | CREDITS |
|--------------------|----------------|-------------------------|---------------------|----------|---------|
| PSCC               | 23PG2K5        | CORPORATE<br>ACCOUNTING | Theory &<br>Problem | 6        | 5       |

### **COURSE DESCRIPTION:**

This course emphasises accounting for companies, preparation of their final accounts and cash flow statements, analysis and interpretation of companies's financial results and accounting for specific events like amalgamation, absorption, preparation of consolidated balance sheets.

### **COURSE OBJECTIVES:**

- 1 To understand the accounting treatment for issue of shares
- 2 To determine profits for fire and marine insurance
- 3 To prepare consolidated financial statements
- 4 To account for price level changes
- 5 To adopt financial reporting standards

### **Units**

#### **UNIT I ISSUE OF SHARES AND FINAL ACCOUNTS OF COMPANIES (18 HRS)**

Issue of Shares: ESOPs - ESPS - Sweat Equity Shares - Book Building- Buy-back of Shares - Conversion of debentures into shares - Final accounts of Companies as per Schedule III of the Companies Act, 2013 – Managerial remuneration.

#### **UNIT II INSURANCE COMPANY ACCOUNTS (18 HRS)**

Insurance Company Accounts: Types of Insurance - Final accounts of life assurance Companies- Ascertainment of profit- Valuation Balance Sheet- Final accounts of Fire, Marine and miscellaneous Insurance Companies.

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**Unit III CONSOLIDATED FINANCIAL STATEMENTS (18 HRS)**

Consolidated financial statements as per AS 21: Consolidated Profit and Loss Account – Minority interest – Cost of control – Capital reserve – Inter-company holdings – Preparation of consolidated Balance Sheet.

**UNIT IV CONTEMPORARY ACCOUNTING METHODS (18 HRS)**

Accounting for price level changes – Social responsibility accounting – Human resource accounting - Forensic Accounting.

**UNIT V FINANCIAL REPORTING (18 HRS)**

Financial reporting: Meaning, Objectives, Characteristics – Indian Accounting Standards (AS 5, AS 10, AS 19, AS 20) – **Corporate Social Responsibility**: Meaning, Key provisions of Companies Act, 2013, Accounting for CSR expenditure, Reporting of CSR, Presentation and disclosure in the financial statements.

**UNIT –VI DYNAMISM(Evaluation Pattern - CIA only)**

Debentures – Issue of Debentures- Provision for Redemption of Debentures

**TEXT BOOKS**

1. Reddy T. S. & Murthy A., (2022), “Corporate Accounting – Volume I & II”, 17<sup>th</sup> Edition, Himalaya Publications, Chennai.

**REFERENCES**

1. Arulanandam M. A. & Raman K. S., (2021), “Advanced Accounting (Corporate Accounting)”, Himalaya Publishing House Pvt Ltd, Mumbai.
2. Shukla M C, Grewal T S and Gupta S C, (2022), “Advanced Accounts Volume II”, 19<sup>th</sup> Edition, Chand & Sons, New Delhi.

**Digital Open Educational Resources (DOER) :**

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>
-

## COURSE CONTENTS & LECTURE SCHEDULE:

| Module No.   | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids      |
|--|---|-----------------|-------------------|--------------------|
| <b>UNIT -1 Issue of Shares and Final Accounts of Companies</b> |   |                 |                   |                    |
| 1.1  | Issue of Shares: ESOPs - ESPS - s<br>- Conversion of debentures into shares - Final accounts of Companies as per Schedule III of the Companies Act, 2013 – Managerial remuneration. | 4               | Lecture           | White board        |
| 1.2  | Sweat Equity Shares - Book Building- Buy-back of Share  | 4               | Lecture           | White board        |
| 1.3  | Final accounts of Companies as per Schedule III of the Companies Act, 2013 –.   | 3               | Lecture           | White board        |
| 1.4  | Final accounts of Companies as per Schedule III of the Companies Act, 2013 –.   | 4               | Lecture           | White board        |
| 1.5  | Managerial remuneration   | 3               | Lecture           | White board        |
| <b>UNIT -2 Insurance Company Accounts</b>                      |   |                 |                   |                    |
| 2.1  | Insurance Company Accounts:.  | 2               | Lecture           | Green Board Charts |
| 2.2  | Types of Insurance - Final accounts of life assurance Companies-  | 2               | Chalk & Talk      | Black Board        |
| 2.3  | Ascertainment of profit-Final accounts of Fire,   | 2               | Chalk & Talk      | Black Board        |
| 2.4  | Marine and miscellaneous Insurance Companies  | 2               | Chalk & Talk      | Black Board        |

|  |   |  |   |              |                    |
|--|---|--|---|--------------|--------------------|
|  | 2.5   | Marine and miscellaneous Insurance Companies | 1 | Lecture      | Green Board Charts |
|  | 2.6   | miscellaneous Insurance Companies            | 2 | Lecture      | Green Board Charts |
| <b>Unit -3 Consolidated financial statements</b> |   |  |   |              |                    |
| 3.1  | Consolidated financial statements as per AS 21:                     |  | 3 | Lecture      | Green Board Charts |
| 3.2  | Consolidated Profit and Loss Account                                |  | 3 | Chalk & Talk | Black Board        |
| 3.3  | Minority interest – Cost of control – Capital reserve –             |  | 3 | Chalk & Talk | Black Board        |
| 3.4  | Inter-company holdings – Preparation of consolidated Balance Sheet. |  | 3 | Chalk & Talk | Black Board        |
| 3.5  | Inter-company holdings – Preparation of consolidated Balance Sheet. |  | 3 | Chalk & Talk | Black Board        |
| <b>UNIT -4 Contemporary Accounting Methods</b>   |   |  |   |              |                    |
| 4.1  | Accounting for price level changes –                                |  | 1 | Lecture      | Green Board Charts |
| 4.2  | Social responsibility accounting –                                  |  | 2 | Chalk & Talk | Black Board        |
| 4.3  | Human resource accounting - Forensic Accounting.                    |  | 4 | Chalk & Talk | Black Board        |
| 4.4  | Human resource accounting   |  | 3 | Chalk & Talk | Black Board        |
| 4.5  | Forensic Accounting.  |  | 3 | Chalk & Talk | Black Board        |

|                                    |   |   |              |             |
|------------------------------------|---|---|--------------|-------------|
| 4.6                                | Forensic Accounting.  | 2 | Chalk & Talk | Black Board |
| <b>UNIT- 5 Financial reporting</b> |   |   |              |             |
| 5.1                                | Financial reporting: Meaning,   | 1 | Lecture      | Green Board |
| 5.2                                | Objectives, Characteristics –   | 4 | Chalk & Talk | Black Board |
| 5.3                                | Indian Accounting Standards (AS 5, AS 10, AS 19, AS 20) –   | 4 | Chalk &Talk  | Black Board |
| 5.4                                | Corporate Social Responsibility: Meaning, Key provisions of Companies Act, 2013, Accounting for CSR | 4 | Chalk & Talk | Black Board |
| 5.5                                | Reporting of CSR, Presentation and disclosure in the financial statements.                          | 4 | Chalk & Talk | Black Board |
| <b>UNIT –VI DYNAMISM</b>           |   |   |              |             |
| 6.1                                | Redemption of Debentures  |   | Seminar      | PPT         |

| Levels | C1      | C2               | C3     | C4           | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|---------|------------------|--------|--------------|------------------------|-------------------------|-----------|-----------------|
|        | Seminar | Better of W1, W2 | M1+M2  | MID-SEM TEST |                        |                         |           |                 |
|        | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks       | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2     | 5       | -                | -      | 2 ½          | -                      |                         | -         | -               |
| K3     | -       | 5                | 4      | 2 ½          | 5                      |                         | 5         | 12.5 %          |
| K4     | -       | -                | 3      | 5            | 12                     |                         | 12        | 30 %            |

|                |   |   |    |    |    |   |    |        |
|----------------|---|---|----|----|----|---|----|--------|
| K5             | - | - | 3  | 5  | 9  |   | 9  | 22.5%  |
| Non Scholastic | - | - | -  | -  | 9  |   | 9  | 22.5 % |
| Total          | 5 | 5 | 10 | 15 | 35 | 5 | 40 | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### PG CIA Components

|           |   | Nos                |             |
|-----------|---|--------------------|-------------|
| <b>C1</b> | - | Test (CIA 1)       | 1 - 10 Mks  |
| <b>C2</b> | - | Test (CIA 2)       | 1 - 10 Mks  |
| <b>C3</b> | - | Assignment         | 2 * - 5 Mks |
| <b>C4</b> | - | Open Book Test/PPT | 2 * - 5 Mks |
| <b>C5</b> | - | Seminar            | 1 - 5 Mks   |
| <b>C6</b> | - | Attendance         | - 5 Mks     |

***\*The best out of two will be taken into account***

## OUTCOMES

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

| NO.  | COURSE OUTCOMES  |
|------|--|
| CO 1 | Prepare Financial Statements of companies as per schedule III of Companies Act, 2013   |
| CO 2 | Apply the provisions of IRDA Regulations, 2002 in the preparation of final accounts of Life Insurance and General Insurance Companies.         |
| CO 3 | Prepare Consolidated Financial Statements of Holding Companies in accordance with AS 23  |
| CO 4 | Assess contemporary accounting methods   |
| CO 5 | Examine Financial Reporting based on Accounting Standards and provisions of Companies Act 2013 with respect to Corporate Social Responsibility |

### Mapping COs Consistency with POs

| CO/ PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|--------|-----|-----|-----|-----|-----|-----|
| CO1    | 3   | 3   | 3   | 3   | 3   | 3   |
| CO2    | 3   | 3   | 3   | 3   | 3   | 3   |
| CO3    | 3   | 3   | 3   | 3   | 3   | 3   |
| CO4    | 3   | 3   | 3   | 3   | 3   | 3   |
| CO5    | 3   | 3   | 3   | 3   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2  
 ♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Dr.T.K.LATHA MAHESWARI**

*P. Sakunthala*

**Forwarded By**

**Dr.P.Sakunthala**

**HOD'S Signature& Name**

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**I M.Com CA**  
**SEMESTER –II**  
*For those who joined in 2023 onwards*

| PROGRAMME CODE | COURSE CODE | COURSE TITLE                    | CATEGORY | HRS/WEEK | CREDITS |
|----------------|-------------|---------------------------------|----------|----------|---------|
| PSCC           | 23PG2K6     | SETTING UP OF BUSINESS ENTITIES | Theory   | 6        | 4       |

**COURSE DESCRIPTION**

In this course you will gain a thorough understanding about important differences in doing business under different structures

**COURSE OBJECTIVES**

- 1 To understand the startup landscape and its financing
- 2 To analyse the formation and registration of Section 8 company
- 3 To outline the concept of LLP and business collaboration
- 4 To understand the procedure for obtaining registration and license
- 5 To create awareness about the legal compliances governing business entities

**Units**

**UNIT –I STARTUPS IN INDIA**

**(18 HRS)**

Types of business organisations – Factors governing selection of an organisation - **Startups – Evolution** – Definition of a Startup – Startup landscape in India – Startup India policy – Funding support and incentives – Indian states with Startup policies – Exemptions for startups – Life cycle of a Startup – Important points for Startups – Financing options available for

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Startups – Equity financing – Debt financing – IPO – Crowd funding – Incubators – Mudra banks – Successful Startups in India.

## **UNIT –II NON-PROFIT ORGANISATIONS**

**(18 HRS)**

**Formation and registration of NGOs** – Section 8 Company – Definition – Features – Exemptions – Requirements of Section 8 Company – Application for incorporation – Trust: Objectives of a trust – Persons who can create a trust – Differences between a public and private trust – Exemptions available to trusts – Formation of a trust – Trust deed – Society – Advantages – Disadvantages – Formation of a society – Tax exemption to NGOs.

## **UNIT –III LIMITED LIABILITY PARTNERSHIP AND JOINT VENTURE(18 HRS)**

Limited Liability Partnership: Definition – Nature and characteristics – Advantages and disadvantages – Procedure for incorporation – LLP agreement – Annual compliances of LLP-Business collaboration: Definition – Types – Joint venture: Advantages and disadvantages – Types – Joint venture agreement – Successful joint ventures in India – Special Purpose Vehicle – Meaning – Benefits – Formation.

## **UNIT –IV REGISTRATION AND LICENSES**

**(18**

**HRS)**

Registration and Licenses: Introduction – Business entity registration – Mandatory registration – PAN – Significance – Application and registration of PAN – Linking of PAN with Aadhar –TAN – Persons liable to apply for TAN – Relevance of TAN – Procedure to apply for TAN –GST: Procedure for registration – Registration under Shops and Establishment Act –MSME registration – Clearance from Pollution Control Board – FSSAI registration and license – Trade mark, Patent and Design registration.

## **UNIT –V ENVIRONMENTAL LEGISLATIONS IN INDIA**

**(18**

**HRS)**

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Geographical Indication of Goods (Registration and Protection) Act, 1999: Objectives, Salient Features - The Environmental Protection Act, 1986: Prevention, control and abatement of environmental pollution - The Water (Prevention And Control of Pollution) Act, 1974: The Central and State Boards for Prevention and Control of Water Pollution - Powers and Functions of Boards - Prevention and Control of Water Pollution - Penalties and Procedure- The Air (Prevention and Control of Pollution) Act, 1981: Central and State Boards for The Prevention and Control of Air Pollution - Powers And Functions - Prevention and Control of Air Pollution - Penalties and Procedure.

### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Business Collaborations -Purpose and Process

#### **TEXT BOOK:**

1. Kailash Thakur, (2007) “Environment Protection Law and Policy in India”, 2<sup>nd</sup> Edition, Deep & Deep Publication Pvt. Ltd., New Delhi.
2. Avtar Singh, (2015), “Intellectual Property Law”, Eastern Book Company, Bangalore

#### **REFERENCES**

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”, 3<sup>rd</sup> Edition, Nova Publishing, USA

#### **Digital Open Educational Resources (DOER) :**

1. [https://www.icsi.edu/media/webmodules/FINAL\\_FULL\\_BOOK\\_of\\_EP\\_SBEC\\_2018.pdf](https://www.icsi.edu/media/webmodules/FINAL_FULL_BOOK_of_EP_SBEC_2018.pdf)
  2. [https://www.mca.gov.in/MinistryV2/incorporation\\_company.html](https://www.mca.gov.in/MinistryV2/incorporation_company.html) 3)
  3. <https://legislative.gov.in/sites/default/files/The%20Limited%20Liability%20Partnership%20Act,%202008.pdf>
  4. <https://legislative.gov.in/sites/default/files/A1999-48.pdf>  
[https://www.indiacode.nic.in/bitstream/123456789/6196/1/the\\_environment\\_protection\\_act%2C1986.pdf](https://www.indiacode.nic.in/bitstream/123456789/6196/1/the_environment_protection_act%2C1986.pdf)
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## COURSE CONTENTS & LECTURE SCHEDULE:

| Module No.                              | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|---|--|-----------------|-------------------|-----------------------|
| <b>UNIT -1 STARTUPS IN INDIA</b>        |  |                 |                   |                       |
| 1.1                                     | Types of business organisations – Factors governing selection of an organisation - Startups – Evolution -Definition of a Startup – Startup landscape in India – Startup India policy | 3               | Lecture           | PPT & White board     |
| 1.2                                     | Funding support and incentives – Indian states with Startup policies   | 3               | Lecture           | White board           |
| 1.3                                     | Exemptions for startups – Life cycle of a Startup  | 3               | Lecture           | Black Board           |
| 1.4                                     | Important points for Startups – Financing options available for Startups   | 3               | Lecture           | Black Board           |
| 1.5                                     | Equity financing – Debt financing – IPO – Crowd funding  | 3               | Lecture           | Black Board           |
| 1.6                                     | Incubators - Mudra banks – Successful Startups in India.   | 3               | Lecture           | Black Board           |
| <b>UNIT -2 NON-PROFIT ORGANISATIONS</b> |  |                 |                   |                       |
| 2.1                                     | Formation and registration of NGOs – Section 8 Company   | 2               | Lecture           | Green Board<br>Charts |
| 2.2                                     | Definition – Features – Exemptions   | 2               | Chalk & Talk      | Black Board           |
| 2.3                                     | Requirements of Section 8 Company  | 2               | Chalk & Talk      | Black Board           |
| 2.4                                     | Application for incorporation – Trust: Objectives of a trust   | 2               | Chalk & Talk      | Black Board           |

| <b>Module No.</b>  | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--|---|------------------------|--------------------------|----------------------|
| 2.5  | Persons who can create a trust – Differences between a public and private trust   | 1                      | Lecture                  | Green Board Charts   |
| 2.6  | Exemptions available to trusts  | 2                      | Lecture                  | Green Board Charts   |
| 2.7  | Formation of a trust  |                        | Lecture                  | Green Board Charts   |
| 2.8  | Trust deed –Society   | 2                      | Chalk & Talk             | Black Board          |
| 2.9  | Advantages – Disadvantages .  | 2                      | Chalk & Talk             | Black Board          |
| <b>UNIT -3 LIMITED LIABILITY PARTNERSHIP AND JOINT VENTURE</b> |   |                        |                          |                      |
| 3.1  | Limited Liability Partnership: Definition – Nature and characteristics  | 3                      | Lecture                  | Green Board Charts   |
| 3.2  | Advantages and disadvantages – Procedure for incorporation.   | 3                      | Chalk & Talk             | Black Board          |
| 3.3  | LLP agreement – Annual compliances of LLP   | 3                      | Chalk & Talk             | Black Board          |
| 3.4  | Business collaboration: Definition – Types  | 3                      | Chalk & Talk             | Black Board          |
| 3.5  | Joint venture: Advantages and disadvantages   | 3                      | Chalk & Talk             | Black Board          |
| 3.6  | Types – Joint venture agreement - Successful joint ventures in India – Special Purpose Vehicle – Meaning – Benefits – Formation | 3                      | Chalk & Talk             | Black Board          |

| Module No.   | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|--|--|-----------------|-------------------|-----------------------|
| <b>UNIT -4 REGISTRATION AND LICENSES</b>           |  |                 |                   |                       |
| 4.1  | Registration and Licenses: Introduction – Business entity registration                                 | 2               | Lecture           | Green Board<br>Charts |
| 4.2  | Mandatory registration – PAN – Significance  | 2               | Chalk & Talk      | Black Board           |
| 4.3  | Application and registration of PAN – Linking of PAN with Aadhar                                       | 2               | Chalk & Talk      | Black Board           |
| 4.4  | TAN – Persons liable to apply for TAN – Relevance of TAN   | 2               | Chalk & Talk      | Black Board           |
| 4.5  | Procedure to apply for TAN –GST: Procedure for registration  | 2               | Chalk & Talk      | Black Board           |
| 4.6  | Registration under Shops and Establishment Act   | 2               | Chalk & Talk      | Black Board           |
| 4.7  | MSME registration – Clearance from Pollution Control Board   | 2               | Chalk & Talk      | Black Board           |
| 4.8  | FSSAI registration and license –   | 2               | Chalk & Talk      | Black Board           |
| 4.9  | Trade mark, Patent and Design registration.  | 2               | Chalk & Talk      | Black Board           |
| <b>UNIT -5 ENVIRONMENTAL LEGISLATIONS IN INDIA</b> |  |                 |                   |                       |
| 5.1  | Geographical Indication of Goods (Registration and Protection) Act, 1999: Objectives, Salient Features | 3               | Lecture           | Green Board           |

| <b>Module No.</b>        | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--------------------------|---|------------------------|--------------------------|----------------------|
| 5.2                      | The Environmental Protection Act, 1986: Prevention, control and abatement of environmental pollution                                | 3                      | Chalk & Talk             | Black Board          |
| 5.3                      | - The Water (Prevention And Control of Pollution) Act, 1974: The Central and State Boards for Prevention and Control of Water       | 3                      | Chalk & Talk             | Black Board          |
| 5.4                      | Pollution - Powers and Functions of Boards - Prevention and Control of Water Pollution - Penalties and Procedure                    | 3                      | Chalk & Talk             | Black Board          |
| 5.5                      | The Air (Prevention and Control of Pollution) Act, 1981: Central and State Boards for The Prevention and Control of Air Pollution - | 3                      | Chalk & Talk             | Black Board          |
| 5.6                      | Powers And Functions Prevention and Control of Air Pollution - Penalties and Procedure.   | 3                      | Chalk & Talk             | Black Board          |
| <b>UNIT -VI DYNAMISM</b> |   |                        |                          |                      |
| 6.1                      | Business Collaborations -Purpose and Process  |                        | Seminar                  | PPT                  |

|               | <b>C1</b>      | <b>C2</b>               | <b>C3</b>     | <b>C4</b>             | <b>Total Scholastic Marks</b> | <b>Non Scholastic Marks C5</b> | <b>CIA Total</b> | <b>% of Assessment</b> |
|---------------|----------------|-------------------------|---------------|-----------------------|-------------------------------|--------------------------------|------------------|------------------------|
| <b>Levels</b> | <b>Seminar</b> | <b>Better of W1, W2</b> | <b>M1+M2</b>  | <b>MID - SEM TEST</b> |                               |                                |                  |                        |
|               | <b>5 Mks.</b>  | <b>5Mks.</b>            | <b>10 Mks</b> | <b>15 Mks</b>         | <b>35 Mks.</b>                | <b>5 Mks.</b>                  | <b>40Mks.</b>    |                        |

|                |   |   |    |     |    |   |    |        |
|----------------|---|---|----|-----|----|---|----|--------|
| K2             | 5 | - | -  | 2 ½ | -  |   | -  | -      |
| K3             | - | 5 | 4  | 2 ½ | 5  |   | 5  | 12.5 % |
| K4             | - | - | 3  | 5   | 12 |   | 12 | 30 %   |
| K5             | - | - | 3  | 5   | 9  |   | 9  | 22.5%  |
| Non Scholastic | - | - | -  | -   | 9  |   | 9  | 22.5 % |
| Total          | 5 | 5 | 10 | 15  | 35 | 5 | 40 | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

### EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

#### • PG CIA Components

##### Nos

|           |   |                    |     |   |        |
|-----------|---|--------------------|-----|---|--------|
| <b>C1</b> | - | Test (CIA 1)       | 1   | - | 10 Mks |
| <b>C2</b> | - | Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - | Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - | Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - | Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - | Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b>  | <b>COURSE OUTCOMES</b>                                   |
|-------------|--|
| <b>CO 1</b> | Build a startup and acquire finance                      |
| <b>CO 2</b> | Comply with the legal requirements for Section 8 Company |
| <b>CO 3</b> | Initiate the proceedings for LLP                         |
| <b>CO 4</b> | Illustrate the registration and licensing procedure      |
| <b>CO 5</b> | Examine the compliance of regulatory framework           |

### **Mapping COs Consistency with POs**

| <b>CO/<br/>PO</b> | <b>PO1</b> | <b>PO2</b> | <b>PO3</b> | <b>PO4</b> | <b>PO5</b> | <b>PO6</b> |
|-------------------|------------|------------|------------|------------|------------|------------|
| <b>CO1</b>        | 3          | 3          | 3          | 3          | 3          | 3          |
| <b>CO2</b>        | 3          | 2          | 2          | 3          | 2          | 3          |
| <b>CO3</b>        | 3          | 3          | 2          | 3          | 3          | 3          |
| <b>CO4</b>        | 3          | 3          | 3          | 3          | 3          | 3          |
| <b>CO5</b>        | 3          | 3          | 3          | 3          | 3          | 3          |

**Note:** ♦ Strongly Correlated – **3**                      ♦ Moderately Correlated – **2**

♦ Weakly Correlated -**1**

**COURSE DESIGNER:**

**Dr.S.P.Savitha**

**Forwarded By** P. Sakunthala

**Dr.P.Sakunthala/**



## SEMESTER –II

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                                  | CATEGO<br>RY | HRS/WEEK | CREDITS |
|--------------------|----------------|---|--------------|----------|---------|
| PSCC               | 23PG2KE5       | DATA MINING<br>AND DATA<br>INTERPRETATI<br>ON | THEORY       | 4        | 3       |

### COURSE DESCRIPTION

This course introduces and improves knowledge in different data mining concepts and its applications with use of data warehouse.

### COURSE OBJECTIVES

1. To understand the basic concepts, principles and need of data warehousing
2. To gain knowledge on the data warehouse architecture, modelling and its implementation.
3. To understand steps in implementing data mart and its various dimensions
4. To learn the features, types and challenges of data mining
5. To aid the students to understand the various data mining tools and techniques

### Units

#### UNIT I DATA WAREHOUSE

**(12 HRS)**

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 ARCHITECTURE

**(12 HRS)**

Data warehouse architecture - properties of data warehouse architectures - types of data warehouse architectures- three-tier data warehouse architecture

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- ETL (extract, transform, and load) process - selecting an ELT tool- Difference between ETL and ELT types of data warehouses - data warehouse modelling - data modelling life cycle - types of data warehouse models- data warehouse design - data warehouse implementation- implementation guidelines - meta data - necessary of metadata in data warehouses - types of metadata-metadata repository - benefits of metadata repository.

### **UNIT III DATA MART**

**(12 HRS)**

**Data Mart**- Reasons for creating a data mart- Types of Data Marts- Steps in Implementing a Data Mart- Difference between Data Warehouse and Data Mart. - Dimensional Modeling-Objectives of Dimensional Modeling- Advantages of Dimensional Modeling - Elements of Dimensional Modeling - Dimension Table- Multidimensional Data Model-Data Cube.

### **UNIT IV DATA MINING**

**(12**

**HRS)**

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 & TECHNIQUES**

**(12HRS)**

Data Mining Implementation Process - Data Mining Architecture - Clustering in Data Mining - Different types of Clustering - Text Data Mining - Bitcoin Data Mining - Data Mining Vs Big Data - Data Mining Models - Trends in Data Mining.

### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Applying Data Mining Techniques - Housing Price Predictions - Smart Health Disease Prediction Using Naive Bayes -Online Fake Logo Detection System - Color Detection - Product and Price Comparing tool.

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### **TEXT BOOKS:**

1. Jiawei Han, Micheline Kamber (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, Shyam Diwakar, V. Ajay (2006), Insight into Data Mining: Theory & Practice, Prentice Hall of India, New Delhi.

### **REFERENCES**

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, Dursun Delen, Efraim Turban (2018), "Business Intelligence", Pearson Education Services Pvt Ltd, Noida.

### **Digital Open Educational Resources (DOER) :**

1. [https://mrcet.com/downloads/digital\\_notes/ME/III%20year/ERP%20Complete%20Digital%20notes.pdf](https://mrcet.com/downloads/digital_notes/ME/III%20year/ERP%20Complete%20Digital%20notes.pdf)
2. [https://mrcet.com/pdf/Lab%20Manuals/IT/DATA%20WAREHOUSING%20AND%20DATA%20MINING%20\(R18A0524\).pdf](https://mrcet.com/pdf/Lab%20Manuals/IT/DATA%20WAREHOUSING%20AND%20DATA%20MINING%20(R18A0524).pdf)

### **COURSE CONTENTS & LECTURE SCHEDULE:**

| Module No.                    | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids     |
|-------------------------------|--|-----------------|-------------------|-------------------|
| <b>UNIT -1 Data Warehouse</b> |  |                 |                   |                   |
| 1.1                           | Definition - history of data warehouse - features of data warehouses | 1               | Lecture           | PPT & White board |
| 1.2                           | characteristics of data warehouse - goals of data warehousing        | 2               | Lecture           | White board       |
| 1.3                           | principles of data warehousing - need for data warehouse             | 2               | Lecture           | PPT & White board |
| 1.4                           | benefits of data warehouse - need for separate data warehouse -      | 2               | Lecture           | PPT & White board |

| <b>Module No.</b>                          | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b>  |
|--|--|------------------------|--------------------------|-----------------------|
| 1.5  | difference between database and data warehouse   | 2                      | Lecture                  | White board           |
| 1.6  | applications of data warehouses  | 1                      | Lecture                  | White board           |
| 1.7  | components of data warehouse- data staging component   | 2                      | Lecture                  | White board           |
| <b>UNIT -2 Data Warehouse Architecture</b> |  |                        |                          |                       |
| 2.1  | Data warehouse architecture - properties of data warehouse architectures   | 1                      | Lecture                  | Green Board<br>Charts |
| 2.2  | Types of data warehouse architectures- three-tier data warehouse architecture - ETL (extract, transform, and load) | 1                      | Chalk & Talk             | Black Board           |
| 2.3  | selecting an ELT tool- Difference between ETL and ELT types of data warehouses                                     | 2                      | Chalk & Talk             | Black Board           |
| 2.4  | data warehouse modelling - data modelling life cycle - types of data warehouse models                              | 2                      | Chalk & Talk             | Black Board           |
| 2.5  | data warehouse design - data warehouse implementation-implementation guidelines                                    | 2                      | Chalk & Talk             | Black Board           |
| 2.6  | meta data - necessary of metadata in data warehouses   | 1                      | Chalk & Talk             | Black Board           |
| 2.7  | types of metadata- metadata repository - benefits of metadata repository   | 1                      | Chalk & Talk             | Black Board           |
| <b>UNIT -3 Data Mart</b>                   |  |                        |                          |                       |
| 3.1  | Data Mart- Reasons for creating a data mart- Types of Data Marts   | 1                      | Lecture                  | Green Board<br>Charts |

| <b>Module No.</b>                                 | <b>Topic</b>   | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b>  |
|---|--|------------------------|--------------------------|-----------------------|
| 3.2   | Steps in Implementing a Data Mart- Difference between Data Warehouse and Data Mart | 1                      | Chalk & Talk             | Black Board           |
| 3.3   | Dimensional Modeling-Objectives of Dimensional Modeling                            | 3                      | Chalk & Talk             | Black Board           |
| 3.4   | Advantages of Dimensional Modeling   | 3                      | Chalk & Talk             | Black Board           |
| 3.5   | Elements of Dimensional Modeling   | 2                      | Chalk & Talk             | Black Board           |
| 3.6   | Dimension Table- Multidimensional Data Model-Data Cube                             | 2                      | Chalk & Talk             | Black Board           |
| <b>UNIT -4 Data Mining</b>                        |  |                        |                          |                       |
| 4.1   | Definition - History of Data Mining- Features of Data Mining                       | 3                      | Lecture                  | Green Board<br>Charts |
| 4.2   | Types of Data Mining - Data Mining Vs Data Warehousing                             | 3                      | Chalk & Talk             | Black Board           |
| 4.3   | Advantages and Disadvantages of Data Mining  | 3                      | Chalk & Talk             | Black Board           |
| 4.4   | Data Mining Applications - Challenges of Implementation in Data mining             | 3                      | Chalk & Talk             | Black Board           |
| 4.5   | Steps involved in Data Mining - Classification of Data Mining Systems              | 3                      | Chalk & Talk             | Black Board           |
| <b>UNIT -5 Data Mining Tools &amp; Techniques</b> |  |                        |                          |                       |
| 5.1   | Data Mining Implementation Process - Data Mining Architecture                      | 1                      | Lecture                  | Green Board           |

| Module No.               | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|--------------------------|---|-----------------|-------------------|---------------|
|                          |   |                 |                   |               |
| 5.2                      | Clustering in Data Mining - Different types of Clustering   | 4               | Chalk & Talk      | Black Board   |
| 5.3                      | Text Data Mining  | 4               | Chalk & Talk      | Black Board   |
| 5.4                      | Bitcoin Data Mining - Data Mining Vs Big Data   | 4               | Chalk & Talk      | Black Board   |
| 5.5                      | Data Mining Models - Trends in Data Mining.   | 4               | Chalk & Talk      | Black Board   |
| <b>UNIT -VI DYNAMISM</b> |   |                 |                   |               |
| 6.1                      | Applying Data Mining Techniques - Housing Price Predictions - Smart Health Disease Prediction Using Naive Bayes | 2               | Seminar           | PPT           |
| 6.2                      | Online Fake Logo Detection System - Color Detection - Product and Price Comparing tool                          | 2               | Seminar           | PPT           |

|        | C1      | C2               | C3     | C4             | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|---------|------------------|--------|----------------|------------------------|-------------------------|-----------|-----------------|
| Levels | Seminar | Better of W1, W2 | M1+M2  | MID - SEM TEST |                        |                         |           |                 |
|        | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks         | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2     | 5       | -                | -      | 2 ½            | -                      |                         | -         | -               |
| K3     | -       | 5                | 4      | 2 ½            | 5                      |                         | 5         | 12.5 %          |

|                |   |   |    |    |    |   |    |        |
|----------------|---|---|----|----|----|---|----|--------|
| K4             | - | - | 3  | 5  | 12 |   | 12 | 30 %   |
| K5             | - | - | 3  | 5  | 9  |   | 9  | 22.5%  |
| Non Scholastic | - | - | -  | -  | 9  |   | 9  | 22.5 % |
| Total          | 5 | 5 | 10 | 15 | 35 | 5 | 40 | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

### EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

#### • PG CIA Components

|           |                      | Nos |          |
|-----------|----------------------|-----|----------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - 5 Mks  |
| <b>C6</b> | - Attendance         |     | - 5 Mks  |

***\*The best out of two will be taken into account***

### COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES   |
|------|---|
| CO 1 | Explain the basic concepts, principles and need of data warehousing |

|             |  |
|-------------|--|
| <b>CO 2</b> | Appraise data warehouse architecture, modelling and its implementation |
| <b>CO 3</b> | Choose various steps in implementing data mart and its dimensions      |
| <b>CO 4</b> | Recall the features and types of data mining.                          |
| <b>CO 5</b> | Apply various data mining tools and techniques                         |

### Mapping COs Consistency with POs

| CO/<br>PO  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|------------|-----|-----|-----|-----|-----|-----|
| <b>CO1</b> | 1   | 1   | 1   | 1   | 2   | 3   |
| <b>CO2</b> | 2   | 3   | 2   | 2   | 2   | 3   |
| <b>CO3</b> | 3   | 3   | 3   | 3   | 3   | 3   |
| <b>CO4</b> | 3   | 3   | 3   | 3   | 3   | 3   |
| <b>CO5</b> | 3   | 3   | 3   | 3   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3                      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Mrs.N.Muthulakshmi**

**Forwarded By**

*P. Sakunthala* **Dr.P.Sakunthala**

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**SEMESTER –II**  
***For those who joined in 2023 onwards***

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE             | CATEGO<br>RY | HRS/WEEK | CREDITS |
|--------------------|----------------|--------------------------|--------------|----------|---------|
| PSCC               | 23PG2KE6       | TECHNOLOGY<br>IN BANKING | Theory       | 4        | 3       |

**COURSE DESCRIPTION**

Technology in banking helps students assimilates knowledge of various digital products in Banking Sector and different Payment Systems in India

**COURSE OBJECTIVES**

- To understand the network essentials for an operational core banking system
- To provide an overview of customer centric electronic banking.
- To understand the evolution of electronic fund transfer systems in the banking sector
- To analyse the digital technologies offered in banking services.
- To understand the information security system

**Units**

**UNIT: I INTRODUCTION TO CORE BANKING COMPUTERIZATION  
(12HRS)**

Essentials of Bank Computerization–Stand Alone and Multi-User System–Local Area Network and Wide Area Network: Features, Advantages and Limitations – Core Banking: **Essential Requirements and Benefits. (Self-Study)**

**UNIT: IIELECTRONIC PAYMENT SYSTEM AND BANKING FACILITIES (12 HRS)**

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**Electronic Payment Systems** – ATM: Features – Advantages – Disadvantages – Brown Label and White Label ATM, PIN, Electro Magnetic Cards, Credit Cards, Debit Cards and Smart Cards: Features, Benefits and Limitations – Multiple Pin in Smart Card – Electronic Purse – Electronic Cheque – Electronic Cash – Electronic Banking – Home Banking (Corporate and Personal) – Update Facilities – Internet Banking – Mobile Banking: Features, Advantages and Limitations – Signature Storage and Retrieval System – Cheque Truncation – MICR and OCR: **Characteristics– Advantages and Limitations. (Self-Study)**

### **UNIT: III ELECTRONIC FUND TRANSFER AND ITS TRANSITIONS (12 HRS)**

Electronic Fund Transfer System – Electronic Credit and Debit Clearing – NEFT, RTGS, VSAT, SFMS, SWIFT: Features, Advantages and Limitations – Digital Signature – Unified Payments Interface (UPI): Concept, Mechanism and Services Covered – Digital Wallets (E-Wallets): Features, Benefits and Types.

### **UNIT: IV TRENDS IN BANKING TECHNOLOGY (12 HRS)**

Recent Developments in Banking Technology: **Digital Account Opening – Application Programming Interface (Self Study)** – Video Collaboration – Person-to-Person Payments – Cloud Computing – NUUP (National Unified USSD Platform) – AePS (Aadhaar enabled Payment System) – APBS (Aadhaar Payments Bridge System) – Role of IDBRT (Institute of Development and Research in Banking) in banking technology development – Status of E-banking in India – Process of E-Banking – Benefits of E-banking – Emerging challenges in banking industry.

### **UNIT: V INFORMATION SECURITY SYSTEM (12 HRS)**

**Information security - Software based security systems** – Hardware based security systems (smart card, M chip) – Hackers: Techniques used by the hackers, Phishing, Pharming, Key loggers, Screen loggers, Phishing – Trojans transaction poisoning – Card related fraud – Site cloning – False merchant site – Authentication methodologies and security measures (Password protection – Smart cards – Biometric characteristics) – Encryption and security – Customer confidentiality – Regulatory

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environment of internet banking - **Legal Framework for Electronic Transactions(Self Study)** -Cyber security as per Information Technology Act, 2000 – RBI Guidelines on Internet Banking.

### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Recent trend in Electronic Banking.

#### **TEXT BOOK:**

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.

#### **REFERENCES**

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.

#### **Digital Open Educational Resources (DOER) :**

1. <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/64767.pdf>
  2. [https://www.researchgate.net/profile/Ravi-Vadlamani/publication/237383828\\_Chapter\\_I\\_Introduction\\_to\\_Banking\\_Te](https://www.researchgate.net/profile/Ravi-Vadlamani/publication/237383828_Chapter_I_Introduction_to_Banking_Te)
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chnology\_and\_Management/links/572a89bc08aef7c7e2c4fbc3/Chapter-I-Introduction-to-Banking-Technology-and-Management.pdf

3. <https://eprocure.gov.in/cppp/rulesandprocs/kbadqkdclswfjdelrquehwuxcfmijmuixngudufgbuubgubfugbububjxcgfvsbdi hbfgGhdfgFHtyyhRtMjk4NzY=#:~:text=%5B9th%20J une%2C%202000%5D%20An,communication%20and%20storage%20of%20i nformation%2C>

### COURSE CONTENTS & LECTURE SCHEDULE:

| Module No.  | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids      |
|---|---|-----------------|-------------------|--------------------|
| <b>UNIT -1 INTRODUCTION TO CORE BANKING COMPUTERIZATION</b>     |   |                 |                   |                    |
| 1.1   | Essentials of Bank Computerization–Stand Alone and Multi-User System                    | 2               | Lecture           | PPT & White board  |
| 1.2   | Local Area Network and Wide Area Network  | 2               | Lecture           | White board        |
| 1.3   | Features, Advantages and Limitations  | 4               | Lecture           | PPT & White board  |
| 1.4   | Core Banking: <b>Essential Requirements and Benefits. (Self Study)</b>                  | 4               | Lecture           | PPT & White board  |
| <b>UNIT -2 ELECTRONIC PAYMENT SYSTEM AND BANKING FACILITIES</b> |   |                 |                   |                    |
| 2.1   | ElectronicPaymentSystems–ATM:Features   | 2               | Lecture           | Green Board Charts |
| 2.2   | Advantages–Disadvantages  | 2               | Chalk & Talk      | Black Board        |
| 2.3   | Brown Label and White Label ATM, PIN, Electro Magnetic Cards, Credit Cards, Debit Cards | 2               | Chalk & Talk      | Black Board        |

| <b>Module No.</b>   | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|---|---|------------------------|--------------------------|----------------------|
| 2.4   | Smart Cards: Features, Benefits and Limitations– Multiple Pin in Smart Card   | 2                      | Chalk & Talk             | Black Board          |
| 2.5   | Electronic Purse –Electronic Cheque –Electronic Cash                          | 1                      | Lecture                  | Green Board Charts   |
| 2.6   | Electronic Banking  | 2                      | Lecture                  | Green Board Charts   |
| 2.7   | Home Banking(Corporate and Personal) – Update Facilities – Internet Banking – | 1                      | Lecture                  | Green Board Charts   |
| 2.8   | Mobile Banking: Features, Advantages and Limitations                          | 2                      | Chalk & Talk             | Black Board          |
| 2.9   | Signature Storage and Retrieval System –                                      | 2                      | Chalk & Talk             | Black Board          |
| 2.10  | Cheque Truncation – MICR and OCR  | 2                      | Chalk & Talk             | Black Board          |
| 2.11  | <b>Characteristics– Advantages and Limitations. (Self Study)</b>              | 2                      | Chalk & Talk             | Black Board          |
| <b>UNIT -3 ELECTRONIC FUND TRANSFER AND ITS TRANSITIONS</b> |   |                        |                          |                      |
| 3.1   | Electronic Fund Transfer System – Electronic Credit and Debit Clearing        | 3                      | Lecture                  | Green Board Charts   |
| 3.2   | NEFT, RTGS, VSAT, SFMS, SWIFT: Features, Advantages and Limitations           | 3                      | Chalk & Talk             | Black Board          |
| 3.3   | Digital Signature   | 3                      | Chalk & Talk             | Black Board          |

| Module No.                                  | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|---|---|-----------------|-------------------|-----------------------|
| 3.4   | Unified Payments Interface (UPI): Concept, Mechanism and Services Covered   | 3               | Chalk & Talk      | Black Board           |
| 3.5   | Digital Wallets (E-Wallets): Features, Benefits.  | 3               | Chalk & Talk      | Black Board           |
| 3.6   | Digital Wallets (E-Wallets): Types.   | 5               | Chalk & Talk      | Black Board           |
| <b>UNIT -4 TRENDS IN BANKING TECHNOLOGY</b> |   |                 |                   |                       |
| 4.1   | Recent Developments in Banking Technology: <b>Digital Account Opening – Application Programming Interface(Self Study)</b> - | 1               | Lecture           | Green Board<br>Charts |
| 4.2   | Video Collaboration – Person-to-Person Payments – Cloud Computing   | 2               | Chalk & Talk      | Black Board           |
| 4.3   | — NUUP (National Unified USSD Platform)-  | 4               | Chalk & Talk      | Black Board           |
| 4.4   | Process of E-Banking  | 5               | Chalk & Talk      | Black Board           |
| 4.5   | - Benefits of E-banking   | 4               | Chalk & Talk      | Black Board           |
| 4.6   | Emerging challenges in banking industry.  | 4               | Chalk & Talk      | Black Board           |
| <b>UNIT -5 INFORMATION SECURITY SYSTEM</b>  |   |                 |                   |                       |

| Module No.  | Topic  | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|---|--|-----------------|-------------------|---------------|
| 5.1   | Information security - Software based security systems - Hardware based security systems (smart card, M chip)  | 1               | Lecture           | Green Board   |
| 5.2   | Hackers: Techniques used by the hackers, Phishing, Pharming, Key loggers, Screen loggers, Phishing - Trojans transaction poisoning   | 4               | Chalk & Talk      | Black Board   |
| 5.3   | Card related fraud - Site cloning – False merchant site - Authentication methodologies and   | 4               | Chalk & Talk      | Black Board   |
| 5.4   | security measures (Password protection - Smart cards - Biometric characteristics)  | 4               | Chalk & Talk      | Black Board   |
| 5.5   | Encryption and security - Customer confidentiality - <b>Legal Framework for Electronic Transactions(Self Study)</b> Cyber security as per Information Technology Act, 2000 – RBI Guidelines on Internet Banking. | 4               | Chalk & Talk      | Black Board   |
| <b>UNIT –VI DYNAMISM(Evaluation Pattern - CIA only)</b> |  |                 |                   |               |
| 6.1   | Recent trend in Electronic Banking.  |                 | Seminar           | PPT           |

| Levels | C1      | C2               | C3    | C4             | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|---------|------------------|-------|----------------|------------------------|-------------------------|-----------|-----------------|
|        | Seminar | Better of W1, W2 | M1+M2 | MID - SEM TEST |                        |                         |           |                 |

|                       | 5 Mks. | 5Mks<br>. | 10 Mks | 15<br>Mks | 35 Mks. | 5 Mks. | 40Mks<br>. |        |
|-----------------------|--------|-----------|--------|-----------|---------|--------|------------|--------|
| K2                    | 5      | -         | -      | 2 ½       | -       |        | -          | -      |
| K3                    | -      | 5         | 4      | 2 ½       | 5       |        | 5          | 12.5 % |
| K4                    | -      | -         | 3      | 5         | 12      |        | 12         | 30 %   |
| K5                    | -      | -         | 3      | 5         | 9       |        | 9          | 22.5%  |
| Non<br>Scholasti<br>c | -      | -         | -      | -         | 9       |        | 9          | 22.5 % |
| Total                 | 5      | 5         | 10     | 15        | 35      | 5      | 40         | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON -<br>SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|---------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6                  | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                   | 40    | 60  | 100   |

### PG CIA Components

#### Nos

|           |   |              |   |   |        |
|-----------|---|--------------|---|---|--------|
| <b>C1</b> | - | Test (CIA 1) | 1 | - | 10 Mks |
| <b>C2</b> | - | Test (CIA 2) | 1 | - | 10 Mks |

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|           |                      |     |         |
|-----------|----------------------|-----|---------|
| <b>C3</b> | - Assignment         | 2 * | - 5 Mks |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - 5 Mks |
| <b>C5</b> | - Seminar            | 1   | - 5 Mks |
| <b>C6</b> | - Attendance         |     | - 5 Mks |

***\*The best out of two will be taken into account***

## **COURSE OUTCOMES**

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

| <b>NO.</b>  | <b>COURSE OUTCOMES</b>  |
|-------------|---|
| <b>CO 1</b> | Discuss the utility of stand-alone and multi-user systems access in Core banking.                           |
| <b>CO 2</b> | Assess the multi-faceted electronic payment options available to customer and host transactions in banking. |
| <b>CO 3</b> | Evaluate the dynamic transitions in Electronic Fund transfer systems.                                       |
| <b>CO 4</b> | Evaluate the enhanced utility and user interface and other recent developments in banking technologies.     |
| <b>CO 5</b> | Assess the information security system  |

## **Mapping COs Consistency with Pos and Pso**

|            | <b>POs</b> |          |          |          |          |          | <b>PSOs</b> |          |          |
|------------|------------|----------|----------|----------|----------|----------|-------------|----------|----------|
|            | <b>1</b>   | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>1</b>    | <b>2</b> | <b>3</b> |
| <b>CO1</b> | 2          | 3        | 2        | 3        | 3        | 2        | 3           | 2        | 2        |
| <b>CO2</b> | 2          | 3        | 2        | 3        | 3        | 3        | 3           | 3        | 3        |
| <b>CO3</b> | 1          | 2        | 3        | 3        | 3        | 3        | 3           | 3        | 3        |
| <b>CO4</b> | 2          | 2        | 2        | 3        | 3        | 3        | 3           | 3        | 3        |
| <b>CO5</b> | 1          | 2        | 3        | 2        | 2        | 3        | 2           | 3        | 3        |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Mrs. M.PRIYA**

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**Forwarded By**

*P. Sakunthala /*

**I M.Com CA**

**SEMESTER –II**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE           | CATEGO<br>RY   | HRS/WEEK | CREDITS |
|--------------------|----------------|------------------------|----------------|----------|---------|
| PSCC               | 23PG2KE7       | FINANCIAL<br>ANALYTICS | PRACTIC<br>ALS | 4        | 3       |

**COURSE DESCRIPTION**

This course introduces and improves knowledge in different the statistical concepts with R and python programming.

**COURSE OBJECTIVES**

1. To understand the statistical concepts relating to Probability, decision making under uncertainty and analysis of exploratory data
2. To learn the use of regression, time series analysis and building of models using accounting data.
3. To gain knowledge on R and python programming
4. To prepare, analyse and forecast financial statements using cash flow statements
5. To gain knowledge on concept, application, and issues in capital budgeting

**Units**

**UNIT I STATISTICAL CONCEPTS**

**(12 HRS)**

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Probability, Normal, Lognormal distribution properties, Decision making under uncertainty - Cleaning and pre-processing financial data, Exploratory Data Analysis in Finance.

## **UNIT II SIMPLE LINEAR MODELS**

**(12 HRS)**

**Use of Regression in Finance**, Building Models using Accounting Data, Understanding stock price behaviour, time series analysis in finance.

## **UNIT III USING R FOR ANALYSIS OF DATA**

**(12 HRS)**

Using R for Analysis of Data

Quick introduction to R and Python, understanding data in finance, sources of data, Using R for analysis of data.

## **UNIT IV CASH FLOW CONCEPTS**

**(12**

**HRS)**

Cash flow statement – Prepare and Analyse, Modelling and forecasting of financial statement.

## **UNIT V CAPITAL BUDGETING**

**(12 HRS)**

**NPV, IRR – Concept, application, and issues**, Use of real options for better financial outcomes.

## **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

**Capital Asset Pricing Model: solution to its Inadequacies - Work of Multi-level marketing in different economies around the world - Improvement on Electronic Payments - Blockchain in Finance Services or Fintech**

### **TEXT BOOKS:**

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”, Springer, USA.

### **REFERENCES**

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

**Digital Open Educational Resources (DOER) :**

1. [https://personal.ntu.edu.sg/nprivault/MH8331/financial\\_risk\\_analytics.pdf](https://personal.ntu.edu.sg/nprivault/MH8331/financial_risk_analytics.pdf)
2. <https://dynamics.microsoft.com/en-us/finance/what-is-financial-analytics/>

**COURSE CONTENTS & LECTURE SCHEDULE:**

| Module No.                          | Topic                                      | No. of Lectures | Teaching Pedagogy | Teaching Aids      |
|-------------------------------------|--|-----------------|-------------------|--------------------|
| <b>UNIT -1 Statistical Concepts</b> |  |                 |                   |                    |
| 1.1                                 | Probability                                | 3               | Lecture           | PPT & White board  |
| 1.2                                 | Normal, Lognormal distribution properties  | 2               | Lecture           | White board        |
| 1.3                                 | Decision making under uncertainty          | 2               | Lecture           | PPT & White board  |
| 1.4                                 | Cleaning and pre-processing financial data | 3               | Lecture           | PPT & White board  |
| 1.5                                 | Exploratory Data Analysis in Finance.      | 2               | Lecture           | White board        |
| <b>UNIT -2 Simple Linear Models</b> |  |                 |                   |                    |
| 2.1                                 | Use of Regression in Finance               | 4               | Lecture           | Green Board Charts |
| 2.2                                 | Building Models using Accounting Data      | 4               | Chalk & Talk      | Black Board        |

| Module No.                             | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids         |
|--|---|-----------------|-------------------|-----------------------|
| 2.3                                    | Understanding stockpricebehaviour                 | 4               | Chalk & Talk      | Black Board           |
| <b>UNIT -3 UsingRforAnalysisofData</b> |   |                 |                   |                       |
| 3.1                                    | Quick introduction to R and Python                | 3               | Lecture           | Green Board<br>Charts |
| 3.2                                    | understanding data in finance                     | 3               | Chalk & Talk      | Black Board           |
| 3.3                                    | sources of data                                   | 3               | Chalk & Talk      | Black Board           |
| 3.4                                    | Using Rforanalysisofdata.                         | 3               | Chalk &Talk       | Black Board           |
| <b>UNIT -4 CashFlowConcepts</b>        |   |                 |                   |                       |
| 4.1                                    | Cash flow statement                               | 4               | Lecture           | Green Board<br>Charts |
| 4.2                                    | Prepare and Analyse                               | 4               | Chalk & Talk      | Black Board           |
| 4.3                                    | Modelling and forecasting of financial statements | 4               | Chalk & Talk      | Black Board           |
| <b>UNIT -5 CapitalBudgeting</b>        |   |                 |                   |                       |
| 5.1                                    | NPV, IRR  | 3               | Lecture           | Green Board           |
| 5.2                                    | NPV, IRR application                              | 3               | Chalk & Talk      | Black Board           |
| 5.3                                    | NPV, IRR issues                                   | 3               | Chalk & Talk      | Black                 |

| Module No.               | Topic   | No. of Lectures | Teaching Pedagogy | Teaching Aids |
|--------------------------|---|-----------------|-------------------|---------------|
|                          |   |                 |                   | Board         |
| 5.4                      | Use of real options for better financial outcomes   | 3               | Chalk & Talk      | Black Board   |
| <b>UNIT –VI DYNAMISM</b> |   |                 |                   |               |
| 6.1                      | Capital Asset Pricing Model: solution to its Inadequacies - Work of Multi-level marketing in different economies around the world | 2               | Seminar           | PPT           |
| 6.2                      | Improvement on Electronic Payments - Blockchain in Finance Services or Fintech  | 2               | Seminar           | PPT           |

| Levels         | C1      | C2               | C3     | C4           | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|----------------|---------|------------------|--------|--------------|------------------------|-------------------------|-----------|-----------------|
|                | Seminar | Better of W1, W2 | M1+M2  | MID-SEM TEST |                        |                         |           |                 |
|                | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks       | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5       | -                | -      | 2 ½          | -                      |                         | -         | -               |
| K3             | -       | 5                | 4      | 2 ½          | 5                      |                         | 5         | 12.5            |
| K4             | -       | -                | 3      | 5            | 12                     |                         | 12        | 30 %            |
| K5             | -       | -                | 3      | 5            | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -       | -                | -      | -            | 9                      |                         | 9         | 22.5 %          |
| Total          | 5       | 5                | 10     | 15           | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### PG CIA Components

|           |                      | Nos |   |        |
|-----------|----------------------|-----|---|--------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - | 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***

## COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES   |
|------|---|
| CO 1 | Analysedecisionsunderuncertaintyandalsoanalyseexploratory |

|             |   |
|-------------|---|
| <b>CO 2</b> | Build models using accounting data and analyse using regression and time series tools |
| <b>CO 3</b> | Apply Rand python programming   |
| <b>CO 4</b> | Estimate and analyse financial statements using cash flow statements                  |
| <b>CO 5</b> | Select appropriate capital budgeting techniques for decision making                   |

### Mapping COs Consistency with POs

| CO/<br>PO  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|------------|-----|-----|-----|-----|-----|-----|
| <b>CO1</b> | 3   | 3   | 1   | 3   | 3   | 2   |
| <b>CO2</b> | 3   | 3   | 1   | 3   | 3   | 2   |
| <b>CO3</b> | 3   | 3   | 1   | 3   | 3   | 2   |
| <b>CO4</b> | 3   | 3   | 1   | 3   | 3   | 2   |
| <b>CO5</b> | 3   | 3   | 1   | 3   | 3   | 2   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Mrs.N.Muthulakshmi**

**Forwarded By**

*P. Sakunthala*

**Dr.P.Sakunthala**

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**I M.Com CA  
SEMESTER –II  
ELECTIVE –IV B**

*For those who joined in 2023 onwards*

| <b>PROGRAM<br/>ME CODE</b> | <b>COURSE<br/>CODE</b> | <b>COURSE TITLE</b>                          | <b>CATEGO<br/>RY</b> | <b>HRS/WEEK</b> | <b>CREDITS</b> |
|----------------------------|------------------------|--|----------------------|-----------------|----------------|
| <b>PSCC</b>                | <b>23PG2KE8</b>        | <b>MANAGEMENT<br/>INFORMATION<br/>SYSTEM</b> | <b>Theory</b>        | 4               | 3              |

**COURSE DESCRIPTION**

To understand the concept of design and implementation of Management Information System and enhance knowledge in Enterprise Resource Planning .

**COURSE OBJECTIVES**

1. To understand the basic concept of Information system
  2. To identify the importance of MIS
-

3. To understand the Functional Management Information System
4. To learn the role of system analyst
5. To apply the concept of Enterprise Resource Planning

**UNIT I INFORMATION SYSTEM (12 HRS)**

Introduction to information system - Management - Structure and Activities - Information needs and sources - Types of management decisions and information need - System classification - Elements of system, input, output, process and feedback.

**UNIT II TYPES OF MANAGEMENT INFORMATION SYSTEMS (12 HRS)**

Transaction Processing Information System - Information system for managers - Intelligence information system – Decision support system - Executive information systems.

**UNIT III FUNCTIONAL MANAGEMENT INFORMATION SYSTEMS (12 HRS)**

Functional Management Information System: Production Information system - Marketing Information Systems - Accounting Information System - Financial Information System - Human Resource Information System.

**UNIT IV SYSTEM DESIGN AND DATABASE (12 HRS)**

System Analysis and Design: The work of a system analyst - SDLC- System design – Requirement analysis - Data flow diagram - Relationship diagram - Design -Implementation - Evaluation and maintenance of MIS - Database System: Overview of Database - Components - Advantages and disadvantages of database.

**UNIT V ENTERPRISE RESOURCE PLANNING (12 HRS)**

**Enterprise Resource Planning (ERP) System -** Benefits of the ERP - How ERP is different from conventional packages - Need for ERP - ERP components - Selection of ERP Package - ERP implementation - Customer Relationship management - Organisation & Types - Decision Making - Data & information

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- Characteristics & Classification of information - Cost & value of information
- Various channels of information and MIS

### **UNIT –VI DYNAMISM (Evaluation Pattern - CIA only)**

Cloud BPM - Business intelligence - MIS to business - Data preservation -  
Investigating the Mediating Effect of Business-IT Alignment

### **TEXT BOOKS:**

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.

### **REFERENCES**

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.

### **Digital Open Educational Resources (DOER) :**

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>

### **COURSE CONTENTS & LECTURE SCHEDULE:**

| <b>Module No.</b>                 | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|-----------------------------------|---|------------------------|--------------------------|----------------------|
| <b>UNIT -1 Information System</b> |   |                        |                          |                      |
| 1.1                               | Introduction to information system – Management                           | 3                      | Lecture                  | PPT & White board    |
| 1.2                               | Structure and Activities - Information needs and sources                  | 3                      | Lecture                  | White board          |
| 1.3                               | Types of management decisions and information need- System classification | 3                      | Lecture                  | PPT & White board    |

| <b>Module No.</b>   | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b>  |
|---|---|------------------------|--------------------------|-----------------------|
| 1.4   | Elements of system, input, output, process and feedback | 3                      | Lecture                  | PPT & White board     |
| <b>UNIT -2    Types of Management Information Systems</b>   |   |                        |                          |                       |
| 2.1   | Transaction Processing Information System               | 2                      | Lecture                  | Green Board<br>Charts |
| 2.2   | Information system for managers                         | 2                      | Chalk & Talk             | Black Board           |
| 2.3   | Intelligence information system                         | 3                      | Chalk & Talk             | Black Board           |
| 2.4   | Decision support system                                 | 2                      | Chalk &Talk              | Black Board           |
| 2.5   | Executive information systems                           | 3                      | Lecture                  | Green Board<br>Charts |
| <b>UNIT -3    Functional Management Information Systems</b> |   |                        |                          |                       |
| 3.1   | Functional Management Information System                | 2                      | Lecture                  | Green Board<br>Charts |
| 3.2   | Production Information system                           | 3                      | Chalk & Talk             | Black Board           |
| 3.3   | Marketing Information Systems                           | 2                      | Chalk & Talk             | Black Board           |
| 3.4   | Accounting Information System                           | 3                      | Chalk & Talk             | Black Board           |
| 3.5   | Financial Information System                            | 2                      | Chalk & Talk             | Black Board           |

| <b>Module No.</b>                                | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b>  |
|--|---|------------------------|--------------------------|-----------------------|
| 3.6  | Human Resource Information System.  | 5                      | Chalk & Talk             | Black Board           |
| <b>UNIT -4      System design and Database</b>   |   |                        |                          |                       |
| 4.1  | System Analysis and Design: The work of a system analyst - SDLC                                       | 1                      | Lecture                  | Green Board<br>Charts |
| 4.2  | System design – Requirement analysis - Data flow diagram  | 2                      | Chalk & Talk             | Black Board           |
| 4.3  | Relationship diagram  | 2                      | Chalk & Talk             | Black Board           |
| 4.4  | Design –Implementation - Evaluation and maintenance of MIS  | 3                      | Chalk & Talk             | Black Board           |
| 4.5  | Database System: Overview of Database – Components  | 2                      | Chalk & Talk             | Black Board           |
| 4.6  | Advantages and disadvantages of database.   | 2                      | Chalk & Talk             | Black Board           |
| <b>UNIT -5      Enterprise Resource Planning</b> |   |                        |                          |                       |
| 5.1  | Enterprise Resource Planning (ERP) System   | 1                      | Lecture                  | Green Board           |
| 5.2  | Benefits of the ERP - How ERP is different from conventional packages - Need for ERP - ERP components | 2                      | Chalk & Talk             | Black Board           |
| 5.3  | Selection of ERP Package - ERP implementation   | 1                      |                          | Black Board           |

| <b>Module No.</b>        | <b>Topic</b>  | <b>No. of Lectures</b> | <b>Teaching Pedagogy</b> | <b>Teaching Aids</b> |
|--------------------------|---|------------------------|--------------------------|----------------------|
| 5.4                      | Customer Relationship management - Organisation & Types -Decision Making - Data & information   | 3                      | Chalk & Talk             | Black Board          |
| 5.5                      | Characteristics & Classification of information   | 2                      | Chalk & Talk             | Black Board          |
| 5.6                      | Cost & value of information - Various channels of information and MIS   | 3                      | Chalk & Talk             | Black Board          |
| <b>UNIT -VI DYNAMISM</b> |   |                        |                          |                      |
| 6.1                      | Cloud BPM - Business intelligence - MIS to business - Data preservation - Investigating the Mediating Effect of Business-IT Alignment | 2                      | Seminar                  | PPT                  |

| Levels | C1                | C2                        | C3              | C4                       | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total | % of Assessment |
|--------|-------------------|---------------------------|-----------------|--------------------------|------------------------|-------------------------|-----------|-----------------|
|        | Seminar<br>5 Mks. | Better of W1, W2<br>5Mks. | M1+M2<br>10 Mks | MID - SEM TEST<br>15 Mks | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2     | 5                 | -                         | -               | 2 ½                      | -                      |                         | -         | -               |
| K3     | -                 | 5                         | 4               | 2 ½                      | 5                      |                         | 5         | 12.5 %          |
| K4     | -                 | -                         | 3               | 5                        | 12                     |                         | 12        | 30 %            |
| K5     | -                 | -                         | 3               | 5                        | 9                      |                         | 9         | 22.5%           |

|                |   |   |    |    |    |   |    |        |
|----------------|---|---|----|----|----|---|----|--------|
| Non Scholastic | - | - | -  | -  | 9  |   | 9  | 22.5 % |
| Total          | 5 | 5 | 10 | 15 | 35 | 5 | 40 | 100 %  |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### • PG CIA Components

|           |                      | Nos |   |    |     |
|-----------|----------------------|-----|---|----|-----|
| <b>C1</b> | - Test (CIA 1)       | 1   | - | 10 | Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 | Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5  | Mks |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5  | Mks |
| <b>C5</b> | - Seminar            | 1   | - | 5  | Mks |
| <b>C6</b> | - Attendance         |     | - | 5  | Mks |

*\*The best out of two will be taken into account*

## COURSE OUTCOMES

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

| NO.  | COURSE OUTCOMES                                   |
|------|---|
| CO 1 | Identify the basic concept of Information system  |
| 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 resource planning |

### Mapping COs Consistency with POs

| CO/<br>PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|-----------|-----|-----|-----|-----|-----|-----|
| CO1       | 1   | 1   | 2   | 2   | 1   | 2   |
| CO2       | 2   | 2   | 2   | 2   | 1   | 2   |
| CO3       | 3   | 3   | 3   | 3   | 1   | 2   |
| CO4       | 3   | 3   | 3   | 3   | 2   | 3   |
| CO5       | 3   | 3   | 3   | 3   | 2   | 3   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

**Mrs.N.Muthulakshmi**

**Forwarded By**

*P. Sakunthala*

**Dr.P.Sakunthala**





**I M.Com CA  
SEMESTER –II**

*For those who joined in 2023 onwards*

| PROGRAM<br>ME CODE | COURSE<br>CODE | COURSE TITLE                       | CATEGO<br>RY   | HRS/WEEK | CREDITS |
|--------------------|----------------|------------------------------------|----------------|----------|---------|
| PSCC               | 23PG2KAE       | FINANCIAL<br>ACCOUNTING &<br>TALLY | PRACTICA<br>LS | 2        | 4       |

**COURSE DESCRIPTION**

This course is designed to equip students with current developments in small and medium business ,assisting companies with their accounting needs.

**COURSE OBJECTIVES**

Provide students to impart knowledge regarding concepts of Financial Accounting Tally is an accounting package which is used for learning to maintain accounts.

**UNIT 1: INTRODUCTION**

**(9 HRS)**

Introduction-Financial Accounting-Golden rules of accounting-Concepts and Conventions-Creation of a company –creating groups and ledger- Display of Trial Balance

**UNIT II: ACCOUNTING VOUCHER**

**(9 HRS)**

Creating accounting voucher for purchase, sales, debit note, credit note, Receipt&payment voucher.

**UNIT III: TALLY INVENTORY**

**(9 HRS)**

**Inventory masters** – Important housekeeping – creating, displaying &Altering, stock groups and stock categories

**UNIT IV: INVENTORY REPORTS**

**(9 HRS)**

Interest calculation ,Cost centre Cost category, **stock group summary**

**UNIT V:BILL WISE DETAILS**

**(9 HRS)**

**Bill-wise details** – Interest calculation-Activate Bill wise processing – Display outstanding statements advance

**Text Book:**

1.Advanced Accountancy, T.S.Reddy&A.Murthy,Margham publications,1st edition,2007

2.K.K.Nadhani, Accounting With Tally, Bpb Publications, 2017.

|                | C1      | C2               | C3     | C4             | Total Scholastic Marks | Non Scholastic Marks C5 | CIA Total |                 |
|----------------|---------|------------------|--------|----------------|------------------------|-------------------------|-----------|-----------------|
| Levels         | Seminar | Better of W1, W2 | M1+M2  | MID - SEM TEST |                        |                         |           | % of Assessment |
|                | 5 Mks.  | 5Mks.            | 10 Mks | 15 Mks         | 35 Mks.                | 5 Mks.                  | 40Mks.    |                 |
| K2             | 5       | -                | -      | 2 ½            | -                      |                         | -         | -               |
| K3             | -       | 5                | 4      | 2 ½            | 5                      |                         | 5         | 12.5 %          |
| K4             | -       | -                | 3      | 5              | 12                     |                         | 12        | 30 %            |
| K5             | -       | -                | 3      | 5              | 9                      |                         | 9         | 22.5%           |
| Non Scholastic | -       | -                | -      | -              | 9                      |                         | 9         | 22.5 %          |
| Total          | 5       | 5                | 10     | 15             | 35                     | 5                       | 40        | 100 %           |

| CIA            |    |
|----------------|----|
| Scholastic     | 35 |
| Non Scholastic | 5  |
|                | 40 |

## EVALUATION PATTERN

| SCHOLASTIC |    |    |    |    | NON - SCHOLASTIC | MARKS |     |       |
|------------|----|----|----|----|------------------|-------|-----|-------|
| C1         | C2 | C3 | C4 | C5 | C6               | CIA   | ESE | Total |
| 10         | 10 | 5  | 5  | 5  | 5                | 40    | 60  | 100   |

### PG CIA Components

|           |                      | Nos |   |        |
|-----------|----------------------|-----|---|--------|
| <b>C1</b> | - Test (CIA 1)       | 1   | - | 10 Mks |
| <b>C2</b> | - Test (CIA 2)       | 1   | - | 10 Mks |
| <b>C3</b> | - Assignment         | 2 * | - | 5 Mks  |
| <b>C4</b> | - Open Book Test/PPT | 2 * | - | 5 Mks  |
| <b>C5</b> | - Seminar            | 1   | - | 5 Mks  |
| <b>C6</b> | - Attendance         |     | - | 5 Mks  |

***\*The best out of two will be taken into account***

## COURSE OUTCOMES

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

| NO.         | COURSE OUTCOMES  |
|-------------|--|
| <b>CO 1</b> | Create companies using Tally ERP                                       |
| <b>CO 2</b> | Use features effectively and navigate between functional keys          |
| <b>CO 3</b> | Create vouchers and invoices and use GST in preparing taxable invoices |
| <b>CO 4</b> | Conduct financial statements analysis, using MIS                       |
| <b>CO 5</b> | Help organizations in extracting inventory information                 |

### Mapping COs Consistency with POs

| CO/<br>PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|-----------|-----|-----|-----|-----|-----|-----|
| CO1       | 3   | 2   | 3   | 2   | 3   | 3   |
| CO2       | 3   | 3   | 3   | 3   | 2   | 3   |
| CO3       | 3   | 2   | 3   | 2   | 2   | 2   |
| CO4       | 3   | 3   | 3   | 2   | 3   | 3   |
| CO5       | 3   | 3   | 3   | 3   | 3   | 3   |

**Note:** ♦ Strongly Correlated – 3      ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

**COURSE DESIGNER:**

/

**Dr.P.Sakunthala**

**Forwarded By**

 **Dr.P.Sakunthala**