

# CVM UNIVERSITY

## FACULTY OF MANAGEMENT

### COURSE OF STUDY

#### DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION TECHNOLOGY MANAGEMENT (HONOURS)

#### [BBA-ITM (Hons)]

#### (Under Choice Based Credit Scheme Semester Degree Programme)

**R. UG BBAITM (HON) 1:** Candidates for the Degree of Bachelor of Business Administration-Information Technology Management (Honours) [BBA-ITM(Hons)] must have passed HSC/12<sup>th</sup> or equivalent statutory Examining Body recognized as equivalent thereto in accordance.

**R. UG BBAITM (HON) 2:** A student who has passed an equivalent examination from any other board or examining body and is seeking admission to a college affiliated to this University shall not be admitted without producing an Eligibility Certificate from the CVM University.

**R. UG BBAITM (HON) 3:**

- (1) Students will be required to earn stipulated credits per course per semester for obtaining degree of Bachelor of Business Administration-Information Technology Management ( Honours) [BBA-ITM(Hons)] as shown below:

| Semesters | I  | II | III | IV | V  | VI | Total |
|-----------|----|----|-----|----|----|----|-------|
| Credits   | 24 | 24 | 27  | 27 | 27 | 27 | 156   |

- (2) The credit per course is determined as one credit equivalent to one hour of study for the duration of fifteen weeks.
- (3) The Workload of a faculty shall be determined considering the total number of hours of study.
- (4) Four credits per subject would mean 3 hours of direct teaching and one hour of tutorials/seminar/presentation/viva voce etc.

**R. UG BBAITM (HON) 4:** For appearing at the First and subsequent semester external of Bachelor of Business Administration-Information Technology Management [BBA-ITM (Honours)] Degree examination, a students should have -

- (i) Kept at least 75% of attendance in the respective semester at a College recognized for teaching courses of study by the University,
- (ii) Obtained at least 30% marks in aggregate in each of the papers in the internal tests conducted by the college,
- (iii) Presented themselves for medical examination, if conducted by the College or University.

**R. UG BBAITM (HON) 5:** For the purpose of deciding final results at the semester Examination, the ratio between internal assessment and final University examination shall be 40:60. For the purpose of internal assessment, the college concerned will conduct at least one test in each semester. The College may also arrange quizzes, term papers, assignments etc. The 40 marks of internal assessment shall be distributed as follows— Written test 25 marks, assignment/seminar/project work 10 marks and attendance 5 marks. The concerned College may have its own policy for giving attendance marks out of 5. The college shall have to maintain necessary daily records for attendance. The duration of University external examination shall be of TWO hours.

**R. UG BBAITM (HON) 6:** In order to study of Bachelor of Bachelor of Business Administration-Information Technology Management [BBA-ITM (Hons)], a student should have undertaken Specialized Electives courses over four semesters.

**R. UG BBAITM (HON) 7:** Candidates desirous of appearing at the Semester Examinations must forward their applications in the prescribed form accompanied by a certificate of attendance to the Registrar through the Principal of the college on or before the date prescribed for the purpose under the relevant ordinance/s.

**R. UG BBAITM (HON) 8:** Standard of passing:

To Pass the Semester Examination, candidate must obtain

- (i) At Least 35% marks in the University Examination in each paper, and
- (ii) At Least 35% marks in the total of Internal and the University Examination in each paper.

**Award of Class:**

- (a) Those of the successful candidates will be placed in the **SECOND CLASS** who obtain at Least 45% but less than 60% of total marks of all the subjects in the internal and external examination put together.
- (b) Those of the successful candidates will be placed in the **FIRST CLASS** who obtain at Least 60% of the total marks of all the subjects in the internal and external examination put together.

- (c) Those of the successful candidates will be placed in the First Class with Distinction who obtain at Least 70% of marks of all the subjects in the internal and external examination put together.
- (d) The class shall be awarded at the end of 6 semesters considering all semester examinations.

**R. UG BBAITM (HON) 9: A.T.K.T.**

1. A student who fails at the Semester Examination in any of the papers will be permitted to keep terms for the next Semester Courses.
2. A student, who is failing in any of the papers and allowed to keep terms in the subsequent Semester Courses, can take the examination in the Courses in which he/she is failing at the end of respective semester examination. A student can have maximum 5 attempts after 6 Semesters excluding the attempt he/she has made at the end of 6<sup>th</sup> Semester.
3. A student failing in any of the papers at a Semester Examination passes out such papers by 6 Semesters, such attempts will be considered as First Attempt.
4. A student getting ATKT will be exempted from appearing in the External examinations in such papers which he/she has passed out.
5. A student failing up to three subjects can appear for the on demand examination as per university rules.

# SEMESTER I

**CVM UNIVERSITY**

**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION TECHNOLOGY MANAGEMENT (Honours)  
[BBA-ITM (Hons)]**

**Semester :I**

**Proposed Course Structure**

| Course  | Name of Course                              | T/P | Credit | Exam Duration in Hrs. | Component of Marks |               |               |
|---|---|-----|--------|-----------------------|--------------------|---------------|---------------|
|   |   |     |        |                       | Internal           | External      | Total         |
|   |   |     |        |                       | Total/Passing      | Total/Passing | Total/Passing |
| <b>Ability-Enhancement Course</b>                               | Fundamentals of English Language Skills – I | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Skill -Enhancement Elective Course</b>                       | Environmental Studies                       | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Core Management Course</b>                                   | Business Management Theory & Practices-I    | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Micro Economics                             | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Fundamentals of Accountancy                 | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Company Management-I                        | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Core IT Course</b>   | Personal Computer and Software Packages     | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Discipline Specific Management Elective Course (Any One)</b> | Business Mathematics – I                    | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Management for MSMEs                        | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Discipline Specific IT Elective Course</b>                   | Computer Organization                       | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Digital Computer Electronics                | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Fundamentals of English Language Skills – I</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

**This course will enable student:**

1. To use grammatically correct language
2. To Listen to and respond appropriately
3. To comprehend written text in various forms
4. To articulate thoughts and feelings
5. To express thoughts and ideas in writing
6. To understand basics of communication
7. To practice business correspondence

| <b>Unit</b>                              | <b>Description in detail</b>  | <b>Weightage</b> |
|--|---|------------------|
| <b>I</b><br><br>Theory<br>+<br>Practical | <p><b>Reading:</b><br/>Importance of reading, strategies of reading to be discussed before giving following practices.</p> <ol style="list-style-type: none"> <li>1. Reading Literature: Text: <b>“Chinar – An Anthology of Prose and Poems”</b> Foundation Books. (Selected Five Chapters)               <ol style="list-style-type: none"> <li>1. <i>The Suitor and Papa</i> by Anton Chekhov</li> <li>2. <i>The Star Ducks</i> by Bill Brown</li> <li>3. <i>The Daffodils (poem)</i> by William Wordsworth</li> <li>4. <i>Quality</i> by John Galsworthy</li> <li>5. <i>Youth and the Tasks Ahead</i> (essay) by Karan Singh</li> </ol> </li> <li>2. Reading official letters and Profiles</li> <li>3. Reading advertisements</li> <li>4. Reading news reports</li> <li>5. Reading charts, tables, schedules, graphs</li> <li>6. Reading online content</li> </ol> | <b>25%</b>       |
|  |   |                  |

|   |  |   |
|---|--|---|
| <p style="text-align: center;"><b>II</b></p> <p>Theory</p>                      | <p><b>Grammar &amp; Vocabulary:</b></p> <p><b>A. Grammar:</b></p> <ol style="list-style-type: none"> <li>1. Sentence Structure</li> <li>2. Tenses &amp; Voice</li> <li>3. Verbs &amp; Modals</li> <li>4. Connectives &amp; Prepositions</li> </ol> <p><b>B. Vocabulary:</b></p> <ol style="list-style-type: none"> <li>1. Just Name it (Nouns &amp; Pronouns)</li> <li>2. Describe it (Adjectives &amp; Adverbs)</li> <li>3. Etymology &amp; Affixes (Prefixes &amp; Suffixes)</li> <li>4. Idioms &amp; One word substitute (Selected)</li> </ol> <p><b>Registers:</b> (Based on Business Benchmark, by Norman Whitby. Student's Book, 2<sup>nd</sup> Edition. South Asian Edition. Cambridge University Press.) <i><b>A workbook to be prescribed for students to practice exercises on these topics:</b></i></p> <ol style="list-style-type: none"> <li>1. Vocabulary to describe: objects, component, parts, shapes, dimensions, materials, describing problems with equipment.</li> <li>2. Verbs to describe to describe process, verbs to noun, nouns to verbs</li> <li>3. Words for advertisement, marketing, appointments travel etc.</li> <li>4. Words to describe cause and effect</li> </ol> | <p style="text-align: center;"><b>25%</b></p> |
|   |  |   |
| <p style="text-align: center;"><b>III</b></p> <p>Theory<br/>+<br/>Practical</p> | <p><b>A. Business Correspondence</b></p> <p><b>Parts of Layout:</b> Letterhead/Heading, Date &amp; Reference, Inside Address, Subject line, Salutation, Complimentary Close &amp; Signature, Copies &amp; Enclosures. (<b>Short notes may be asked</b>)</p> <p><b>B. Writing:</b></p> <p>Students may be motivated for analytical thinking and putting thoughts into words by giving prompts on current topics, ideas, opinions, facts etc.</p> <ol style="list-style-type: none"> <li>1. Jumbled sentences</li> <li>2. Dialogue Writing</li> <li>3. Writing sentences &amp; paragraphs: requesting information, describing</li> <li>4. Writing emails</li> </ol> <p>Writing inquiry and order Letters</p>   | <p style="text-align: center;"><b>25%</b></p> |

|                     |  |            |
|---------------------|--|------------|
| <b>IV</b><br>Theory | <b>Communication:</b> <ol style="list-style-type: none"> <li>1. Concept , Nature &amp; Definition of Communication</li> <li>2. Process of Communication (Diagrams &amp; Models)</li> <li>3. Characteristics of Business Communication <ul style="list-style-type: none"> <li>- Principles of Communication: correctness, completeness, conciseness, clarity, courtesy, control and coordination</li> </ul> </li> </ol> | <b>25%</b> |
|---------------------|--|------------|

### Practical: Listening & Speaking:

#### A. Listening:

1. **Business Benchmark, by Norman Whitby.** Student's Book, 2<sup>nd</sup> Edition. South Asian Edition. Cambridge University Press.
2. **Listening to** at least one **Audio book – Google play**
3. **Watching Online** Videos/ short films

#### B. Speaking:

1. Spelling & Sounds (Phonetics)
2. Stress & Intonation
3. Lesson 1 to 5 (PART- I) of the book: **Spoken English, by KamleshSadananda and SushilaPunitha**, A Foundation Course
4. **Functions & Notions:** Greeting, Introduction, Exchange of Information, Telephonic Talk, Instruction, Requests, Directions, Thanking, Invitation, Permission, Compliments, Talking about, Describing etc.

*Standard Language Lab software is recommended*

### Outcome:

#### By the end of this course student will be able to:

1. Use standard English in spoken and written form
2. Understand varieties of spoken English
3. Read, understand and analyze written forms of English
4. Express ideas and thoughts in spoken form
5. Write, describe and explain thoughts and ideas in writing
6. Understand basic of business communication
7. Write formal business correspondence



### **Recommended Pedagogy:**

1. Classroom Interaction
2. Activities based on LSRW in Language Lab. Blended teaching-learning wherein certain language related tasks/ activities may be conducted outside classroom using social media and same can be discussed in the class/Lab next day.
  - a. Listening: Practicing competitive exam tests: like IELTS, TOEFL etc.
  - b. Speaking: Recording and uploading on Google Drive/ Local Server
  - c. Reading: Online content & Audio book from Google audiobooks
  - d. Writing: Short write ups to long essays on Google Doc. Writing of short reviews.
3. Workbook Exercises

### **Evaluation Scheme:**

- |                                  |    |
|----------------------------------|----|
| 1. Internal (Theory + Practical) | 40 |
| 2. External (Theory + Practical) | 60 |

### **Evaluation Components:**

- Written Tests, Listening tests, Viva Voce and Journal Writing

### **Reference Books:**

1. P. Kiranmai Dutt & Geetha Rajeevan. Basic Communication Skills. Foundation (with CD)
2. J P Parikh, Anshu Surve, Swarnabharati, Asma Bahrainwala. Business Communication: Basic Concepts and Skills. Orient Blackswan
3. Jayashree Murthy. English Guide cum Workbook. Himalaya Publishing House
4. Longman Essential Activator. Put your ideas into words. Longman Corpus Network.
5. Grant Taylor. English Conversation Practice. Tata McGraw Hill Publishing Company Ltd. New Delhi.
6. L. Gartside. Revised by Shirley Taylor. Model Business Letters. ELBS with Pitman Publishing. British Government.
7. Urmila Rai & S M Rai. Business Communication. 9<sup>th</sup> Revised Edition, Himalaya Publishing House
8. Rajendra Pal & J S Korlahalli. Essentials of Business Communication. Sultan Chand & Sons.

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: ENVIRONMENTAL STUDIES</b> | <b>Total Credit: 4</b> |
|--|------------------------|

**Objectives:**

1. To learn and gain knowledge about environment, its resources and availability
2. Create concern about the changing environment of our mother earth along with the basic concept of natural resources, its types and forms.
3. How our ecosystem functions as well as how biodiversity varieties help in our survival and who all are parts of it as well as how humans harm them.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>INTRODUCTION TO ENVIRONMENT</b> <ul style="list-style-type: none"> <li>▪ <b>Meaning, Biotic &amp; Abiotic Resources,</b></li> <li>▪ <b>Components of Environment</b></li> <li>▪ <b>Renewable &amp; Non Renewable Resources :</b> <ul style="list-style-type: none"> <li>▪ Forest Resources,</li> <li>▪ Water Resources,</li> <li>▪ Mineral Resources &amp; Land Resources</li> </ul> </li> </ul> | <b>25%</b>       |
| <b>II</b>   | <b>NATURAL RESOURCES</b> <ul style="list-style-type: none"> <li>▪ Spheres of Earth</li> <li>▪ Role of Individual in Conserving Natural Resources.</li> <li>▪ Energy Resources – Conventional &amp; Non-Conventional (Advantages &amp; Limitations)</li> <li>▪ Case Studies of Various Resources over Utilization Problems in India</li> </ul>   | <b>25%</b>       |
| <b>III</b>  | <b>ECOSYSTEMS</b> <ul style="list-style-type: none"> <li>▪ Concept, Structure &amp; Functions</li> <li>▪ Types Characteristics &amp; Threats to Forest, Grassland, and Desert &amp; Aquatic Ecosystems.</li> <li>▪ Role of Individual in Sustaining the Ecosystems</li> </ul>   | <b>25%</b>       |

|           |  |            |
|-----------|--|------------|
| <b>IV</b> | <b>BIODIVERSITY</b>  | <b>25%</b> |
|           | <ul style="list-style-type: none"> <li>▪ Introduction, Types – Genetic, Species, Ecosystems</li> <li>▪ Biodiversity at Global, National &amp; Local Levels</li> <li>▪ Threats to Biodiversity</li> <li>▪ Methods of Conserving of Biodiversity.</li> </ul> |            |

**Outcome:**

1. Students will have a deeper understanding of how our environment functions.
2. A better learning of all the natural resources availability and how we use it. Along with it how do humans threaten the natural resources existence on earth?
3. Students will gain knowledge about ecosystems existence in India as well as how rich biodiversity exists in India.
4. The large no. of variety of species found in environment and its uses for our survival and how humans are threatening their existence by over utilization of resources.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Environmental Studies by ErachBarucha
2. Basics of Environmental Studies – S.Chand Publication by Er.ReenaPopawala
3. Fundamental concepts in Environmental Studies – S.Chand Publication by Dr.D D Mishra

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Business Management Theory &amp; Practice - I</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

1. The students will become aware about the management theory and practice
2. The students will understand the role and importance of Planning, Organizing, Directing, and Leadership in businesses
3. The students will become aware of the principles of management in the real life

| <b>Unit</b> | <b>Description in detail</b>   | <b>Weightage</b> |
|-------------|--|------------------|
| <b>I</b>    | <b>Management Thoughts &amp; Theories:</b><br>Management theories: Scientific management theories by F W Taylor (Principles, elements/techniques), administrative theories by Henry Fayol (Principles), Bureaucracy theory by Max Webber (Principles, characteristics, advantages & disadvantages)<br>Introduction to management: Concept, Functions of Management (POSDCORB), Management V/S Administration, Levels of Management | <b>25%</b>       |
| <b>II</b>   | <b>Planning:</b><br>Concept, Characteristics, Importance, Limitations, Process, Types of Plans, Planning Premises, Obstacles   | <b>25%</b>       |
| <b>III</b>  | <b>Organizing:</b><br>Meaning & Definition of Organisation - Guiding Principles of Organisation - Process of Organisation - Delegation of Authority: Meaning & Definition, Elements & Advantages - Centralization V/S Decentralization - Forms of Organisation Structure: Line, Functional, Line & Staff   | <b>25%</b>       |
| <b>IV</b>   | <b>Directing and Leadership:</b><br>(A) Directing: Meaning and Definition, Elements, Importance, Principles of Direction. (B) Leadership: Meaning and Definition, Nature, Importance, Style of leadership: Autocratic, Democratic, Free rein, Quality of a good leader.  | <b>25%</b>       |

**Outcome:** Students will understand various theories of management, importance of planning in business, importance of organizing, need for directing and various leadership styles used in business.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Principles & Practices of Management by L M Prasad
2. Business Organization & Management by C B Gupta
3. Modern Business Organization & Management by S A Sherlekar & V S Sherlekar
4. Management by Koontz and Weighrich

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Micro Economics</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:** To acquaint the students of management with basic micro economic concepts and theories applicable in management practices.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Nature and scope of economics</b><br><br>Introduction to Economics<br>Definitions of Economics with criticism<br>Nature of Economics<br>Subject Matter of Economics  | <b>25%</b>       |
| <b>II</b>   | <b>Basic economic concepts, basic problems of an economy and role of price mechanism</b><br><br>Basic Concepts - Economic and non -economic activity, goods and services, utility and types of utility, price and value, wealth, welfare, equilibrium, Production, Consumption, Entrepreneur<br>Basic problems of an economy, Economics Systems – Capitalism, Socialism and Mixed Economic System | <b>25%</b>       |
| <b>III</b>  | <b>Product Pricing</b><br><br>Meaning of demand, determinants of demand, law of demand, change in demand, meaning of supply, determinants of supply, the law of supply, change in supply, Equilibrium price, Effect of Time element on pricing.   | <b>25%</b>       |
| <b>IV</b>   | <b>Factor Pricing</b><br><br>Marginal productivity theory of distribution; Theories of wage determination; Wages and collective bargaining; Wage differentials; Rent — Scarcity rent; Differential rent; Quasi rent; Interest —Classical and Keynesian theories; Profits — Innovation, risk and uncertainty theories.   | <b>25%</b>       |

**Outcome:**

1. Explain the Meaning of Economics, describe the Meaning and Nature of Economics and describe the Scope of Economics.
2. Explain the Basic Problems faced by an Economy, describe how Different Economies Solve their Basic Economic Problems and explain the Role of Price Mechanism in Solving the Basic Problems of an Economy.
3. Explain the Meaning of Demand, describe what Determines Demand, explain the Law of Demand and the difference between Movement along the Demand Curve and Shift of the Demand Curve.
4. Explain the meaning of supply, explain specific examples of determinants of supply, describe the law of supply and distinguish between movements on the supply curve and shift of the supply curve.
5. Explain the principles of factor pricing and understand underlying theories.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Lipsey, R.G. and K.A. Chrystal (1999), Principles of Economics (9th Edition), Oxford University Press, Oxford.
2. Samuelson, P.A. and W.D. Nordhaus (1998), Economics, Tata McGraw Hill, New Delhi.
3. H.L.Ahuja (2008), Advance Economic Theory , 17<sup>th</sup> Revised Edition, S Chand & Co Ltd, New Delhi.
4. Thomas W, Gor A, (2012), Micro Economics , Shri Gajanan Press, Surat, Gujarat

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: FUNDAMENTALS OF ACCOUNTANCY</b> | <b>Total Credit: 3</b> |
|--|------------------------|

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <p><b>CONCEPTUAL FRAME WORK: (THEORY)</b></p> <ul style="list-style-type: none"> <li>• Meaning, Objectives</li> <li>• Scope &amp; Areas of Accounting</li> <li>• Advantages &amp; Limitations of Accounting</li> <li>• Business Transactions Classification of Accounts and rules of debit &amp; Credit Distinction between Capital and revenue expenditures and incomes</li> </ul> <p><b>Basic Accounting Terms</b></p> <ul style="list-style-type: none"> <li>• Assets, Liabilities, Capital, Expenses, Expenditure, Debtors, Creditors, Goods, Cost, Gain, Stock, Purchase, Sales, Loss Profit, Voucher, Discount, Transaction, Drawing, Depreciation, Reserves &amp; Provisions (Overview)</li> </ul> | <b>25%</b>       |
| <b>II</b>   | <p><b>ACCOUNTING PRINCIPLES AND CONCEPTS: (THEORY)</b></p> <ul style="list-style-type: none"> <li>• General Accounting Principles</li> <li>• Account Concepts and Conventions for Profit &amp; Loss Account &amp; Balance Sheet</li> <li>• Introduction of Accounting Standards issued by ICAI: <ul style="list-style-type: none"> <li>➤ AS 1 Disclosure of Accounting Policies</li> <li>➤ AS 2 Valuation of Inventories</li> <li>➤ AS 6 Depreciation Accounting</li> <li>➤ AS 9 Revenue Recognition</li> </ul> </li> <li>• Utility of Accounting Standards</li> </ul>  | <b>25%</b>       |
| <b>III</b>  | <p><b>ACCOUNTING CYCLE : (EXAMPLES ONLY)</b></p> <ul style="list-style-type: none"> <li>• Introduction of Journal, Subsidiary books and Ledgers</li> <li>• Types of errors taking place in account (Theory Only)<br/>Examples on recording transactions into journal</li> <li>• Posting into ledgers, Balancing and preparation of Trail Balance</li> </ul>   | <b>25%</b>       |



|           |   |            |
|-----------|---|------------|
| <b>IV</b> | <b>FINAL ACCOUNTS OF SOLE PROPRIETOR: (EXAMPLES ONLY)</b> <ul style="list-style-type: none"><li>• Preparation of Trading Account, Profit &amp; Loss Account and Balance Sheet</li></ul> | <b>25%</b> |
|-----------|---|------------|

**Outcome:** Students will be able to understand basics of Accounting Procedure.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Advanced Accountancy 1-Maheshwari S N & Maheshwari SK
2. Fundamentals of Financial Accounting-Sehgal Ashok and Sehgal Deepak
3. Advanced Accountancy-Tulsian
4. Advanced Accountancy 1-GuptaRadhaswamy
5. Principles & Practice of Accountancy Gupta R L & Gupta VK
6. Advanced Accountancy-Jain S P & Narang KL
7. Financial Accounting-Khanka SS
8. FinancialAccounting-Narayanaswamy

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |  |
|--|--|
| <b>TITLE OF PAPER: Personal Computer and Software Packages</b> | <b>Total Credit: 3</b><br><b>(Practical Labs: 6)</b> |
|--|--|

**Objectives:** To introduce the basics of personal computing and presentation tools.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <p><b>Word Processing Tool:</b><br/>           Introduction to word processing and word processor, Creating, Editing, Formatting, Viewing of Document, Header &amp; Footer Option, Change Case, Drop Cap, Search and replacement facility, Print, Mail Merge Facility, Spelling and Grammar, Table creation, deletion, selection and formatting, Drawing toolbar facilities</p>   | <b>25%</b>       |
| <b>II</b>   | <p><b>Spreadsheet Tool Basics:</b><br/>           Introduction to Spread Sheet, All Formatting Categories For a Cell, Formula and Function Concepts, In-Built Functions- Math &amp; Trig Functions: Sum(), Product(), Abs(), Fact(), Int(), Sumif(), Power(), Mod(), Round(), Trunc(), String functions: Lower(), Upper(), Proper(), Len(), Mid(), Substitute(), Exact(), Find(), Concatenate(), Rept(), Trim(), Statistical Functions: Average(), Count(), Countif(), Counta(), Max(), Min()</p> | <b>25%</b>       |
| <b>III</b>  | <p><b>Spreadsheet Tool Advanced:</b><br/>           Logical Functions: And(), Or(), Not, If(), Lookup and Reference e Functions: Vlookup(), Match(), Index(), Advance Spreadsheet Facilities: Graph Plotting Facilities (with formatting graph), Sort option, AutoFilter option, Advance Filter, Pivot Table &amp; Chart Facility.</p>  | <b>25%</b>       |
| <b>IV</b>   | <p><b>Presentation Tool:</b><br/>           Creating Presentation, Formatting Slides, Slide Transition, Slide Animation, Inserting Pictures, Sound, Chart, etc. Loop</p>  | <b>25%</b>       |

|  |  |  |
|--|--|--|
|  | creation to run slides, drawing toolbar, Linking Files & Slides. |  |
|--|--|--|

**Outcome:**

This course will enable the students to prepare documents and reports, professional presentations and perform basic to intermediate data analysis.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. R K Taxali: PC Software For Windows 98 Made Simple
2. Relevant Manuals of the Tools

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|   |                        |
|---|------------------------|
| <b>TITLE OF PAPER: BUSINESS MATHEMATICS-I</b> | <b>Total Credit: 4</b> |
|---|------------------------|

**Objectives:**

1. To provide college students with reinforcement of mathematical computations.
2. This course is designed to provide the students a strong foundational introduction to the fundamental concepts in Mathematics.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Mathematical Concepts:</b> Arithmetic operator, percentage, ratio, rate, proportion, constant, variables, Log and antilog, functions, Linear and nonlinear functions, Indices, powers or exponents, Arithmetic Progression (A.P.) Geometric Progression (G.P.), Mathematical symbols/notations, Linear Equation, graph of a function   | <b>25%</b>       |
| <b>II</b>   | <b>Set theory:</b><br>Concept of Sets, types of sets (empty, singleton, finite, infinite, universal, complement, Subsets, power) Set operations: Equality, union and intersection, difference and symmetric difference of two sets, Laws of algebra of sets, Venn diagram up to three sets. (Only examples).<br><b>Determinants:</b> Determinants of order two and three, its properties, Solving a system of linear equations using Cramer's rule for two variables. | <b>25%</b>       |
| <b>III</b>  | <b>Matrix: Meaning, Difference between determinants and Matrix, Types of Matrices,</b> Matrix operations (Addition, Subtraction, scalar multiplication, multiplication and Equality), Inverse of a Matrix (up to order three) using ad-joint of a matrix, Solution of Equations by Inverse of Matrix.   | <b>25%</b>       |
| <b>IV</b>   | <b>Mathematics in finance:</b> Simple and Compound Interest: Interest compounded once a year, k-times in a year, continuous, nominal and effective rate of interest, Annuity-Present and future value, sinking funds.   | <b>25%</b>       |

**Outcome:**

Students will be able to

1. understand and employ equations, formulae, and mathematical expressions in a variety of contexts.
2. solve business problems through functions and matrices.
3. demonstrate skills required in mathematically intensive areas of commerce such as Finance and Economics.
4. show critical thinking and problem solving skills in a variety of contexts

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Kapoor, V.K.: Business Mathematics, Sultan Chand and Sons, New Delhi
2. PetrZimba and Robert L. Brown: Mathematics of Finance, Schaum's series (Second edition), Tata McGraw Hill
3. Singh, J. K.: Business Mathematics, Himalaya Publishing House

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|   |                        |
|---|------------------------|
| <b>TITLE OF PAPER: MANAGEMENT FOR MSMEs</b> | <b>Total Credit: 3</b> |
|---|------------------------|

**Objectives:**

1. To develop the understanding amongst the learners about the concept of Entrepreneurship and the Key Challenges in developing MSME's in India.
2. To develop amongst the learners the understanding of Government support for MSMES.
3. To enhance understanding about the policy initiatives for MSMES.
4. To develop understanding about the emerging trends and institutions supporting MSMES

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>MSMES IN INDIA</b><br>Concept of Entrepreneur & Entrepreneurship, Quality & Characteristics of Entrepreneurs, Entrepreneurial Motivation<br>MSMEs: Definition, Performance, Key Challenges & Steps involved in setting up MSMEs  | <b>25%</b>       |
| <b>II</b>   | <b>GOVERNMENT SUPPORT FOR MSMES</b><br>Skill Development, Market Linkages, Technology Upgradation, Cluster Development & Finance Availability.  | <b>25%</b>       |
| <b>III</b>  | <b>POLICY INITIATIVES FOR MSMEs</b><br>ASPIRE- A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship<br>The MSME Development Act, 2006 (Salient Features)<br>The MSME Development Act (Amendment) Bill, 2015<br>E-Governance Initiatives/ Digital Initiatives | <b>25%</b>       |
| <b>IV</b>   | <b>EMERGING TRENDS &amp; INSTITUTIONS SUPPORTING MSME</b><br>Overview of GATT and World Trade Organization (WTO), Intellectual Property Rights (IPR), International SME Network (INSME) and Bar Coding  | <b>25%</b>       |

**Outcome:**

1. Learners will develop understanding about the concept of Entrepreneurship and the Key Challenges in developing MSME's in India.
2. Learners will develop clarity about the Government support for MSMES.
3. Learners will achieve understanding about the policy initiatives for MSMES.
4. Learners will achieve clarity about the emerging trends and institutions supporting MSMES

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Dynamics of Entrepreneurship Development & Management: Vasant Desai
2. Entrepreneurship Development in India: C B Gupta & N P Srinivasan
3. Entrepreneurship Development: S S Khanka
4. Entrepreneurship and small Business Management: C B Gupta & S S Khanka
5. Small Business Entrepreneurship: Paul Burns & Jim Dewhunt

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Computer Organization</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

The purpose of introducing this subject is to make the students get equipped with the following:

1. How Numbers and Characters are represented inside the computer at the binary level and the various ways to detect errors in storage.
2. To get idea of the basic building blocks of an electronics circuit and how simple logic can be constructed using them
3. How the processor and its components together can execute the instructions passed to them
4. The various I/O devices which allow to read or display information to the user

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Number System and its Arithmetic</b><br>Introduction to Number Systems - Conversions: Decimal, Binary, Octal, Hexadecimal - Binary Arithmetic - Character codes - ASCII, EBCDIC, UNICODE - Representation of Numbers: (Integer)- Signed magnitude method, 1's complement method, 2's complement method, Excess Notation method - Representation of Float Numbers: Single precision, Double precision method - Error Detection and Correction Code: Parity bit method, Hamming code | <b>25%</b>       |
| <b>II</b>   | <b>Gates and Boolean algebra</b><br>Gates - AND Gate, OR Gate, NOT Gate, NAND Gate, NOR Gate, XOR Gate, XNOR Gate, Bubbled AND Gate, Bubbled OR Gate - Boolean algebra - Truth Tables - De Morgan's Theorems, Circuit Equivalence   | <b>25%</b>       |
|             |   |                  |



|            |  |            |
|------------|--|------------|
| <b>III</b> | <b>Processor Functions and Components</b><br>Instruction Execution Cycle - CPU Organization: Data path of a typical VONNeumann machine - Functioning of a processor of hypothetical computer - Parallel Instruction Execution - Categories of Parallel Machines, Array Processors, Multifunctional Units, Pipeline Machines, Multiprocessors - Direct Addressing, Indirect Addressing, Register Addressing, Stack Addressing | <b>25%</b> |
| <b>IV</b>  | <b>Overview of I/O and Memory Devices</b><br>Overview of I/O devices: Hard Disk, Floppy Disk, CD-ROM (Introduction, Advantages and Disadvantages) - Introduction to RAM, ROM, PROM, EEPROM - Printers (Line, Dot Matrix, Inkjet, Laser) – VDU – Mouse – Keyboard – Scanners – Plotters - OCR (MICR, Barcode Reader)  | <b>25%</b> |

**Outcome:**

The students will get to understand how information is represented inside a computer. They will also learn how the information is stored and processed at the most basic level inside the computer.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
2. Malvino Brown: Digital Computer Electronics, 3rd Edition
3. Malvino and Leach: Digital Principles and Applications, 4th Edition.
4. Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
5. Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
6. S.K.Basandra: Computers Today GalgotiaPubli.
7. Peter Norton: Introduction to Computers TMH.

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: I**

**Syllabus with effect from: JUNE 2020**

|   |                        |
|---|------------------------|
| <b>TITLE OF PAPER: Digital Computer Electronics</b> | <b>Total Credit: 3</b> |
|---|------------------------|

**Objectives:**

The purpose of introducing this subject is to make the students get equipped with the following:

1. How Numbers and Characters are represented inside the computer at the binary level.
2. To get idea of the basic building blocks of an electronics circuit and how simple logic can be constructed using them
3. The combinational circuits, which allow simple computations and conversions of data from one system to another.
4. The various ways in which the data can be retained inside the memory register.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Number Systems</b><br>Number System: Binary, Octal, Decimal & Hexadecimal and their inter-conversions - Character Representation - Data Representation: positive, negative, maximum and minimum number representation (related to 8 bit number) - Real number representation - Binary arithmetic: Binary Addition, binary subtraction using 1's and 2's compliment | <b>25%</b>       |
| <b>II</b>   | <b>Digital Circuits and its Simplification</b><br>Logic gates – Properties and Symbolic Representation - Truth Table (up to 3 input) - NOR and NAND gates as universal gates - De-Morgan's theorem - Simplification of logic expression using Laws of Boolean algebra - Circuit Equivalence   | <b>25%</b>       |
| <b>III</b>  | <b>Combinational Circuits</b><br>Decoder & Encoder - Half adder & Full adder - 4-bit binary Adder/Subtractor - Multiplexer & Demultiplexer  | <b>25%</b>       |
|             |   |                  |

|           |  |            |
|-----------|--|------------|
| <b>IV</b> | <b>Sequential Building Blocks</b><br>Flip-Flop (RS, D, JK, Master-slave && T flip-flops) - Registers & Shift registers - Counters: Synchronous and Asynchronous Designing method | <b>25%</b> |
|-----------|--|------------|

**Outcome:**

The student will get to understand the data, its conversion & representation from the electronics point of view.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
2. Malvino Brown: Digital Computer Electronics, 3rd Edition
3. Malvino and Leach: Digital Principles and Applications, 4th Edition.
4. Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
5. Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
6. S.K.Basandra: Computers Today Galgotia Publi.
7. Peter Norton: Introduction to Computers TMH.
8. William H. Gothmann: Digital Electronics – An Introduction to Theory and Practice , 2nd Edition, PHI , 1982

# SEMESTER II

**CVM University**

**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester :II**

**Proposed Course Structure**

| Course  | Name of Course                               | T/P | Credit | Exam Duration in Hrs. | Component of Marks |               |               |
|---|--|-----|--------|-----------------------|--------------------|---------------|---------------|
|   |  |     |        |                       | Internal           | External      | Total         |
|   |  |     |        |                       | Total/Passing      | Total/Passing | Total/Passing |
| <b>Ability-Enhancement Course</b>                     | Fundamentals of English Language Skills – II | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Skill -Enhancement Elective Course</b>             | Climate Change & Sustainable Development     | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Core Management Course</b>                         | Business Management Theory & Practices-II    | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Macro Economics                              | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Corporate Accountancy                        | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Company Management-II                        | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Core IT Course</b>                                 | Programming Fundamentals                     | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Discipline Specific Management Elective Course</b> | Business Mathematics – II                    | T   |        | 2                     | 40/14              | 60/21         | 100/35        |
|   | Innovation Management                        | T   | 3      | 2                     | 40/14              | 60/21         | 100/35        |
| <b>Discipline Specific IT Elective Course</b>         | Computer Networks                            | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |
|   | Networking Technologies                      | T/P | 3      | 2                     | 40/14              | 60/21         | 100/35        |

**Note: At Semester I and II Syllabus for Regular and Hons. Programs are similar.**

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**  
**Semester: II**  
**Syllabus with effect from: DECEMBER 2020**

|   |                        |
|---|------------------------|
| <b>TITLE OF PAPER: Fundamentals of English Language Skills – II</b> | <b>Total Credit: 3</b> |
|---|------------------------|

**Objectives:**

**This course will enable student:**

1. To use grammatically correct language
2. To Listen to and respond appropriately
3. To comprehend written text in various forms
4. To articulate thoughts and feelings
5. To express thoughts and ideas in writing
6. To understand basics of communication
7. To practice business correspondence

| <b>Unit</b>                              | <b>Description in detail</b>   | <b>Weightage</b> |
|--|--|------------------|
| <b>I</b><br><br>Theory<br>+<br>Practical | <p><b>Reading:</b><br/>Importance of reading techniques like skimming &amp; scanning to be discussed before giving following practices.</p> <ol style="list-style-type: none"> <li><b>1.</b> Reading Literature: Text: <i>“Chinar – An Anthology of Prose and Poems” Foundation Books. (Selected Five Chapters)</i> <ol style="list-style-type: none"> <li>1. Appa–mam by <i>Padma Hejmadi</i></li> <li>2. The Many and the None by <i>BansuriTaneja &amp; Ashish Kothari</i></li> <li>3. Where the Mind is without Fear (poem) by <i>Rabindranath Tagore</i></li> <li>4. National Prejudice by <i>Oliver Goldsmith</i></li> <li>5. Machines and the Emotions by <i>Bertrand Russell</i></li> </ol> </li> <li><b>2.</b> Reading and Making Notes ( Excerpts)</li> <li><b>3.</b> Reading Long articles</li> <li><b>4.</b> Interpreting<br/>Comparing &amp; Contrasting</li> </ol> | <b>25%</b>       |
|  |  |                  |

|   |  |                   |
|---|--|-------------------|
| <p><b>II</b></p> <p>Theory</p>                      | <p><b>Grammar &amp; Vocabulary:</b></p> <p><b>A. Grammar:</b></p> <ol style="list-style-type: none"> <li>1. Conditionals</li> <li>2. Comparison</li> <li>3. Concord- Subject Verb Agreement</li> <li>4. Syntax</li> </ol> <p><b>B. Vocabulary:</b></p> <ol style="list-style-type: none"> <li>1. Phrasal Verbs</li> <li>2. Analogy</li> <li>3. Words Often Confused</li> <li>4. <b>Registers-</b> (Based on Business Benchmark, by Norman Whitby. Student’s Book, 2<sup>nd</sup> Edition. South Asian Edition. Cambridge University Press.) <i><b>A workbook to be prescribed for students to practice exercises on these topics:</b></i></li> </ol> <p>Describing Trends (Global), Management, Finance, Stock &amp; Share Marketing, Employment Vocabulary like Job titles, names of the departments, Sports vocabulary in business, computer terms, e mails &amp; website terms etc.</p> | <p><b>25%</b></p> |
| <p><b>III</b></p> <p>Theory<br/>+<br/>Practical</p> | <p><b>A. Business Correspondence:</b></p> <p><b>Parts of Layout:</b> Letterhead/Heading, Date &amp; Reference, Inside Address, Subject line, Salutation, Complimentary Close &amp; Signature, Copies &amp; Enclosures. (<b>Short notes may be asked</b>)</p> <p><b>B. Writing:</b></p> <p>Basic writing skills for beginners to be discussed prior to giving these practices.</p> <ol style="list-style-type: none"> <li>1. Writing Narration, Description etc.</li> <li>2. Writing memo, office order, circular, notes, requests etc.</li> <li>3. Writing complaint, Adjustment, Collection Letters</li> </ol> <p>Précis Writing</p>  | <p><b>25%</b></p> |
| <p><b>IV</b></p> <p>Theory</p>                      | <p><b>Communication:</b></p> <ol style="list-style-type: none"> <li>1. Objectives of Communication</li> <li>2. Channels of Communication: Upward, Downward, Horizontal, Grapevine and Consensus</li> </ol> <p>Barriers to Communication</p>  | <p><b>25%</b></p> |

### **Practical: Listening & Speaking:**

#### **Listening:**

1. **Business Benchmark, by Norman Whitby.** Student's Book, 2<sup>nd</sup> Edition. South Asian Edition. Cambridge University Press.
2. **Listening to** at least one **Audio book – Google play**
3. **Watching Online** Videos/ short films

#### **Speaking:**

1. Lesson 6 to 10 (PART – II) of the book: **Spoken English, by KamleshSadananda and SushilaPunitha**, A Foundation Course.
2. **Functions & Notions:** Opinions, Advice, Suggestion, Complaints, likes-dislikes, emotions, past events, assuming, inferring, giving reasons, future plans, intentions, purposes, arrangements, uncertainty, possibility, probability, necessity, ability etc.
3. Small Speech/ Oral Expressions on given topic

#### **Outcome:**

##### **By the end of this course student will be able to:**

1. Use standard English in spoken and written form
2. Understand varieties of spoken English
3. Read, understand and analyze written forms of English
4. Express ideas and thoughts in spoken form
5. Write, describe and explain thoughts and ideas in writing
6. Understand basic of business communication
7. Write formal business correspondence

#### **Recommended Pedagogy:**

1. Classroom Interaction
2. Activities based on LSRW in Language Lab.
  - a. Listening: Using competitive exam tests: like IELTS, TOEFL etc.
  - b. Speaking: Recording and uploading on Google Drive/ Local Server
  - c. Reading: Audio book from Google audiobooks.
  - d. Writing: essays on Google Doc. Writing of short reviews.
3. Workbook Exercises

#### **Evaluation Scheme:**

1. Internal (Theory + Practical) 40
2. External (Theory + Practical) 60



**Evaluation Components:**

- Written Tests, Listening tests, Viva Voce and Journal Writing

**Reference Books:**

1. P. Kiranmai Dutt & Geetha Rajeevan. Basic Communication Skills. Foundation (with CD)
2. J P Parikh, Anshu Surve, Swarnabharati, Asma Bahrainwala. Business Communication: Basic Concepts and Skills. Orient Blackswan
3. Jayashree Murthy. English Guide cum Workbook. Himalaya Publishing House
4. Longman Essential Activator. Put your ideas into words. Longman Corpus Network.
5. Grant Taylor. English Conversation Practice. Tata McGraw Hill Publishing Company Ltd. New Delhi.
6. L. Gartside. Revised by Shirley Taylor. Model Business Letters. ELBS with Pitman Publishing. British Government.
7. Urmila Rai & S M Rai. Business Communication. 9<sup>th</sup> Revised Edition, Himalaya Publishing House
8. Rajendra Pal & J S Korlahalli. Essentials of Business Communication. Sultan Chand & Sons.

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**

**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER:CLIMATE CHANGE &amp; SUSTAINABLE DEVELOPMENT</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

1. To raise awareness of climate change impact, mitigation and adaptation strategies
2. To help students understand energy crisis, acute shortage of food and water, and threat of natural calamities loom large.
3. To make the students understand the opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
4. To foster an awareness and concern about the changing environment of our mother earth along with the basic concept of natural resources.
5. To create new patterns of behaviors of individuals, groups and society as a whole towards the environment.
6. To make the students understand the opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>POLLUTION</b> <ul style="list-style-type: none"> <li>▪ Definition</li> <li>▪ Causes and Effects of Air Pollution, Water Pollution, Soil Pollution, Marine</li> <li>▪ Pollution &amp; Noise Pollution.</li> <li>▪ Role of an individual in Prevention of Pollution.</li> <li>▪ Disaster Management: Floods, Earthquakes, Cyclones &amp; Landslides</li> </ul>       | <b>25%</b>       |
| <b>II</b>   | <b>SOCIAL ISSUES&amp; SUSTAINABLE DEVELOPMENT:</b> <ul style="list-style-type: none"> <li>▪ From Unsustainable to Sustainable Development.</li> <li>▪ Urban Problems Related to Energy.</li> <li>▪ Water Conservation, Rainwater Harvesting and Watershed Management.</li> <li>▪ Resettlement &amp; Rehabilitation of People : Its Problems &amp; Concerns</li> </ul> | <b>25%</b>       |

|            |   |            |
|------------|---|------------|
| <b>III</b> | <b>CLIMATE CHANGE&amp; MITIGATION STRATEGIES:</b> <ul style="list-style-type: none"> <li>▪ Climate Change, Global Warming, Acid Rain, Ozone Layer Depletion,</li> <li>▪ Nuclear Accidents &amp; Nuclear Holocaust</li> <li>▪ Kyoto Protocol &amp; Role of UNFCCC</li> <li>▪ Mitigation Strategies</li> </ul>  | <b>25%</b> |
|            |   |            |
| <b>IV</b>  | <b>INNOVATIVE PRACTICES TO REDUCE GLOBAL WARMING</b> <ul style="list-style-type: none"> <li>▪ 3 R Practical Concept, Usages of 3 R IN INDIA</li> <li>▪ Gov. Schemes for Energy Conservation,</li> <li>▪ Benefits provided by Gov. to SSI &amp; MSI for various environment protection methods</li> <li>▪ Companies implementing methods for conservation of environment –case study.</li> </ul> | <b>25%</b> |

**Outcome:**

1. Students will have a deeper understanding of what factors are affecting our environment and which are the most important sources of pollution.
2. A better learning of different methods of storing rain water, its effectiveness and how can we sustain our energy resources
3. All the major factors which are affecting our ozone layer and factors responsible for ozone depletion and how can we reduce.
4. The role of population affecting our environment and it what form the technology helps in protecting environment and human health.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Environmental Studies by Erach Barucha
2. Basics of Environmental Studies – S.Chand Publication by Er.Reena Popawala
3. Fundamental concepts in Environmental Studies – S.Chand Publication by Dr.D D Mishra

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**  
**Semester: II**  
**Syllabus with effect from: JUNE 2020**

|   |                        |
|---|------------------------|
| <b>TITLE OF PAPER: Business Management Theory &amp; Practice - II</b> | <b>Total Credit: 3</b> |
|---|------------------------|

**Objectives:**

1. The students will become aware about the importance of staffing and manpower planning.
2. The students will generate insight about various controlling techniques.
3. The students will understand the importance of motivation and communication in business setup.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Staffing:</b><br>Concept, Meaning, nature, staffing process, importance of manpower planning, steps in manpower planning, obstacles in manpower planning.  | <b>25%</b>       |
| <b>II</b>   | <b>Controlling</b><br>Concept, Features, Importance, Steps in control process, Types of control, Techniques of Control : (A) Budgetary control-meaning, objectives, advantages & limitations (B) Break Even Analysis-concept, uses & limitations.   | <b>25%</b>       |
| <b>III</b>  | <b>Motivation:</b><br>Meaning & Definition, Nature, Importance of Motivation, Types of motivation, - Theories of Motivation (Need Hierarchy Theory by Maslow, Two Factor Theory by Herzberg and Theory X & Theory Y by McGregor)  | <b>25%</b>       |
| <b>IV</b>   | <b>Communication:</b><br>Meaning & Definition of Communication - Importance of Communication - Process of Communication - Barriers to effective Communication - Principles of effective, types of communication (formal, informal, grapevine, downward, upward, oral, verbal) with advantages and disadvantages | <b>25%</b>       |

**Outcome:**

Students will understand staffing process, controlling techniques, theories of motivation and importance of two way communication in business.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Principles & Practices of Management by L M Prasad
2. Business Organization & Management by C B Gupta
3. Modern Business Organization & Management by S A Sherlekar & V S Sherlekar
4. Management by Koontz and Weighrich

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**

**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Macro Economics</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:** To introduce various Macro Economic Analysis tools to management students.

| <b>Unit</b> | <b>Description in detail</b>   | <b>Weightage</b> |
|-------------|--|------------------|
| <b>I</b>    | <b>Introduction to ME and National Income Accounting</b><br><br>Definition, Scope, Importance and Limitations of Macro Economics, National Income Accounting: Meaning and definition of National Income, Circular Flow (Four sector model), Stock and flow concept, National Income at Current Price and Constant Price, Various concepts of National Income, Methods for measurement of National Income and difficulties in measurement of National Income. | <b>25%</b>       |
| <b>II</b>   | <b>Theory of income and employment</b><br><br>Theory of Income & Employment - Consumption function, Investment multiplier and accelerator, Liquidity preference theory of interest, Liquidity Trap, Modern theory of Interest.   | <b>25%</b>       |
| <b>III</b>  | <b>Money, banking and international trade</b><br><br>Money (Definition and Functions) and Components of Money Supply, Milton Friedman's Quantity theory of Money, Functions of Commercial banks with special emphasis on Credit Creation, Monetary policy of Central Bank, International Trade- Comparative cost theory, Balance of Payments- causes, effects and rectification measures, Exchange Rate.   | <b>25%</b>       |
| <b>IV</b>   | <b>Macro Economic Problems</b><br><br>Business Cycle, Inflation- Meaning, Types, Causes, Effects and Control of inflation - Philips curve, Direct and Indirect tax - merits and demerits, Public debt and Debt repayment, Deficit Financing – Concept and its Safe limits.   | <b>25%</b>       |

**Outcome:**

1. Describe the nature and scope of Macro Economics and explain the concepts and components of National Income and methods of NI Accounting;
2. Explain Keynesian theory of income and employment;
3. Comprehend the quantity theory of money, Monetary policy, explain the basis of international trade and balance of payments and exchange rate; and
4. Discuss business cycle, inflation, taxes and deficit financing.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Ackley, G. (1976), Macroeconomics : Theory and Policy, Macmillan Publishing Company, New York.
2. Gupta, S.B. (1994), Monetary Economics, S. Chand and Co., Delhi.
3. Heijdra, B.J. and F.V. Ploeg (2001), Foundations of Modern Macroeconomics, Oxford University Press, Oxford.
4. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi
5. Mithani D M, Money, Banking, International Trade and Public Finance, New Delhi, 2012
6. Mankiw G. N. (2003), Macro Economics (Vth Edition), Thomson South Western, Delhi.

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**  
**Semester: II**  
**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: CORPORATE ACCOUNTANCY</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:** To give basic knowledge of corporate accounts to students.

| <b>Unit</b> | <b>Description in detail</b>   | <b>Weightage</b> |
|-------------|--|------------------|
| <b>I</b>    | <b>SHARE CAPITAL</b><br><br>Types of Shares<br>Provisions relating to issue of shares<br>Examples of Issue and Allotment of shares including prorata allotment (Excluding Forfeiture and reissue of shares)  | <b>25 %</b>      |
| <b>II</b>   | <b>ISSUE AND REDEMPTION OF DEBENTURES</b><br><br>Types of Debentures<br>Accounting entries of issue and redemption of debentures(Examples)<br>Writing off Debenture Discount(Examples)<br>Redemption of debentures including purchase of own debenture and conversion of debenture into shares(Examples)<br>Debenture Redemption Fund Method(Examples)                           | <b>25 %</b>      |
| <b>III</b>  | <b>ACCOUNTING STANDARDS RELATED TO FINANCIAL REPORTING</b><br><br>AS 3 Cash Flow Statements<br>AS 4 Contingencies and Events Occurring After the Balance Sheet Date<br>AS 14 Accounting for Amalgamations<br>AS 17 Segment Reporting<br>AS 21 Consolidated Financial Statements<br>AS 25 Interim Financial Reporting<br>AS 27 Financial Reporting of Interests in Joint Ventures | <b>25 %</b>      |



|           |   |             |
|-----------|---|-------------|
| <b>IV</b> | <b>FINAL ACCOUNTS OF JOINTS STOCK COMPANIES</b>   | <b>25 %</b> |
|           | Vertical presentation of accounting with notes as per revised schedule VI, as per amendments of Companies Act-2013. |             |

**Outcome:** Students will able to understand basics corporate reporting.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Advanced Accounting 2 - Sehgal Ashok And Sehgal Deepak
2. Advanced Accounts - Shukla M C And Grawal TS
3. Problems And Solution In Adv Accounting - Gupta RL
4. Company Accounts - Gupta R L And Radhaswamy M
5. Rathmans Company Accounts Theory Problems And Solution - Rathman P V And Raju DR
6. Accounting Standards And Corporate Accounting Practice - Ghosh TP

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**

**Syllabus with effect from: DECEMBER 2020**

|   |  |
|---|--|
| <b>TITLE OF PAPER: Programming Fundamentals</b> | <b>Total Credit: 3</b><br><b>(Practical Labs: 6)</b> |
|---|--|

**Objectives:**

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Computer Languages, Flowcharts and Algorithms:</b><br>Introduction to Computer Languages with Examples, Types of Computer Languages, What are translators?, Interpreters, Compilers & Assembler, Turbo C Editor Details, Algorithm, Flowchart, Definition, Introduction, advantages, disadvantages, Symbols used in Flowcharting, Algorithm & Flowchart examples based on: Simple problems (operations), Decision making concepts, Looping Concepts.                                       | <b>25%</b>       |
| <b>II</b>   | <b>Programming Basics:</b><br>General Structure Of C Program, Character Sets, Variables, Keywords, Constants, Symbolic Constants, Basic Data Types Like Int, Char, Float, Double, Basic Operators: Arithmetic, Relational, Logical, Assignment, Shorthand Assignment, Conditional, Increment, Decrement, I / P Functions: Scanf(), Getchar(), Getch(), Gets(), O / P Functions: Printf(), Puchar(), Clrscr(), Puts() Precedence & Associativity Of Operators, Problems Based On Above Topics. | <b>25%</b>       |
| <b>III</b>  | <b>Decision Making And Looping Concepts:</b><br>Decision Making Statements: Simple IF Statement, If-Else Statement, Nested If Statement, If-Else Ladder, Switch Statement, Looping Structures: For Statement, Do...while statement, While Statement, Problems Based On Above.   | <b>25%</b>       |
|             |   |                  |

|           |   |            |
|-----------|---|------------|
| <b>IV</b> | <b>Advanced Programming Concepts:</b><br>What are Arrays? Creating, initializing and working with 1-D arrays, In-Built Functions. | <b>25%</b> |
|-----------|---|------------|

**Outcome:**

The students will learn the basic aspects of programming and understand the flow of logical writing of a program.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. E Balaguruswami: Programming in ANSI C
2. Yashwant Kanetker: Let Us C

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**  
**Semester: II**  
**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: BUSINESS MATHEMATICS-II</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

1. To provide college students with reinforcement of mathematical computations.
2. This course is designed to provide the students a strong foundational introduction to the fundamental concepts in Mathematics.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <p><b>Interpolation:</b></p> <p>Introduction and concept, Forward and Backward difference operators.</p> <p>Newton's formula for Equal and Unequal intervals:</p> <ul style="list-style-type: none"> <li>-Forward difference formula</li> <li>-Backward difference formula</li> <li>-Divided difference formula</li> </ul>  | <b>25%</b>       |
| <b>II</b>   | <p><b>Permutations and Combinations:</b></p> <p>Meaning, Fundamental principle of counting, Theorem based (without proof) on permutation and combination, Permutations of things not all different, Permutations when repetition is allowed, Circular permutations, Examples of permutation and combination.</p>  | <b>25%</b>       |
| <b>III</b>  | <p><b>Derivatives and Its Applications:</b> Introduction and Concept: Derivatives of constant function, logarithmic functions, polynomial and exponential function, Rules of derivatives: addition, multiplication, quotient, Second order derivatives,</p> <p><b>Business and economics Functions:</b> Demand, Supply, Cost, Revenue And Profit</p> <p><b>Application of Derivatives:</b> Maxima, Minima, Average Cost and Marginal Cost. Total revenue, Marginal revenue, Average</p> | <b>25%</b>       |

|           |  |            |
|-----------|--|------------|
|           | revenue.Average and Marginal profit.Price elasticity of demand.  |            |
| <b>IV</b> | <b>LPP:</b> Introduction, Meaning, Assumptions and Applications.<br>Mathematical Formulation of LPP, Solution of LPP by Graphical method.<br><b>Transportation Problems:</b> Meaning and Mathematical Form.<br>Methods to find initial basic feasible solution:<br>North – West Corner Method,<br>Least Cost Method and<br>Vogel’s Approximation Method. | <b>25%</b> |

**Outcome:**

Students will able to

1. understand and employ equations, formulae, and mathematical expressions in a variety of contexts.
2. solve business problems through functions and matrices.
3. demonstrate skills required in mathematically intensive areas of commerce such as Finance and Economics.
4. show critical thinking and problem solving skills in a variety of contexts

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Kapoor, V.K.:Business Mathematics, sultan Chand and Sons, New Delhi
2. S C Gupta: Fundamentals of Statistics, Himalaya Publishing House
3. N.D. Vohra: Quantitative Techniques in Management, Tata McGraw Hill, New Delhi.
4. Petr Zima and Robert L. Brown: Mathematics of Finance, Schaum’s series (Second edition), Tata McGraw Hill
5. Singh, J. K.: Business Mathematics, Himalaya Publishing House.

**CVM UNIVERSITY**  
**PROGRAM : BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**  
**Syllabus with effect from: DECEMBER 2020**

**Title of Paper: Innovation Management**

**Total Credit: 3**

**Objectives:**

1. To make understand student various Principles of Innovation Management
2. To make understand student various Techniques and Tools of Innovation Management

| <b>Unit</b>                          | <b>Description in detail</b>   | <b>Weightage</b> |
|--------------------------------------|--|------------------|
| <b>I Innovation &amp; Creativity</b> | Innovation: Concept, characteristics, Importance, Principles of innovation,<br>Process of Innovation.<br>Creativity: Concept of creativity, Creativity process, Hurdles to creativity.   | <b>25%</b>       |
| <b>II Innovation Management</b>      | Concept, Scope, Characteristics, Evolution of Innovation management,<br>Significance, Factors influencing innovation   | <b>25%</b>       |
| <b>III Tools for Innovation</b>      | Creativity thinking: Traditional v/s Creative thinking, Individual creativity<br>Techniques: Meditation, Self-awareness, & Creative Focus<br>Group Creative Techniques: Brain storming, Off The Wall Thinking & ThinkingHats method. | <b>25%</b>       |
| <b>IV Areas of Innovation</b>        | Product Innovation: Concept, packaging and positioning innovation;<br>Process<br>Innovation: Concept, requirement & types: Benchmarking-TQM-<br>Business Process Reengineering   | <b>25%</b>       |

**Outcome:**

Students will Understand Need and Importance of Innovation to Increase Productivity of Business

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. Paul Trott, "Innovation Management & New Product Development", published by Pitman, 2000.
2. Innovation Management by C S G Krishnamacharyulu & Lalitha R, Himalaya Publishing House
3. James A Christiansen, "Competitive Innovation Management", published by Macmillan Business, 2000.
4. S S George, "Managing innovation in the New Millennium", The ICFAI Press, 2004.

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**

**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Computer Networks</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

The purpose of introducing this subject is to make the students get equipped with the following:

1. What is Networking and the various types of Networks
2. How transmission takes place between two entities on the network
3. How the entities of the network can be laid out logically
4. The various media and devices that are used to build a network

| <b>Unit</b> | <b>Description in detail</b>   | <b>Weightage</b> |
|-------------|--|------------------|
| <b>I</b>    | <b>Basics of Networking</b><br><br>Introduction of networking (Definition) - Advantages and Disadvantages of Networking - LAN, MAN, WAN - LAN Components - OSI model   | <b>25%</b>       |
| <b>II</b>   | <b>Transmission Technology</b><br><br>Digital and Analog Transmission - Transmission mode (Half Duplex and Full Duplex Transmission) - Serial Transmission, Parallel Transmission - Synchronous & Asynchronous Transmission - Transmission Impairment (Attenuation, distortion, Noise) | <b>25%</b>       |
| <b>III</b>  | <b>Topology and Protocols</b><br><br>LAN Topologies (Bus, Star, Ring, Tree, Mesh, Intersecting Rings) - Protocols (Definition), Need of Protocols - Protocols (CSMA/CD, CSMA/CA)   | <b>25%</b>       |
| <b>IV</b>   | <b>Networking Media and Devices</b><br><br>Types of transmission media - Guided Media - (Twisted pair cables, Coaxial Cables, Optical fibers), Devices - Hubs, Switches, Bridges, Routers, Gateways, Modems  | <b>25%</b>       |



**Outcome:**

The students will get to learn the types of networks and their arrangements, along with the various methods/media for transmitting data and interconnecting networks.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. B. A. Forouzan: Data Communications and Networking 2nd Edition, TMH
2. Andrew S Tannenbaum: Computer Networks, 3rd Ed., Pearson-Prentice Hall
3. B. A. Forouzan: Local Area Networks, TMH

**CVM UNIVERSITY**  
**PROGRAM: BACHELOR OF BUSINESS ADMINISTRATION- INFORMATION**  
**TECHNOLOGY MANAGEMENT (HONOURS)**

**Semester: II**

**Syllabus with effect from: DECEMBER 2020**

|  |                        |
|--|------------------------|
| <b>TITLE OF PAPER: Networking Technologies</b> | <b>Total Credit: 3</b> |
|--|------------------------|

**Objectives:**

The purpose of introducing this subject is to make the students get equipped with the following:

1. What is Networking and the various types of Networks
2. How transmission and modification of data takes place for multiple transmissions on a single line.
3. A few protocols that govern the transmission of data at a few layers of OSI model
4. The protocols used at the Network layers of OSI.

| <b>Unit</b> | <b>Description in detail</b>  | <b>Weightage</b> |
|-------------|---|------------------|
| <b>I</b>    | <b>Networking Basics</b><br><br>Introduction to Networking: Need, Advantages and Disadvantages<br>- Computer Communication and need to transmit data over long distances - Types of Networks and their characteristics - Difference between Multi-user system and LAN - Layered Model for LAN/WAN internetworking   | <b>25%</b>       |
| <b>II</b>   | <b>Switching &amp; Multiplexing</b><br><br>Introduction to Switching (Circuit Switching, Packet Switching, Message Switching) - Introduction to Shift Keying (Amplitude Shift keying (ASK), Frequency Shift Keying (FSK), Phase Shift Keying (PSK)) - Frequency Division Multiplexing (FDM) - Time Division Multiplexing (TDM)                            | <b>25%</b>       |
| <b>III</b>  | <b>Communication Protocols &amp; Ethernet</b><br><br>Protocols - Need of protocols? - Protocol Hierarchy - Asynchronous Transmission - Synchronous Transmission – HDLC - SNMP (Simple Network Management Protocol): SNMP Model, Types of Ethernet (Standard, Fast, Giga Bit), Applications of Ethernet (10 Base 2, 10 Base 5, 10 Bases - T, 10 Bases – F) | <b>25%</b>       |

|           |  |            |
|-----------|--|------------|
| <b>IV</b> | <b>TCP/IP</b><br>Overview of TCP/IP – Network Layer(IPv4) – Addressing – Subnetting – Other Protocols in the Network Layer(ARP) – Transport Layer(TCP) – Next Generation: IPV6 | <b>25%</b> |
|-----------|--|------------|

**Outcome:**

The students will get to learn the basics of networking, how data is represented & transmitted through the networks and how this communication is governed.

**Evaluation Scheme:**

1. Internal Marks: 40
2. External Marks: 60

**Reference Books:**

1. B. A. Forouzan: Data Communications and Networking 2nd Edition, TMH
2. Andrew S Tannenbaum: Computer Networks, 3rd Ed., Pearson-Prentice Hall
3. B. A. Forouzan: Local Area Networks, TMH