

*Progressive Education Society's*  
**Modern College of Arts, Science and  
Commerce,**  
Shivajinagar, Pune 5  
(An Autonomous College Affiliated to Savitribai Phule Pune University)

## **Detailed Syllabus**

**For**

**M. Com (e-Commerce)**

**(2019-20 Course)**

**(with effect from 2019-20)**

## Semester 1 (Part 1)

Course Type	Course Code	Course / Paper Title	Hours/Week	Credit	CIA	End Sem Exam	Total
CCT-1	19BaEcoP101	Modern Operating Environment and MS office	4	3	40	60	100
CCT-2	19BaEcoP102	Statistical Methods & Analysis	4	3	40	60	100
CCT-3	19BaEcoP103	Financial And Investment Analysis	4	3	40	60	100
CCT-4	19BaEcoP104	Software Engineering	4	3	40	60	100
CCT-5	19BaEcoP105	Practical(Tally+ MS Office)	4	3	40	60	100
DEC-1	19BaEcoP106	Business Communication	4	3	40	60	100
DEC-2	19BaEcoP107	Management Information System	4	3	40	60	100
DEC-3	19BaEcoP108	Information System Security	4	3	40	60	100
AECCT-1	19CpCysP101	Cyber Security-I	1	1	-	-	25
AECCT-2	19CpHrtP102	Human Rights-I	1	1	-	-	25
		<b>Total</b>	<b>30</b>	<b>22</b>			

## Semester 2 (Part 1)

Course Type	Course Code	Course / Paper Title	Hours/Week	Credit	CIA	End Sem Exam	Total
CCT-1	19BaEcoP201	Business Process and Practices	4	3	40	60	100
CCT-2	19BaEcoP202	Financial and Management Accounting Methods	4	3	40	60	100
CCT-3	19BaEcoP203	Database Management System	4	3	40	60	100
CCT-4	19BaEcoP204	Procedure Oriented Programming Using C	4	3	40	60	100
CCT-5	19BaEcoP205	Practical (C + DBMS)	4	3	40	60	100
DEC-1	19BaEcoP206	Human Resource Management	4	3	40	60	100
DEC-2	19BaEcoP207	Operating System Concepts	4	3	40	60	100
DEC-3	19BaEcoP208	Cyber Law	4	3	40	60	100
AECCT-3	19CpCysP201	Cyber Security-I	1	1	-	-	25
AECCT-4	19CpHrtP202	Human Rights-I	1	1	-	-	25
		<b>Total</b>	30	22			

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP101**

**Course Name: Modern Operating Environment and MS-Office**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

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**Course Outcomes:** On completion of the course students will be able to:

- Have knowledge of E-Commerce, Internet, Extranet, E-commerce Security, Electronic payment System, Encryption, etc.

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**Course Contents**

Chapter No.	Topic	Lectures
1.	<b>Introduction to computer :</b> Computer Characteristics, Concept of Hardware, Software , Evolution of computer and Generations, Types of computer – Analog & Digital computers, Hybrid computers, General purpose & Special Purpose Computer, Limitations of Computer Applications of Computer in Various fields.	6
2	<b>Computer Memory :</b> Memory Concept , Memory cell, memory organization, Semiconductor memory- RAM, ROM, PROM, EPROM, Secondary Storage devices - Magnetic tape, Magnetic Disk (floppy Disk& Hard disk.), Compact Disk.	6
3.	<b>Number System:</b> Digital Signals and Logic gates, Number systems: Binary, octal and hexadecimal number systems, signed binary number, binary arithmetic.	6
4.	<b>Introduction to software:</b> Software types and Software Development activities (Requirement, Design (algorithm, flowchart, decision table and tree), Coding, Testing,Installation,Maintenance).Lowandhighlevellanguages,assemblers, Compilers, interpreters, linkers.	5
5.	<b>Introduction to Graphics primitives:</b> Display Devices: Refresh Cathode Ray Tube, Raster Scan Display, Plasma Display, Liquid Crystal Display, Plotters, Printers, Keyboard, Trackball, Joystick, Mouse, Light Pen, Tablet and Digitizing Camera.	7

	External Storage devices.	
6.	<b>Introduction to Computer Networks:</b> Basic elements of a Communication System, Data transmission media, Digital and Analog Transmission, Network topologies, Network Types (LAN, WAN and MAN).	7
7.	<b>MS-OFFICE: Introduction</b> to Ms-office, Components and features. <b>MS-Word</b> – Creating letter, table , fonts , page layout document formatting spell check, print preview, template, color, mail merge, Auto text, inserting picture, word art. <b>MS-EXCEL</b> – Introduction to Excel , Sorting , Queries, Graphs , Scientific functions. <b>Power Point</b> :- Introduction to Power Point Creation of Slides , Inserting pictures, Preparing slide show with animation. <b>MS-ACCESS</b> - Creation and Manipulation of Files.	10
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Digital Fundamentals by B. Basaraj by Vikas Publications.
2. Introduction to Information Technology by V. Rajaraman.
3. Fundamentals of Computers by V. Rajaram

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP102**  
**Course Name: Statistical Methods and Analysis**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

- To understand and Master the concepts, techniques & applications of Statistical Methods.
- To develop the skills of solving real life problems using Statistical methods.
- To make students to understand the art of applying statistical techniques to solve some real life problems.
- To gain knowledge of Statistical Computations.

**Course Outcome:**

- To understand and Master the concepts, techniques & applications of Statistical Methods.
- To develop the skills of solving real life problems using Statistical methods.
- To make students to understand the art of applying statistical techniques to solve some real life problems

Chapter No.	Topic	No. of Lectures
1	<b>Multiple correlation and Regression, Partial correlation : (For trivariate data)</b> 1.1 Introduction: Simple Correlation & Simple Regression. 1.2 Trivariate sample data and notation. 1.3 Meaning of multiple and partial correlation. 1.4 Calculation of multiple and partial correlation coefficients when: i) Simple correlation coefficients are given, ii) Sum of squares and products are given. 1.5 Meaning of multiple regression. 1.6 To state equation of multiple regression equations when means, standard deviations and simple correlation coefficients are given. Interpretation of regression coefficient.	8

	1.7 Examples and Problems.	
<b>2</b>	<p><b>Simulation :</b></p> <p>2.1 Introduction: Discrete random variable, Binomial &amp; Poisson distribution (p.m.f., problems on computation of probabilities).</p> <p>2.1 Definition and scope of simulation.</p> <p>2.2 Advantages and disadvantages of simulation.</p> <p>2.3 Monte – Carlo simulation.</p> <p>2.4 Examples and problems.</p>	<b>10</b>
<b>3</b>	<p><b>Normal Distribution :</b></p> <p>3.1 Introduction: Concept of continuous random variable with examples.</p> <p>3.2 Definition of :Normal distribution with mean ‘m’ and variance <math>\sigma^2</math></p> <p>3.3 Standard normal variate (SNV).</p> <p>3.4 Properties of normal distribution (without proof).</p> <p>3.5 Additive property of two independent normal variates (without proof).</p> <p>3.5 Problems on evaluation of probabilities and to find mean and variance.</p> <p>3.6 Examples and problems.</p>	<b>8</b>
<b>4</b>	<p><b>Testing of hypothesis :</b></p> <p>Large Sample Test :</p> <p>4.1 Introduction : Concept of hypothesis, Statistical hypothesis, null hypothesis, Alternative hypothesis, Two types of errors, Level of significance, Test of Significance, critical region &amp; acceptance region.</p> <p>4.2 Concept of a large sample test for testing:</p> <p>4.2.1 <math>H_0 : M = M_0</math> v/s <math>H_A : M \neq M_0</math></p> <p>4.2.2 <math>H_0 : M_1 = M_2</math> v/s <math>H_A : M_1 \neq M_2</math></p> <p>4.2.3 <math>H_0 : P = P_0</math> v/s <math>H_A : P \neq P_0</math></p> <p>4.2.4 <math>H_0 : P_1 = P_2</math> v/s <math>H_A : P_1 \neq P_2</math></p> <p>4.3 Examples and problems</p> <p>Small Sample Test :</p> <p>4.4 Chi-square (<math>\chi^2</math>) test of goodness of fit.</p> <p>4.5 Chi-square (<math>\chi^2</math>) test of independence of two attributes</p> <p>a) 2 x 2 contingency table</p> <p>b) m x n contingency table</p> <p>4.6 t-test for <math>H_0 : M = M_0</math> v/s <math>H_A : M \neq M_0</math></p> <p>t –test for <math>H_0 : M_1 = M_2</math> v/s <math>H_A : M_1</math></p>	<b>14</b>

	<p>≠ M2 paired t- test.  t – test for <math>H_0 : \rho = 0</math> v/s <math>H_A: \rho \neq 0</math>  (Test of significance of correlation coefficient )  4.7 F – test for testing <math>H_0 : \sigma_1^2 = \sigma_2^2</math> v/s <math>H_A : \sigma_1^2 \neq \sigma_2^2</math>  4.8 Examples and problems</p>	
<b>5</b>	<p><b>Time Series :</b>  5.1 Meaning and utility  5.2 Components of time series  5.3 Additive and multiplicative models  5.4 Methods of estimating trend by graphical method, ratio method moving averages  method of least squares for linear trend and exponential smoothing method  5.5 Examples and problems.</p>	<b>7</b>
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Fundamentals of Statistics by S.C. Gupta
2. Statistics for Business and Economics by J.S Chandra.
3. Statistical Methods by S. P Gupta -
4. Business Statistics by S.C Gupta, Gupta Indra.



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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP103  
Course Name: Financial and Investment Analysis**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

**Course Objectives :**

**Course Outcome :** On successful completion of this subject the student are enabled with the Knowledge of fundamental, technical analysis, Portfolio Analysis and Management

Chapter No.	Topic	Lectures
1.	<b>Introduction:</b> Properties Of Financial Assets, Financial Market Investment, Objectives Of Investment, Investment vs. Speculation Investment Analysis, Portfolio Management.	8
2.	<b>Stock Exchange in India:</b> BSC, NSC, OTEL market regulations, regulations primary market secondary mutual funds institutional Investors derivative trading investors protecting services of Intermediaries.	8
3.	<b>Fundamental analysis:</b> Economic Analysis ,Industry Analysis, Company Analysis	5
4.	<b>Technical Analysis:</b> charting tools-flow of fund, market structure, market indicators	6
5.	<b>Portfolio Analysis and Management:</b> Traditional Portfolio analysis, Effects of combining securities ,diversification, markowitz model location of the efficiency front tier	10

6.	<b>Portfolio Performance, Measurement And Evaluation:</b> Measurement of Portfolio performance risk and return risk-adjustment and performance measure, components of portfolio investment performance. Stock selection and market timing	10
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Fundamental Analysis for Investors by Raghu Palat.
2. Financial Management by Thomson.
3. Introduction to Finance by Pearson.
4. Security Analysis and Portfolio Management by Dr. Vanita Tripathi.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP104**  
**Course Name: Software Engineering**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives :**

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**Course Outcome :** On successful completion of the course the students should have knowledge of software engineering concepts, understanding of software engineering, understand software requirements, system implementation, system analysis tools like ERD, DFD, process models.

**Course Contents**

Chapter No.	Topics	No. of lectures
1	<b>Introduction to System Concepts and Software Engineering</b> 1.1 Definition , Elements of System 1.2 Characteristics of System 1.3 Types of System 1.4 System Concepts 1.5 Definition, Need for software Engineering 1.6 Software Characteristics 1.7 Software Qualities ( McCall's Quality Factors)	6
2	<b>Process Models</b> 2.1 SDLC 2.2 Waterfall Model 2.3 Prototyping Model 2.4 Spiral Model	8

3	<b>System Analysis Tools and Techniques</b> 3.1 System Analysis 3.2 System Analyst & its role 3.3 Feasibility Study 3.4 Fact Finding Techniques	4
4	<b>Analysis and Design Tools</b> 5.1 Entity-Relationship Diagrams 5.2 Decision Tree and Decision Table 5.3 Data Flow Diagrams (DFD) 5.4 Data Dictionary 5.4.1 Elements of DD 5.4.2 Advantage of DD 5.5 Pseudo code 5.6 Input And Output Design	15
5	<b>System Testing and Quality Assurance</b> 5.1 Definition 5.2 Testing Principles 5.3 Testing Process 5.4 Types of Testing 5.5 McCall's Quality factors	4
6	<b>System Implementation</b> 6.1 Implementation Approaches 6.1.1. Incremental 6.1.2. Traditional. 6.2 Implementation Steps 6.3 Post Implementation review	5
7	<b>System Maintenance</b> 7.1 Types of Maintenance 7.2 Side effects of Maintenance 7.3 Reverse Engineering 7.4 Re-engineering	5
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Software Engineering – Roger Pressman
2. System Analysis and Design (SADSE) – Parthsarthy, Khalkar
3. System Analysis and Design – Elias Awad.
4. System Analysis and Design of Information system- James Senn

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code:** 19BaEcoP105  
**Course Name:** Practical Paper

**Teaching Scheme: TH:** 4 Lectures/Week  
**Examination Scheme: CIA:** 40 Marks

**Credit:** 03  
**End-Sem:** 60 Marks

**Prerequisite Courses:**

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**Course Objectives :**

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**Course Outcome :**

**Course Contents :**

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP106**  
**Course Name: Business Communication**

**Teaching Scheme: TH: 4 Lectures/Week**  
**Examination Scheme: CIA: 40 Marks**

**Credit: 03**  
**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

- To understand the concept, process and importance of communication.
- To develop an integrative approach where reading, writing, presentation skills are used together to enhance the students' ability to communicate and write effectively.
- To create awareness among students about Methods and Media of communication.
- To make students familiar with information technology and improve job seeking skills.

**Course outcome:**

- On successful completion of the course the students should have to understand the concept, process and importance of communication.
- To develop an integrative approach where reading, writing, presentation skills are used together to enhance the students ability to communicate and write effectively.
- To create awareness among students about Methods and Media of communication.

**Course Contents**

Chapter No	Topic	No. of Lectures
Unit 1	<b>Introduction to Communication</b> 1.1 Meaning 1.2 Definition 1.3 Process, importance. 1.4 Principles of effective communication 1.5 Scope of Business communication - Internal & External 1.6 Barriers to Communication, Overcoming the barriers	08

<b>Unit 2</b>	<b>Media of Business Communication</b> <b>2.1 Verbal Communication</b> 2.1.1 – Written Communication-Advantages & Limitations (writing a Cover Letter, Memo, Agenda, Notice & Minutes) 2.2.2 Oral Communication -Advantages & Limitations <b>2.2 Non-Verbal Communication</b> 2.2.1 Body Language ( Positive & Negative Gestures) <b>2.3 Grapevine</b>	06
<b>Unit 3</b>	<b>Listening Skills</b> Importance Types of Listening Barriers to Effective listening How to make listening effective <b>10</b> Commandments of listening	06
<b>Unit 4</b>	<b>Business Correspondence</b> 4.1 Need of Business Correspondence 4.2 Components and layout of Businessletter, 4.3 Drafting of letters: Enquiry, Quotation, order , Complaints and follow up ,Recovery 4.4 Email etiquette	08
<b>Unit 5</b>	<b>Information Technology for Communication</b> Introduction, Advantages and Limitations of – Telex, Telegram, Fax, Voice Mail, Teleconferencing, Video Conferencing, Internet and Social Media Sites, E-communication at workplace.	08
<b>Unit 6</b>	<b>Job Skills</b> 6.1 Job applicationletter 6.2 Essentials of an impressive Resume 6.3 Group Discussion 6.4 InterviewSkills 6.5 Learning to deliver an EffectivePresentation	06
<b>Unit 7</b>	<b>Introduction to Grammar</b> Parts of Speech Noun - Pronouns - Adjective - verb - adverb - Preposition - Conjunction - Interjection Correct Usage of Tenses	05
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	<b>48</b>

**Reference Books:**

1. Modern Business Organization - S.A.Sherlekar
2. Industrial Organization Management -Sherlekar
3. Business Organization and management – Y.K.Bhushan
4. Business Environment - F.Cherunilam
5. Business Organization & Management – C.B.Gupta.
6. Entrepreneurial Development – S.S.Khanna.
7. Organizing and Financing of Small scale Industry – Dr. V.Desai



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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code:** 19BaEcoP107  
**Course Name:** Management Information System

**Teaching Scheme:** TH: 4 Lectures/Week  
**Examination Scheme:** CIA: 40 Marks

**Credit:** 03  
**End-Sem:** 60 Marks

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:**

On successful completion of this subject the students should have inculcate knowledge on Computer based information system MIS support for the functions of management

**Course Contents**

Chapter No.	Topics	No. of Lectures
1	<b>1. Management Information Systems</b> - Need, Purpose and Objectives - Contemporary Approaches to MIS - Information as a strategic resource - Use of information for competitive advantage - MIS as an instrument for the organizational change	8
2	<b>2. Information, Management and Decision Making</b> - Models of Decision Making - Classical, Administrative and Herbert Simon's Models - Attributes of information and its relevance to Decision Making - Types of information	6

3	<b>3. Information Technology</b> - Definition, IT Capabilities and their organizational impact - Telecommunication and Networks - Types and Topologies of Networks	5
4	<b>4. Data Base Management Systems –</b> Data Warehousing and Data Mining	6
5	<b>5. Systems Analysis and Design</b> - Systems Development Life Cycle - Alternative System Building Approaches - Prototyping model - Spiral model - Rapid Development Tools - CASE Tools	8
6	<b>6. Decision Support Systems - Group Decision Support Systems</b> - Executive Information Systems - Executive Support Systems - Expert Systems and Knowledge Based Expert Systems - Artificial Intelligence	7
7	<b>7. Management Issues in MIS</b> - Information Security and Control - Quality Assurance - Ethical and Social Dimensions - Intellectual Property Rights as related to IT Services / IT Products - Managing Global Information Systems	7
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Management Information Systems, Laudon and Laudon, 7th Edition, Pearson Education Asia
2. Management Information Systems, Jawadekar, Tata McGraw Hill
3. Management Information Systems, Davis and Olson, Tata McGraw Hill
4. Analysis and Design of Information Systems, Rajaraman, Prentice Hall
5. Decision Support Systems and Intelligent Systems, Turban and Aronson, Pearson Education Asia
6. Management Information Systems, Schulthesis, Tata McGraw Hill
7. Management Information Systems - Sadagopan, Prentice Hall

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP108**

**Course Name: Information Security System**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:**

On successful completion of this subject the students understand the concepts of computer security, cryptography, data integrity etc.

**Course Contents**

Chapter No.	Topics	No. Of Lectures
Chapter 1	<b>Introduction to security</b> 1. The need for security 2. Security approaches 3. Principles of security 4. Types of attack	5
Chapter 2	<b>Overview of computer Security</b> 1. The Basic Components a) Confidentiality b) Integrity c) Availability 2. Threats 3. Policy and Mechanism a) Goals of Security 4. Protection state 5. Access Control Matrix Model 6. Assurance a) Specification b) Design	10

	<ul style="list-style-type: none"> <li>c) Implementation</li> <li>7. Operational Issues <ul style="list-style-type: none"> <li>a) Cost Benefit analysis</li> <li>b) Risk Analysis</li> <li>c) Laws and Customs</li> </ul> </li> <li>8. Human Issues <ul style="list-style-type: none"> <li>a) Organizational Problems</li> <li>b) People Problems</li> </ul> </li> </ul>	
<b>Chapter 3</b>	<b>Information and Network Security Policies</b> <ul style="list-style-type: none"> <li>1. Security Policies <ul style="list-style-type: none"> <li>a) Definitions</li> <li>b) Types of security Policies</li> <li>c) The Role of Trust</li> <li>d) Type of Access control</li> <li>e) Example Academic Computer Security Policy</li> </ul> </li> <li>2. Confidentiality Policies <ul style="list-style-type: none"> <li>a) Goal of Confidentiality policies</li> <li>b) The Bell-LaPadula Model</li> </ul> </li> <li>3. Integrity Policies <ul style="list-style-type: none"> <li>a) Goals</li> <li>b) Biba Integrity Model</li> <li>c) Clark-Wilson Integrity Model</li> </ul> </li> <li>4. Hybrid Policies <ul style="list-style-type: none"> <li>a) Chinese Wall Model</li> <li>b) Clinical Information Systems Security</li> <li>c) Originator Controlled Access Control</li> </ul> </li> </ul> Role Based Access Control	12
<b>Chapter 4</b>	<b>Cryptography</b> <ul style="list-style-type: none"> <li>1. What is cryptography?</li> <li>2. What is Cipher?</li> <li>3. Classical cryptosystem <ul style="list-style-type: none"> <li>a) Transposition cipher</li> <li>b) Substitution cipher</li> </ul> </li> <li>4. Encryption <ul style="list-style-type: none"> <li>a) Mathematical Basis of encryption</li> <li>b) Symmetric and shared key encryption</li> <li>c) Data encryption standards <ul style="list-style-type: none"> <li>i) Triple DES</li> <li>ii) skipjack</li> </ul> </li> <li>d) Data Integrity</li> <li>e) Advantages of public key encryption</li> </ul> </li> </ul>	8

<b>Chapter 5</b>	<b>Authentication</b> 1. Authentication Basic 2. Passwords a) Attacking a passwordsystem b) Countering Passwordsystem 3. Biometrics a) Fingerprints b) Voices c) Eyes d) Faces e) Keystrokes f) Combination g) caution	6
<b>Chapter 6</b>	<b>System and Application Security</b> 1. Mail security 2. File systemsecurity 3. Program andsecurity 4. Memorysecurity	6
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Introduction to computer Security – Matt Bishop (Published by Pearson)
2. Cryptography and Network Security Second Edition –AtulKahate
3. Computer security,Dictergouman, John Wiley & sons.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP201**

**Course Name: Business Processes and Practices**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:**

On successful completion of this subject the students acquires the knowledge about the various types of Innovation Management, Entrepreneurship Management etc

**Course Contents**

Chapter No.	Topic	Lectures
1.	<b>Innovation Management</b> Meaning, Introduction, Characteristics, Components. Types of Innovation. Module of Innovation Process. Innovation Management. Evaluation of Innovation Management Significance, Principles, key drives of Innovation management. Innovation impact, Innovation behavior. Strategy Innovation. Creative Individual & their development.	12
2	<b>Quality Management</b> Meaning, Development, TQM. Components of TQM, Fundamentals of TQM. Approaches to TQM, Steps of TQM TQM models/Methods. Team work of quality Quality Circle.	11

3.	<b>Entrepreneurship Management</b> Meaning Skills & functions of Entrepreneurs Communication skills of Entrepreneurs Attitude of Entrepreneurship Entrepreneurs Making Entrepreneurship walks. Developing a global mindset Social entrepreneur in India.	12
4.	<b>Performance Management &amp; Control</b> Meaning Goal of performance management Performance management plan techniques to enhance performance. Benefits & barriers. The control function Control techniques Direct control vs. prevention control.	12
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

1. Fundamental of Business Process Management – Marlon Dumas, Paula Berman.
2. Principal of Management -Peter Drucker.
3. Business Process Management - Mathias Weske.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP202**

**Course Name: Financial Management and Accounting Methods**

**Teaching Scheme: TH: 4 Lectures/Week**

**Credit: 03**

**Examination Scheme: CIA: 40 Marks**

**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:**

On successful completion of this course the student are enabled with the Knowledge in the practical applications of accounting, financial management, Technique & capital Budgeting

**Course Contents**

Chapter No.	Topic	Lectures
1.	<b>Financial Management</b> Meaning, Financial Decision In Firm, Goals Of Financial Management. Financial System-Meaning, Functions, Financial Assets, Financial Market, Financial Intermediaries, Regulatory Infrastructure, Growth & Trends In The Indian Financial System.	12
2	<b>Long term finance</b> <b>Source of long term finance:</b> equity capital, Internal Accounts, Preference Capital, Term Loans, Debenture, Venture Capital. <b>Cost of capital:</b> Cost of Debt & Preference Cost of Equity, Weighted Average, and Cost of Capital.	11
3.	<b>Technique &amp; capital Budgeting</b> Payback Period, Accounting Rate of Return, Net Present Value Method, Profitability Index, Internal Rate of Return, ARR, Budgetary Control & Flexible Budget, Capital Rationing, Responsibility Accounting.	12



4.	<b>Dividend decision</b> Why Firm Pay Dividend, Dimensions, Dimensions of Dividend Policy of Analysis of Financial Statements, Application and Limitations. Working Capital Management: Inventory, Receivable& Cash Management.	12
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

- 1.Theory & Practice in Financial Management -Khan, M.Y.Jain.
- 2.Financial Theory, concept and problems -Rustogi R.P.
- 3.Strategic financial Management -Jakhotia G.P
- 4.Management accounts -Saxena and Vashist.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code:** 19BaEcoP203  
**Course Name:** Database Management System

**Teaching Scheme: TH:** 4 Lectures/Week  
**Examination Scheme: CIA:** 40 Marks

**Credit:** 03  
**End-Sem:** 60 Marks

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:** On successful completion of this subject the students should be able

- To inculcate knowledge on DBMS concepts and Programming with Oracle.
- To acquire practical knowledge about creating and manipulating data.

**Course Contents**

Chapter No.	Topic	No. of Lect.
1	<b>Database Management System</b> 1.1 Data 1.2 Information 1.3 Data Vs. Information 1.4 Data Warehouse 1.5 Data Dictionary 1.6 Data Items or fields 1.7 Records and Files 1.8 Database 1.9 Database System Applications 1.10 View of data 1.11 Database Languages 1.12 Data Model 1.13 Database architecture 1.14 Entity relationship model 1.14.1 Basic Concepts 1.14.2 Constraints 1.14.3 Keys	12

	<ul style="list-style-type: none"> <li>1.14.4 Strong Entity sets</li> <li>1.14.5 Weak Entity sets</li> <li>1.15 Entity relationship diagrams</li> <li>1.16 Extended E-Features’ <ul style="list-style-type: none"> <li>1.16.1 Specialization</li> <li>1.16.2 Generalization</li> </ul> </li> </ul>	
2	<p><b>Relational Model and Relational Database Design</b></p> <ul style="list-style-type: none"> <li>2.1 Introduction</li> <li>2.2 Fundamental Relational Algebra operation</li> <li>2.3 Overview of relational database design process</li> <li>2.4 Anomalies of Un normalized Database</li> <li>2.5 Normalization 1NF <ul style="list-style-type: none"> <li>2 NF</li> <li>3 NF</li> </ul> </li> <li>2.6 Functional Dependency</li> <li>2.7 Decomposition using functional dependencies</li> </ul>	7
3	<p><b>SQL</b></p> <ul style="list-style-type: none"> <li>3.1 Background</li> <li>3.2 Basic structure of SQLqueries</li> <li>3.3 Aggregate Functions</li> <li>3.4 Null values</li> <li>3.5 Nested sub-queries</li> <li>3.6 Views</li> <li>3.7 Integrity constraints</li> <li>3.5 Authorization</li> </ul>	14
4	<p><b>Transaction Management</b></p> <ul style="list-style-type: none"> <li>4.1 Transaction concept</li> <li>4.2 Transaction state</li> <li>4.3 Transaction properties</li> <li>4.4 Concurrent Execution</li> <li>4.5 Serializability</li> <li>4.6 Testing for Serializability</li> <li>4.7 Recoverability</li> </ul>	7
5	<p><b>Concurrency Control</b></p> <ul style="list-style-type: none"> <li>5.1 Introduction</li> <li>5.2 Lock based protocols</li> <li>5.3 Timestamp based protocols</li> <li>5.4 Validation based protocols</li> <li>5.5 Deadlock Prevention</li> <li>5.6 Deadlock Handling</li> </ul>	7

	5.7 Deadlock Recovery	
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
<b>Total</b>		48

**Reference Books:**

1. Database System Concepts :- Silberschatz , Korth , Tata McGraw-HillPublication
2. Database Management System :-Raghu Ramakrishnan, Tata McGraw-HillPublication
3. SQL, PL/SQL the Programming Language Oracle: -Ivan Bayross, BPBPublication.
4. Database Systems Concepts , Designs and Application -Shiv Kumar Singh ,Pearson
5. Database Management Systems -DebabrataSahoo ,Tata McGraw-Hill

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP204**  
**Course Name: C Programming**

**Teaching Scheme: TH: 4 Lectures/Week**  
**Examination Scheme: CIA: 40 Marks**

**Credit: 03**  
**End-Sem: 60 Marks**

**Prerequisite Courses:**

**Course Objectives:**

**Course outcome:**

On successful completion of this subject the students have the programming ability in C Language by understand fundamentals and basic concepts of C programming includes arrays, structures, function, strings, Exceptions, pointers and

**Course Contents**

Chapter No.	Topics	No. of Lectures
1	<b>Introduction to C language</b> 1.1 History 1.2 Basic structure of C Programming 1.3 Language fundamentals 1.3.1 Character set, tokens 1.3.2 Keywords and identifiers 1.3.3 Variables and data types 1.4 Operators 1.4.1 Types of operators 1.4.2 Precedence and associativity 1.4.3 Expression	4
2	<b>Managing I/O operations</b> 2.1 Console based I/O and related built-in I/O functions 2.1.1 print(),scanf() 2.1.2 getch(),get char()	2

3	<b>Decision Making and looping</b> 3.1 Introduction 3.2 Decision making structure 3.2.1 If statement 3.2.2 If-else statement 3.2.3 Nested if-else statement 3.2.4 Conditional operator 3.2.5 Switch statement 3.3 Loop control structures 3.3.1 While loop 3.3.2 Do-while loop 3.3.3 For loop 3.3.4 Nested for loop 3.4 Jump statements 3.4.1 break 3.4.2 continue 3.4.3 go to 3.4.4 exit	8
4	<b>Functions and pointers</b> 4.1 Introduction 4.1.1 Purpose of function 4.1.2 Function definition 4.1.3 Function declaration 4.1.4 Function call 4.2 Types of functions 4.3 Call by value and call by reference 4.4 Introduction to pointer 4.4.1 Definition 4.4.2 Declaration 4.4.3 Initialization 4.5 Indirection operator and address of operator 4.6 Pointer arithmetic 4.1.4 Dynamic memory allocation	14
5	<b>Arrays and Strings</b> 5.1 Introduction to one-dimensional Array 5.1.1 Definition 5.1.2 Declaration 5.1.3 Initialization 5.2 Accessing and displaying array elements 5.3 Arrays and functions 5.4 Introduction to two-dimensional Array 5.4.1 Definition 5.4.2 Declaration 5.4.3 Initialization 5.5 Accessing and displaying array elements 5.6 Introductions to Strings 5.6.1 Definition	10

	5.6.2 Declaration 5.6.3 Initialization Standard library functions	
6	<b>Structures and union</b> 6.1 Introduction to structure 6.1.1 Definition 6.1.2 Declaration 6.1.3 Accessing members 6.2 Structure operations	5
7	<b>File handling</b> 7.1 Definitions of files 7.2 File opening modes 7.3 Standard functions	4
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	<b>48</b>

**Reference Books:**

- 1) Let us C –YashwantKanetkar, BPB publication.
- 2) Programming in C - Balguruswamy, Tata McGraw-Hill publication.
- 3) Pointers in C –YashwantKanetkar, BPB publication.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code:** 19BaEcoP205  
**Course Name:** Practical Paper

**Teaching Scheme: TH:** 4 Lectures/Week  
**Examination Scheme: CIA:** 40 Marks

**Credit:** 03  
**End-Sem:** 60 Marks

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:** On successful completion of this subject the students should be able

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**Course Contents**



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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP206**  
**Course Name: Human Resource Management**

**Teaching Scheme: TH: 4 Lectures/Week**  
**Examination Scheme: CIA: 40 Marks**

**Credit: 03**  
**End-Sem: 60 Marks**

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:** On successful completion of this subject the students should be able

- To make a student to learn self and personality development and how to be integrated with exercises and experiential learning. To familiarize the students with concepts and challenges of managing and developing human performance in organizations. Students come to know how interpersonal skills should be practiced and develop within an organization/ personal life.

**Is this a objective or outcome???**

**Course Contents**

Chapter no.	Topic	No. of lectures
1	<b>Introduction of HRM</b> Definition & concept of HRM Difference between HRM&personnelmanagement Importance, Function, limitation of HRM Challenges of HRM <b>HRD</b> -Meaning,definition, scope ,importance	08
2	<b>Human Resources Planning</b> Definition, objective & process of HRP Factor influencing estimation of Human Resource, Human Resource Information System <b>Job analysis</b> -concept ,purpose, steps in job analysis, method	08
3	<b>Recruitment &amp; selection</b> Concept, goal, sources, alternatives of recruitment. <b>selection</b> -concept, selection process ,limitation of selection process, transfer policy	08

4	<b>Training &amp; development</b> Meaning, definition, need, objective, importance of training, training method Employee development-concept, method Organization development- process, methods International training & development issue	08
5	<b>Performance appraisal</b> Concept, objective, process, uses & limitation Performance management system- concept, purpose, challenges of Performance management system	08
6	<b>Labour union &amp; Collective bargaining</b> Concept of union, reasons of joining union, union organizing process, critical issue for union today's scenario meaning, objective, scope, process of collective bargaining	07
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	<b>48</b>

**Reference books:**

1. Human Resource Management by David A. Decenzo & Stephen P. Robbins-, Wiley India
2. Human Resource Management by Sharad D. Geet & Mrs Asmita A. Deshpande.
3. Human Resource Management by A. M. Sharma.
4. Human Resource Management S. K. Bhatia - Personnel Management and Nirmal Sing.

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**First Year of M-Com (e-Commerce) (2019 Course)**

**Course Code: 19BaEcoP207**  
**Course Name: Introduction of Operating System**

**Teaching Scheme: TH:** 4 Lectures/Week  
**Examination Scheme: CIA:** 40 Marks

**Credit:** 03  
**End-Sem:** 60 Marks

**Prerequisite Courses:**

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**Course Objectives:**

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**Course outcome:** On successful completion of this subject the students should be able

- Enable the students to get sufficient knowledge on various systems, Resources, system software and operating system concepts.

**Is this an objective or outcome???**

**Course Contents**

Chapter No.	Topics	No. Of Lectures
1	<b>Introduction to operating system</b> 1. What is an operating system. 2. Types of operating system. a) Multiprogramming system b) Parallel system c) Distributed System d) Real time System 3. Services provided by an operating system.	5
2	<b>Introduction</b> 1. Introduction of DOS OS 2. Introduction of Windows OS 3. Introduction of Linux OS 4. Difference between DOS ,Windows and Linux	4

3	<b>Computer System component</b> <ol style="list-style-type: none"> <li>1. Hardware(Basic computing resources) <ol style="list-style-type: none"> <li>a) CPU</li> <li>b) Memory</li> <li>c) I/O device</li> </ol> </li> <li>2. User View</li> <li>3. System View</li> <li>4. Computer System operation</li> </ol>	4
4	<b>Operating System structure</b> <ol style="list-style-type: none"> <li>1. General system architecture <ol style="list-style-type: none"> <li>a) Single processor system</li> <li>b) Multiprocessor system</li> <li>c) Clustered system</li> </ol> </li> <li>2. I/O Structure</li> <li>3. Storage Structure</li> <li>4. System calls and implementation <ol style="list-style-type: none"> <li>a) Process or job control</li> <li>b) File management</li> <li>c) Device Management</li> </ol> </li> <li>5. System Program</li> </ol>	7
5	<b>Process management</b> <ol style="list-style-type: none"> <li>1. Process concept <ol style="list-style-type: none"> <li>a) Process States</li> <li>b) Process Control Blocks</li> <li>c) Process scheduling</li> </ol> </li> <li>2. Interaction between process and OS</li> <li>3. Context switching</li> <li>4. Operation on process</li> </ol>	6
6	<b>CPU Scheduling</b> <ol style="list-style-type: none"> <li>1. Scheduling concept</li> <li>2. Types of scheduling</li> <li>3. Scheduling criteria</li> <li>4. Scheduling Algorithms <ol style="list-style-type: none"> <li>a) FCFS</li> <li>b) SJF(preemptive and non-preemptive)</li> <li>c) Priority Scheduling</li> <li>d) Round Robin</li> </ol> </li> </ol>	7
7	<b>Memory Management</b> <ol style="list-style-type: none"> <li>1. Introduction to memory management</li> <li>2. Paging</li> <li>3. Segmentation</li> <li>4. Segmentation with paging</li> <li>5. Virtual memory</li> <li>6. Demand paging</li> </ol>	4

<b>8</b>	<b>File System</b> <ol style="list-style-type: none"> <li>1. File concept</li> <li>2. File System structure</li> <li>3. File Access methods</li> <li>4. File Allocation methods</li> <li>5. Directory structure</li> <li>6. File Protection</li> </ol>	6
	<b>Guidance / discussion on specific experiential learning through field work</b>	01
	<b>Total</b>	48

**Reference Books:**

Operating System Concept by Gilberschatz, Galvin, Addison wisely Newyork  
System Programming and operating system by D M Dhamdhere, Tata McGraw-Hill Publication.