

## Course-202-2 : Emerging Trends and Applications in IT (ET & IT)

<b>Course Code</b>	202 - 2
<b>Course Title</b>	Emerging Trends and Applications in IT ( ET & IT)
<b>Credit</b>	3
<b>Nature of Subject:</b>	Theory Only
<b>Teaching per Week</b>	3 Hrs
<b>Minimum weeks per Semester</b>	15 (Including Class work, examination, preparation etc.)
<b>Review / Revision</b>	June 2020
<b>Purpose of Course</b>	<p>Technology changes very frequently. The information technology and software industry is emerging at very fast pace. Aim of this course is to provide</p> <ol style="list-style-type: none"> <li>1) Fundamental Knowledge about emerging trends in Information &amp; Communication Technology.</li> <li>2) Study about Design and implementation concepts of Application software &amp; their applicability.</li> <li>3) Students acquire concepts and knowledge about designing professional and commercial application softwares.</li> </ol>
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>(i) To provide fundamental information regarding the emerging trends of ICT industry.</li> <li>(ii) To provide basic knowledge about emerging trends and related buzz words of ICT industry.</li> <li>(iii) To provide basic knowledge and glimpses about readymade software applications, their design and application areas.</li> </ol>
<b>Pre-requisite</b>	None
<b>Course Out come</b>	After studying this course, students will be able to understand concepts of emerging information Technology and readymade software.
<b>Course Content</b>	<p><b>Unit 1. Software Fundamentals</b></p> <ol style="list-style-type: none"> <li>1.1. What is software</li> <li>1.2. Types of software ( System and Application Software)</li> <li>1.3. System Software Fundamentals.</li> <li>1.4. Application software fundamentals.</li> <li>1.5. Purpose of Application software</li> <li>1.6 Stand-alone Application software</li> <li>1.7 Multi-user Application Software</li> <li>1.8 Client-server Architecture concepts.</li> </ol> <p><b>Unit 2. Introduction to File System and File Management</b></p> <ol style="list-style-type: none"> <li>2.1. What is website</li> <li>2.2. Purpose of Website</li> <li>2.3. Working of interactive websites.</li> <li>2.4. Various software and tools used to develop static and interactive websites.</li> <li>2.5 Working of online transactions</li> </ol> <p><b>Unit 3. Case Study-1 :</b></p>

	<p>3.1. Study of design and application of popular websites.  [Purpose of this unit is to show Live demo of various sites and introduce their various features during class room teaching.]</p> <p>3.1.1 Online product shopping websites: Case Study of Amazon, Snapdeal, Flipkart.</p> <p>3.1.2. Online reservation system : Case study of Railway Reservation System (IRCTC), Bus Reservation System (GSRCT).</p> <p>3.1.3 Online transactions processing</p> <p>3.2 Online Payments:</p> <p>3.2.1 Security measures of online payment system.</p> <p>3.2.2 Payment gateway</p> <p>3.2.3 Concepts of NEFT, RTGS, IMPS</p> <p>3.2.4 Online Payment Systems using mobile apps like PayTm, BHIM</p> <p>3.2.5 Online payments process through Credit and Debit Cards.</p> <p><b>Unit 4. Case Studies of Application Software ( Any live System should be shown as case study):</b></p> <p>4.1. Production planning Application software system</p> <p>4.2. Accounting Application software system</p> <p>4.3. Inventory Applications:</p> <p>4.4. Mobile Application</p> <p>4.4.1 Fundamentals of mobile Applications</p> <p>4.4.2 Concepts of mobile apps and their OS(iOS,Android)</p> <p><b>Unit 5. Emerging Trends in IT</b>  <b>[Purpose of this unit is to give only Fundamental knowledge about the terminologies and emerging concepts of these technologies]</b></p> <p>5.1. Emerging trends and Buzz words ( Only Basic concepts)</p> <p>5.1.1 Concepts of ERP ( Fundamentals and importance)</p> <p>5.1.2 ETL concepts ( Extraction, Transformation, Loading)</p> <p>5.1.3 Concepts of Data Warehousing</p> <p>5.1.4 Concepts of data science and its application areas.</p> <p>5.1.5 Concepts of Data Analytics and related tools</p> <p>5.1.6 Concepts of Business Analytics</p> <p>5.1.7 Concepts of cloud</p>
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>1. E-Commerce : An Indian Perspective, 3<sup>rd</sup> Edition – Joseph PHI</li> <li>2. Frontiers of Electronic Commerce : Kalakota and Whinstn Addition Wesley</li> <li>3. Computer Fundamentals : Pradeep K. Sinha &amp; Priti Sinha (BPB)</li> <li>4. Fundamentals of Computers : V. Rajaraman</li> </ol>
<b>Teaching Methodology</b>	Class Work, Discussion, Self-Study, Seminars and/or Assignments
<b>Evaluation Method</b>	<p>30% Internal assessment.</p> <p>70% External assessment.</p>