

Semester	<b>1</b>
Course	Multi-Disciplinary
Paper Title	INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)
Paper Code	M1CS230111T
No. of Credits	<b>3</b>
Theory / Practical / Composite	<b>Theory</b>
Minimum No. of preparatory hours per week a student has to devote	3
Number of Modules	1
Syllabus	<p><b>1. Introduction to ICT:</b> Definition, ICT System Components, ICT and IT, ICT Tools, Applications of ICT, Advantages and Disadvantages of ICT, Social and Economic Impact of ICT</p> <p><b>2. Number Systems and Codes:</b> Weighted and Non-Weighted Codes, Positional Number Systems like Binary, Octal, Decimal and Hexadecimal. r's and (r-1)'s Complement.</p> <p><b>3. Representation of Numbers and Characters</b></p> <p><b>4. Introduction to Problem Solving:</b> Concept of Data and Information, Basic problem solving using Flowchart and Algorithm</p> <p><b>5. Computer Hardware and Software</b></p> <p><b>6. Introduction to Networking:</b> Advantages of Networking; Basic Features, LAN, MAN and WAN; Intranet and Internet; Servers and Clients; Ports; Domain Name System (DNS); world wide web; browsers; Guided and Unguided media.</p>
Learning Outcomes	<ol style="list-style-type: none"> <li>1. Learn computer system and its various components.</li> <li>2. Perform various logical and mathematical operations in different number systems.</li> <li>3. Learn different formats of representing numbers and characters.</li> <li>4. Acquire knowledge about problem solving and programming fundamentals.</li> <li>5. Learn fundamentals of networking and communications.</li> </ol>
Reading/Reference Lists *4	<ol style="list-style-type: none"> <li>1. Computer Fundamental- P.K Sinha.</li> <li>2. Digital Logic and Computer Design, M Morris Mano, Pearson education India</li> </ol>

	<p>3. Data Communications and Networking, B Forouzan, Mc Graw Hill</p> <p>4. Fundamentals of Computers, V. Rajaraman, PHI</p> <p>5. Information and Communication Technology in Organizations: Adoption, Implementation, Use and Effects Harry Bouwman, Bart van den Hooff, Lidwien van de Wijngaert, Jan van Dijk, SAGE</p>	
Evaluation	<p>Theory CIA: 12 Attendance: 3 Semester Exam: 35</p>	
Paper Structure for Theory Semester Exam	5 out of 7 of 7 marks each	