

**B.Sc.(Information Technology)****F.Y.B.Sc.(I.T.) Semester I PCT Examination NOVEMBER - 2021**

SR. NO.	NAME OF THE FACULTY	SEMESTER	SUBJECT	UNITS COVERED	TOPICS COVERED
1	SANJANA KHEMKA	1	OPERATING SYSTEM	UNIT 1	Chapter 1: Introduction: What is an operating system? History of operating system, computer hardware, different operating systems, operating system concepts, system calls, operating system structure Chapter 2: Processes and Thread: Processes, threads, interprocess communication, scheduling, IPC problems.
2	RUPALI MISHRA	1	IMPERATIVE PROGRAMMING	UNIT 1, 2	C- Introduction : Keywords, identifiers, Variables, Constants, C data types, input-output, operators, if...else, for loop, While Loop, Do...while loop, Switch-case, All practical examples covered w.r.t. the given topics.
3	AMIT LIMBASIA	1	DISCRETE MATHEMATICS	UNIT 1	Set Theory: Definitions and the Element Method of Proof, Properties of Sets, Disproofs, Algebraic Proofs, Boolean Algebras, Russell's Paradox and the Halting Problem. The Logic of Compound Statements: Logical Form and Logical Equivalence, Conditional Statements, Valid and Invalid Arguments
4	MUZAFFAR PALSANIA	1	DIGITAL ELECTRONICS	UNIT 1 & UNIT 2	Analog System, digital system, numbering system, binary number, Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem, Perfect Induction, Reduction of Logic expression using Boolean Algebra, Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates, minterms and sum of minterm form, maxterm and Product of maxterm form, Reduction technique using Karnaugh maps – 2/3/4 variable K-maps, Grouping of variables in K-maps, K-maps for product of sum form, minimize Boolean expression using K-map and obtain K-map from Boolean expression system, octal number system, hexadecimal number system, conversion from one number system to another, weighted codes binary coded decimal, non-weighted codes Excess – 3 code, Gray code, Binary addition, Binary subtraction, Negative number representation, Subtraction using 1's complement and 2's complement, Binary multiplication and division, Arithmetic in octal number system, Arithmetic in hexadecimal number system, BCD and Excess – 3 arithmetic. Logic (AND OR NOT), Boolean theorems, Boolean Laws, De Morgan's Theorem, Perfect Induction, Reduction of Logic expression using Boolean Algebra, Deriving Boolean expression from given circuit, exclusive OR and Exclusive NOR gates, Universal Logic gates.
5	MANJULA KAMATH	1	Communication Skills	UNIT 1 & UNIT 2	CHAPTER 1-The 7 C's of effective communication, CHAPTER 2-Understanding Business Communication, CHAPTER 3-Writing Business message and documents CHAPTER 4-Developing oral communication skills for business