

SN	Name Of the Subject	Modules Name
1	Computer Organisation & Structure	Module I BASIC STRUCTURE OF COMPUTERS Module II ARITHMETIC MODULE Module III BASIC PROCESSING MODULE Module IV MEMORY SYSTEM Module V Input / Output
2	Data Structure Using "C"	Module I Introduction: Basic Terminology Module II Stacks: Abstract Data Type Module III Trees: Basic terminology Module IV Graphs Module V Searching
3	Semiconductor Devices and Circuits	Unit 1 PN Diodes and Rectifiers Unit 2 Bipolar Junction Transistors Unit 3 Field Effect Transistors and special diodes Unit 4 Amplifiers Unit 5 Power Supply
4	Digital Design	Unit 1 Number System and Boolean Algebra Unit 2 Combinational Circuits Unit 3 Synchronous Sequential Circuits Unit 4 Asynchronous Sequential Circuits Unit 5 PLD, Memories and Logic Families
5	Measurements and Instrumentation	Unit 1 Philosophy Of Measurement Unit 2 Measurement : Instrument Transformer Unit 3 Measurement of Parameters Unit 4 AC Potentiometer & Magnetic Measurement Unit 5 Digital Measurement of Electrical Quantities & Cathode Ray Oscilloscope
6	Electromagnetic Field Theory	Unit 1 COORDINATE SYSTEMS AND TRANSFORMATION Unit 2 ELECTROSTATICS Unit 3 MAGNETOSTATICS Unit 4 WAVES AND APPLICATIONS Unit 5 TRANSMISSION LINES
7	Analog Electronic Circuits	Unit 1 Transistor at low and high frequencies Unit 2 FET amplifiers and Power Amplifiers Unit 3 Feedback Amplifiers Unit 4 Oscillators Unit 5 Tuned Amplifiers
8	Transform Techniques For Signal	Unit 1 Introduction to Signals Unit 2 Laplace-Transform (LT) and Z-transform (ZT) Unit 3 Fourier Transforms (FT) Unit 4 Introduction to Systems Unit 5 Time and frequency domain analysis of systems
9	Analog Communication	Unit 1 Basics of Communication Theory Unit 2 Amplitude Modulation Unit 3 Angle Modulation Unit 4 Noise in CW modulation Unit 5 Pulse Modulation

10	Analog Integrated Circuits	Unit 1 Operational Amplifiers Unit 2 Applications of Operational Amplifiers Unit 3 Analog Multiplier and PLL Unit 4 D/A and D/A Converters Unit 5 Special Function Ics
11	Microprocessors and Microcontrollers	Unit 1 Introduction Unit 2 8086 Microprocessor Unit 3 I/O and Bus Interfacing Unit 4 8051 Microcontroller Unit 5 PIC Microcontroller
12	Digital Communication	Unit 1 COMMUNICATION SYSTEM Unit 2 BASEBAND FORMATTING TECHNIQUES Unit 3 BASEBAND RECEPTION TECHNIQUES Unit 4 BANDPASS SIGNAL TRANSMISSION AND RECEPTION Unit 5 SPREAD SPECTRUM & MULTIPLE ACCESS TECHNIQUES
13	Antenna and Wave Propagation	Unit 1 Antenna Fundamentals Unit 2 Design of Arrays Unit 3 Design of Antennas Unit 4 Antennas for modern wireless communications Unit 5 Wave Propagation
14	Control Systems	Unit 1 Introduction to Control System Unit 2 Time Response analysis Unit 3 Control System Components Unit 4 Frequency response Analysis Unit 5 Introduction to Design of control systems
15	Digital Signal Processing	Unit 1 Introduction of Signals and Systems Unit 2 Transform Analysis Of LTI Systems Unit 3 Implementation of Discrete –Time Systems Unit 4 Filter Design Techniques Unit 5 Discrete Fourier Transforms
16	VLSI Design	Unit 1 Basic CMOS Technology Unit 2 Circuit Characterization and Performance Estimation Unit 3 CMOS Logic Structures Unit 4 Analog IC Design Unit 5 Short Channel Effects and Device Models
17	Microwave Engineering	Unit 1 Introduction Unit 2 Microwave Network Analysis Unit 3 Microwave Semiconductor Devices Unit 4 Design of Microwave Circuits Unit 5 Microwave Systems
18	Optical Communication and Networks	Unit 1 Introduction to Optical Fibers Unit 2 Sources and Detectors Unit 3 Power Launching and Coupling Unit 4 Optical Receivers Unit 5 Optical Networks
19	Computer Networks	Unit 1 Data Communication Unit 2 Error Control and Data Link Protocols Unit 3 Network and Switching Unit 4 X.25, Frame Relay, ATM and SONET/ SDH Unit 5 Networking Devices and TCP / IP Protocol Suite

20	Wireless and Mobile Communication	Unit 1 Introduction to Wireless Communications Unit 2 Cellular Concepts and System Design Fundamentals Unit 3 Mobile radio Propagation Models Unit 4 Modulation Techniques Unit 5 System Examples and Design Issues
21	Network Analysis and Synthesis	Unit 1 Graph Theory Unit 2 Network Theorems (Applications to ac networks) Unit 3 Network Functions Unit 4 Two Port Networks Unit 5 Network Synthesis & Filters
22	Data Base Concepts	Unit 1 Introduction Unit 2 Relational data Model and Language Unit 3 Data Base Design & Normalization Unit 4 Transaction Processing Concept Unit 5 Concurrency Control Techniques
23	Mobile Computing	Unit 1 PERVASIVE COMPUTING & WIRELESS TECHNOLOGIES Unit 2 SOFTWARE ARCHITECTURE Unit 3 SYSTEM-LEVEL SUPPORT Unit 4 INFORMATION MANAGEMENT Unit 5 LOCATION MANAGEMENT
24	Soft Computing	Unit 1 Artificial Neural Networks Unit 2 Fuzzy Systems Unit 3 Neuro-Fuzzy Modelling Unit 4 Genetic Algorithm Unit 5 Artificial Intelligence
25	Wireless Networks	Unit 1 Physical And Wireless MAC Layer Alternatives Unit 2 Wireless Network Planning And Operation Unit 3 Wireless WAN Unit 4 Wireless LAN Unit 5 WPAN And Geolocation Systems
26	Embedded System Design	Unit 1 PIC Microcontroller Unit 2 Embedded Processors Unit 3 Embedded Programming Unit 4 Embedded System design Unit 5 Real Time Operating Systems
27	Biomedicle Engineering	Unit 1 Basic physiological system of the body Unit 2 Bio-potential electrodes Unit 3 The Nervous System Unit 4 Patient care monitoring Unit 5 Biomedical computer applications
28	Neural Networks and Fuzzy Control	Unit 1 Introduction to Artificial Neural Network Unit 2 Feedforward and Recurrent Neural Networks Unit 3 Unsupervised Learning and Self Organizing Networks Unit 4 Fuzzy Sets and Fuzzy Relations Unit 5 Fuzzy Decision Making and Neuro Fuzzy
29	Digital System Design using VHDL	Unit 1 Introduction Unit 2 Programmable Logic devices Unit 3 Digital Design with State Machine Charts Unit 4 Programmable Gate Arrays Unit 5 VHDL Synthesis and Models

30	Principles of Secure Communication	Unit 1 Direct Sequence Spread Spectrum Systems Unit 2 Frequency Hopped Spread Spectrum Systems Unit 3 Cryptographic Techniques Unit 4 Block Cipher and Data Encryption Standard Unit 5 Public Key Cryptography
31	Satellite Communication	Unit 1 Introduction to Satellite Communication Unit 2 Multiplexing and Multiple Access Techniques Unit 3 Satellite Link Design Unit 4 Global Positioning System Unit 5 Applications
32	VLSI Technology	Unit 1 IC Fabrication technologies Unit 2 Fabrication of semiconductor devices Unit 3 CMOS Technology Unit 4 Subsystem Design Unit 5 GaAs Technology
33	Digital Image Processing	Unit 1 Fundamentals of Digital Image Processing Unit 2 Image Enhancement Techniques Unit 3 Image Restoration Unit 4 Image Compression Unit 5 Image Segmentation and Recognition
34	Wireless Sensor Networks	Unit 1 Overview Of Wireless Sensor Networks Unit 2 Architectures Unit 3 Networking Sensors Unit 4 Infrastructure Establishment Unit 5 Sensor Network Platforms And Tools
35	Mobile Ad Hoc Networks	Unit 1 Introduction to Wireless Ad Hoc Networks Unit 2 Medium Access Control Protocol Unit 3 Routing Protocol Unit 4 Multicasting Protocol Unit 5 Energy Management
36	Automation and Robotics	Unit 1 INTRODUCTION ROBOTICS Unit 2 ROBOT CONTROL Unit 3 END EFFECTORS Unit 4 ROBOT MOTION ANALYSIS Unit 5 ROBOT APPLICATIONS
37	Computer Programming and Problem Solving	Unit 1 Introduction to Computers and Algorithms Unit 2 Constructs of C Unit 3 Arrays Unit 4 Functions Unit 5 Structures
38	Basic Electrical and Electronics Engineering	Unit 1 Elementary Circuit Analysis Unit 2 Analysis of DC and AC Circuits Unit 3 Digital Systems Unit 4 Semiconductor Devices Unit 5 Electro-mechanics