



SCHEME FOR THIRD SEMESTER (COMPUTER ENGINEERING)

| Sr. No. | Subject | Study Scheme | | | EVALUATION SCHEME | | | | | | Total Marks |
|------------------------------|-------------------------------------|--------------|----------|-----------|---------------------|------------|----------------------------------|----------|------------|----------|-------------|
| | | | | | INTERNAL ASSESSMENT | | EXTERNAL ASSESMENT (EXAMINATION) | | | | |
| | | | | | Theory | Practical | Written Paper | | Practical | | |
| | | | | | Max. Marks | Max. Marks | Max. Marks | Hrs. | Max. Marks | Hrs. | |
| Hrs/Week | | | L | T | P | | | | | | |
| | | | | | | | | | | | |
| 3.1 | Operating System | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.2 | Computer Peripheral and Interfacing | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.3 | Data Communication | 3 | - | - | 25 | - | 100 | 3 | - | - | 125 |
| 3.4* | Digital Electronics-I | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.5 | Internet and Web Designing | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.6 | Computer Workshop | - | - | 6 | - | 50 | - | - | 50 | 3 | 100 |
| # Student Centred Activities | | - | - | 5 | - | 25 | - | - | - | - | 25 |
| Total | | 19 | - | 21 | 125 | 175 | 500 | - | 250 | - | 1025 |

* Common with diploma programme in Electronics and communication Engineering.

Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.



SYLLABUS: Polytechnic (CSE)

Department: Computer Science & Engineering – 3rd Semester

Subject: Operating System (Theory)

Subject Code: 120831

Detailed Contents

Unit No.1 Introduction to System Software

- Topic No.1: Compiler
- Topic No.2: Assembler
- Topic No.3: Loader
- Topic No.4: Operating System

Unit No.2 Brief Introduction to MS-DOS, WINDOW, LINUX

- Topic No.5: Brief history of DOS and WINDOWS
- Topic No.6: Main features of DOS
- Topic No.7: Directory Structure of DOS
- Topic No.8: File Structure of DOS
- Topic No.9: Detail concept of DOS commands
- Topic No.10: Introduction to Window and Linux

Unit No.3 Overview of Operating System

- Topic No.11: Definition of Operating System
- Topic No.12: Functions of Operating System
- Topic No.13: Types of Operating System
- Topic No.14: Storage structure, I/O structure, caching

Unit No.4 Functions of Operating System

- Topic No.15: Process Management Function: Scheduling Criteria, Scheduling Algorithm, Process synchronization
Deadlocks-characterization, Method for handling deadlocks, Deadlock avoidance, Banker's Algorithm
Deadlock prevention, Recover from Deadlock
- Topic No.16: Memory Management Function: Introduction, Single Process System, Fixed Partition Memory, Paging
Segmentation, Swapping, Fragmentation, Virtual Memory Management, Demand Paging
- Topic No.17: I/O Management Functions: Dedicated Devices, Shared Devices, I/O Devices, Storage Devices, Buffering
Spotting
- Topic No.18: File Management: File Concept, File Types, File Structure, Access Method, And Directory Structure
Free Space Management

| STUDY SCHEME | EVALUATION SCHEME | | | | | | | | Total Marks | |
|-----------------|------------------------|---|------------|--------------------------------------|------------|-----------|------------|---------------|----------------|-----------|
| | Internal Assessment | | | External Assessment (Examination) | | | | | | |
| | Hrs/week | | | Theory | | Practical | | Written Paper | | Practical |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | | |
| 4 | - | - | 25 | - | 100 | 3 | - | - | 125 | |

TEXTBOOKS:

1. Operating system Principles by A. Silberschatz, Peter Baer Galvin and Greg Gagne; Wiley Student Edition.
2. Operating System by Stallings, Tata McGraw Hill, New Delhi

REFERENCE BOOKS:

1. Operating System by Stallings, Tata McGraw Hill, New Delhi.
2. Operating System Concepts by Ekta Walia, Khanna Publishers, New Delhi.
3. System Programming by Dham Dhare
4. Operating Systems by C. Ritchie
5. Operating Systems by John J Donovan
6. MS DOS by Peter Norton, BPB Publications
7. Microsoft Windows Manual



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SUGGESTED DISTRIBUTION OF MARS FOR FACILITATING THE PAPERSETTER

| Topic No. | Time Allotted (in hrs) | Marks Allotted (%) |
|--------------|------------------------|--------------------|
| 1 | 4 | 6 |
| 2 | 8 | 12 |
| 3 | 8 | 12 |
| 4 | 44 | 70 |
| Total | 64 | 100 |





Subject: Operating System (Practical)

Subject Code: 120831

LIST OF PRACTICALS

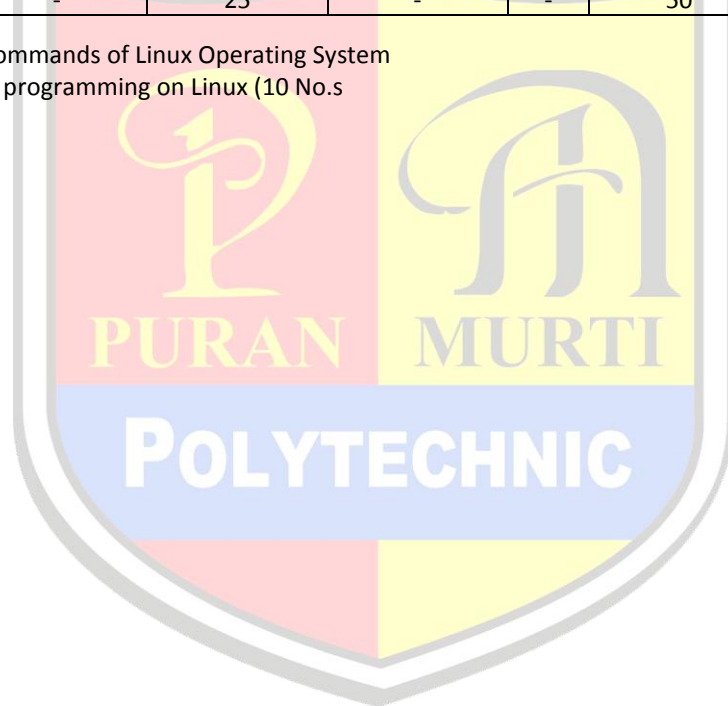
1. Demonstration of all the controls provided on Control Panel
2. Exercises involving various internal and external DOS commands (20 No.)
3. Exercises involving Basics of Windows (20 No.)
4. Exercises on windows operating system

5.

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|---------------|-----------------------------------|------------|-----|-------------|
| | | | Internal Assessment | | | External Assessment (Examination) | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |

Exercise on basic commands of Linux Operating System

6. Exercise on shell programming on Linux (10 No.s)





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Subject: Computer Peripherals and Interfacing (Theory)

Subject Code: 120833

Detailed Contents

Unit No.1 Display Devices

- Topic No.1: Pixel
- Topic No.2: Resolution
- Topic No.3: Refresh Rate
- Topic No.4: Response Time
- Topic No.5: Bandwidth
- Topic No.6: Horizontal Scanning Frequency
- Topic No.7: Vertical Scanning Frequency
- Topic No.8: Interlaced Versus Non Interlaced Monitor
- Topic No.9: Video Display Adapters EGA, VGA and SVGA
- Topic No.10: Raster Scan and their relative advantages.
- Topic No. 11: Random Scan and their relative advantages.
- Topic No. 12: Difference between Raster Scan and Random Scan.
- Topic No. 13: Working Principle of CRT.
- Topic No.14: CRT color monitor: Block diagram and function of each block.

Unit No.2 Motherboard.

- Topic No.15: Introduction functions and features.
- Topic No. 16: Various components of Motherboard.
- Topic No. 17: Processor, Cache, SIMM, DIMM, BIOS, ROM, Chipset, Slots, Socket, and Connectors.
- Topic No. 18: Serial port and parallel port.

Unit No. 3 Interfacing Standards.

- Topic No. 19: Interfacing standards, RS 232
- Topic No. 20: Centronics
- Topic No. 21: IDE
- Topic No. 22: SCSI
- Topic No. 23: IEEE 488
- Topic No. 24: USB

Unit No. 4 Keyboard and Mouse

- Topic No. 25: Construction and working principle of keyboard
- Topic No. 26: Types of key switches: Membrane, Mechanical, Rubber Dome, and Capacitive.
- Topic No. 27: Scan code generation.
- Topic No. 28: Construction and working of mouse.
- Topic No. 29: Types of mouse: Mechanical, opto- mechanical, optical.
- Topic No. 30: Interfacing of keyboard and mouse with Computer.

Unit No. 5 Disk Drives.

- Topic No. 31: Constructional features of disk drives
- Topic No. 32: Working and logical structure of disk drive.



Topic No. 33: Difference between HDD and FDD.

Topic No. 34: Reading and writing operation in HDD drive.

Topic No. 35: Interleaving factor.

Topic No. 36: Terms related to HDD. Tracks, Sectors, Cylinders, Clusters, Landing Zone, MBR,

Topic No. 37: Formatting, low level formatting, high level Formatting, partition, FAT, access time

Topic No. 38: HDD Interface: Parallel AT Attachment (PATA), Serial AT Attachment (SATA)

Unit No.6 Input and Output devices

Topic No.39: Scanner: Flatbed, sheet fed, Handheld

Topic No.40: Construction and working of scanner

Topic No.41: Construction and working of light pen

Topic No.42: Joystick

Topic No.43: Digitizer

Topic No.44: Touch screen

Topic No.45: Tablets.

Topic No.46: Printers

Topic No.47: Types of printers, Impact and non impact.

Topic No.48: Construction and working principle of DMP.

Topic No.49: Inkjet printers

Topic No.50: Laser printers.

Topic No.51: Plotters.

Topic No.52: Types and working principle of plotters.

Unit No. 7 Power Supplies

Topic No.53: Introduction to SMPS

Topic No.54: CVT

Topic No.55: UPS and its functions

Topic No.56: Types of UPS: Offline and Online UPS

Unit No. 8 Input and Output drivers.

Topic No.57: Software of peripherals devices

Topic No.58: Device dependent and independent Software

Topic No.59: Device drivers.

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 4 | - | - | 25 | - | 100 | 3 | - | - | 125 |

TEXT BOOKS:

1. IBM PC and Clones by B.Govind Rajalu, TMH

REFERENCE BOOKS:

1. Hardware and Software of Personal Computers by S.K.Bosr, Wiley Eastern
2. Microprocessor and Interfacing by Hall, Douglas, Mcgraw Hill
3. Inside the PC by Peter Norton, Tech Media Publication

INSTRUCTIONAL STRATEGY

While teaching the subject the teacher may take the interfacing device like HDD, FDD, Scanner, Printer, etc physically and explain the parts and working of the device. Additional practical exercise on identification/location of parts can be taken up in practical class.

SUGGESTED DISTRIBUTION OF MARS FOR FACILITATING THE PAPERSETTER

| Topic No. | Time Allotted | Marks Allotted |
|-----------|---------------|----------------|
|-----------|---------------|----------------|



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| | (in hrs) | (%) |
|--------------|-----------|------------|
| 1 | 8 | 14 |
| 2 | 8 | 12 |
| 3 | 8 | 12 |
| 4 | 8 | 12 |
| 5 | 10 | 16 |
| 6 | 12 | 22 |
| 7 | 6 | 8 |
| 8 | 4 | 4 |
| Total | 64 | 100 |

Subject: Computer Peripherals and Interfacing (Practical)

Subject Code: 120833

LIST OF PRACTICALS

1. To identify various components and peripheral devices.
2. Exercise on assembling of a PC.
3. Exercise on installation of a PC.
4. Installation of peripherals like printer, scanner.
5. Studying parts of motherboard, FDD, HDD.
6. Fault finding and repair of peripherals (HDD, FDD, DMP, Laser printer, Inkjet printer).
7. Using antivirus software.

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |



Subject: Data Communication (Theory)

Subject Code: 120835

DETAILED CONTENTS

Unit No.1 Introduction

- Topic No.1: Data Communication and Components
- Topic No.2: Data Representation
- Topic No.3: Data Flow, Distributed Processing
- Topic No.4: Network Criteria
- Topic No.5: Network Category-LAN, WAN, MAN
- Topic No.6: Physical Structures

Unit No.2 VB Structure

- Topic No.7: Transmission Impairment-Attenuation, Distortion, Noise
- Topic No.8: System Performance-Bandwidth, Throughput, Latency, Jitter
- Topic No.9: Digital Signals- Bit Rate, Bit Length
- Topic No.10: Periodic and non-periodic Signals
- Topic No.11: Analog and Digital Data
- Topic No.12: Diff. B/W Analog and Digital Signals

Unit No.3 Digital and Analog Transmission

- Topic No.13: Analog to Analog Conversion-AM, FM, PM
- Topic No.14: Digital to Analog Conversion-ASK, PSK, FSK
- Topic No.15: Digital to Digital Conversion
- Topic No.16: Analog and Digital Conversion-PCM, DM
- Topic No.17: Serial and Parallel Transmission

Unit No.4 Multiplexing

- Topic No.18: FDM
- Topic No.19: WDM
- Topic No.20: TDM

Unit No. 5 Transmission Media

- Topic No.21: Guided Media- Twisted Pair Cable, Co-axial Cable, Fiber Optics Cable
- Topic No.22: Unguided Media- Radio Wave, Microwave, Infrared

Unit No. 6 Error Detection and Correction

- Topic No.23: Types of errors, Redundancy
- Topic No.24: Detection/Correction, Forward Error Correction
- Topic No.25: General Principle of Error Detection and correction using Cyclic Redundancy Check
- Topic No.26: Error Detection through Parity Bit

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|--------|-----------|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | Theory | Practical | Written Paper | | Practical | | | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 5 | | - | 25 | - | 100 | 3 | - | - | 125 |



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TEXT BOOKS:

1. Computer Networking by Tanenbaum; Prentice Hall of India, New Delhi
2. REFERENCE Data Communication and Networking by Forouzan; Tata McGraw Hill

REFERENCE BOOKS:

1. Data and Computer Communication by William Stalling
2. Data Communication by PS Gupta
3. Computer Communication and Networking by John Freer

INSTRUCTIONAL STRATEGY

Explanation of basic concept of data communication and all entities involved need to be elaborated precisely by the teacher with the emerging technologies. The topics should be clarified diagrammatically as well as with help of multimedia presentations.

SUGGESTED DISTRIBUTION OF MARS FOR FACILITATING THE PAPERSETTER

| Topic No. | Time Allotted(in hrs) | Marks Allotted (%) |
|--------------|-----------------------|--------------------|
| 1 | 8 | 16 |
| 2 | 12 | 26 |
| 3 | 8 | 18 |
| 4 | 3 | 6 |
| 5 | 5 | 10 |
| 6 | 12 | 24 |
| Total | 48 | 100 |

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Subject: Digital Electronics (Theory)

Subject Code: 120832

DETAILED CONTENTS

Unit No.1 Introduction

- Topic No.1: Define digital and analog signals and systems
- Topic No.2: Difference between analog and digital signals
- Topic No.3: Need of digitization
- Topic No.4: Applications of digital systems

Unit No.2 Number Systems

- Topic No.5: Decimal
- Topic No.6: Binary
- Topic No.7: Octal
- Topic No.8: Hexadecimal number systems
- Topic No.9: Conversion of number from one number system to another including decimal points
- Topic No.10: Binary addition & Subtraction
- Topic No.11: Multiplication
- Topic No.12: 1's and 2's complement method of subtraction
- Topic No.13: BCD code numbers and their limitations,
- Topic No.14: Addition of BCD coded numbers,
- Topic No.15: Conversion of BCD to decimal and vice-versa
- Topic No.16: Excess-3 codes Binary to Excess-3 codes and vice-versa
- Topic No.17: Gray code, Binary to gray and gray to binary conversion
- Topic No.18: Concept of parity, single and double parity
- Topic No.19: Error detection and correction using parity

Unit No.3 Logic Gates

- Topic No.20: Logic Gates
- Topic No.21: Positive and negative logic
- Topic No.22: Pulse waveform, definition, symbols, truth tables, pulsed operation of NOT
- Topic No.23: Pulse waveform, definition, symbols, truth tables, pulsed operation of OR
- Topic No.24: Pulse waveform, definition, symbols, truth tables, pulsed operation of AND
- Topic No.25: Pulse waveform, definition, symbols, truth tables, pulsed operation of NAND,
- Topic No.26: Pulse waveform, definition, symbols, truth tables, pulsed operation of NOR
- Topic No.27: Pulse waveform, definition, symbols, truth tables, pulsed operation of EX-OR
- Topic No.28: Pulse waveform, definition, symbols, truth tables, pulsed operation of EX-NOR gates
- Topic No.29: NAND and NOR as universal logic gates

Unit No.4 Logic Simplification

- Topic No.30: Rules and laws of Boolean algebra logic expression Demorgan's theorems, their proof
- Topic No.31: Sum of products form (minterm), Product of sum form (MAXTERMS)
- Topic No.32: Simplification of Boolean expressions with the help of Rules and laws of Boolean algebra
- Topic No.33: Karnaugh mapping techniques up to 4 variables and their application

Unit No.5 Arithmetic Circuits

- Topic No.34: Half Adder



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Topic No.35: Full Adder

Topic No.36: Parallel Binary Adder

Topic No.37: 2 Bit full adder

Topic No.38: 4 bit binary full adder

Unit No.6 Multiplexer/Demultiplexer

Topic No.39: Basic functions, symbols and logic diagrams of 4-inputs, 8-inputs multiplexers

Topic No.40: Function/utility of 16 and 32 inputs multiplexers

Topic No.41: Basic function, symbols and logic diagram of 4 outputs and 8 output DEMUX

Topic No.42: Realization of Boolean expression using multiplexer/demultiplexers

Unit No.7 Decoders, Display Devices and Associated Circuits

Topic No.-43 Basic Binary decoder,

Topic No.-44 4-line to 16 line decoder circuit

Topic No.-45 BCD to decimal decoder

Topic No.-46 BCD to 7-segment decoder/driver,

Topic No.-47 LED/LCD display

Unit No.8 Encoders and Comparators

Topic No.48: Encoder Introduction

Topic No.49: Decimal to BCD encoder

Topic No.50: Decimal to BCD priority encoder

Topic No.51: keyboard encoder

Topic No.52: Magnitude comparators

Topic No.53: Symbols and logic diagrams of 2-bit and 4-bit comparators

Unit No.9 Latches and Flip-Flop

Topic No.54: Latch

Topic No.55: SR-latch

Topic No.56: D-latch

Topic No.57: Flip-flop, difference between latch and flip-flop

Topic No.58: S-R & D flip flop, their operation using waveform and truth tables

Topic No.59: Race around condition

Topic No.60: JK flip-flop,

Topic No.61: Master slave and their operation using waveform and truth tables

Unit No.10 Counters

Topic No.62: Asynchronous counter

Topic No.63: 4-bit Asynchronous counter

Topic No.64: Asynchronous decade counter

Topic No.65: Synchronous counter

Topic No.66: 4-bit synchronous binary counter.

Topic No.67: Up/down Asynchronous counters

Topic No.68: 3 Bit Asynchronous up/down counter.

Topic No.69: Ring counters

Topic No.70: Cascaded counter

Topic No.71: Counter applications

Unit No.11 Shift Register

Topic No.72: Shift registers functions

Topic No.73: Serial-in-serial out

Topic No.74: Serial-in-parallel-out

Topic No.75: Parallel-in-serial-out

Topic No.76: Parallel-in-parallel out shift register

Topic No.77: Universal shift register,

Topic No.78: Shift registers counter

Topic No.79: Applications of shift registers



| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|---------------|-----------------------------------|------------|-----|-------------|
| | | | Internal Assessment | | | External Assessment (Examination) | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 4 | - | - | 25 | - | 100 | 3 | - | - | 175 |

TEXT BOOKS:

1. Digital Electronics and Applications by Malvino Leach, Tata McGraw Hill, New Delhi
2. Digital Logic Designs by Morris Mano, Prentice Hall of India, New Delhi

REFERENCE BOOKS

1. Digital Fundamentals by Thomas Floyds, Universal Book Stall
2. Digital Fundamentals by Thomas Floyds, Universal Book Stall
3. Digital Electronics by RP Jain, Tata McGraw Hill, New Delhi
4. Digital Electronics by KS Jamwal, Dhanpat Rai & Co., New Delhi
5. Digital Electronics by Rajiv Sapra, Ishan Publication, Ambala
6. Digital Electronics by BR Gupta, Dhanpat Rai & Co., New Delhi
7. Digital Systems: Principles and Applications by RJ Tocci, Prentice Hall of India,
8. Digital Electronics by Rajaraman V., Prentice Hall of India, New Delhi

INSTRUCTIONAL STRATEGY

The Digital Electronic – 1 has significant importance in the field of Electronics. Adequate competency need to be developed by giving sufficient practical knowledge in microprocessor, A/D, D/A, convertors and other topics. Help may be taken in the form of charts, simulation packages to teach of the subject.

SUGGESTED DISTRIBUTION OF MARS FOR FACILITATING THE PAPERSETTER

| Topic No. | Time Allotted (in hrs) | Marks Allotted (%) |
|--------------|------------------------|--------------------|
| 1 | 2 | 6 |
| 2 | 10 | 6 |
| 3 | 4 | 6 |
| 4 | 8 | 12 |
| 5 | 3 | 10 |
| 6 | 4 | 10 |
| 7 | 4 | 10 |
| 8 | 4 | 10 |
| 9 | 7 | 10 |
| 10 | 10 | 10 |
| 11 | 8 | 10 |
| Total | 64 | 100 |



Subject: Digital Electronics (Practical)

Subject Code: 120832

LIST OF PRACTICALS

1. Study of logic breadboard with verification of truth table for AND, OR, NOT, NAND, EX-OR, NOR gate
2. Verification of NAND and NOR gate as universal gates
3. Construction of half-adder and full adder circuits using EX-OR and NAND gate and verification of their operation
4. Verify the operation of a) multiplexer using an IC b) de-multiplexer using an IC
5. a) Verify the operation of BCD to decimal decoder using an IC
b) Verify the operation of BCD to 7 segment decoder using an IC
6. Verify operation of SR, JK, D-flip-flop master slave JK flip-flop using IC
7. Verify operation of SISO, PISO, SIPO, PIPO shift register. (Universal shift register)
8. Study of ring counter, Up/down counter
9. Construct and verify the operation of an asynchronous binary decade counter using JK flip-flop
10. Testing of digital ICs using IC tester

| STUDY SCHEME | | EVALUATION SCHEME | | | | | | Total Marks | |
|--------------|---|---------------------|------------|-----------------------------------|---------------|-----|------------|-------------|-----|
| | | Internal Assessment | | External Assessment (Examination) | | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | | Hrs |
| - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |



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Subject: Internet & Web Designing (Theory)

Subject Code: 120834

DETAILED CONTENTS

Unit No.1 Internet Basics

- Topic No.1: Basic of internet
- Topic No.2: Application of Internet
- Topic No.3: Connecting to internet
- Topic No.4: Modem
- Topic No.5: TCP/IP model
- Topic No.6: IP Address
- Topic No.7: DNS

Unit No.2 connecting to internet

- Topic No.8: Different Method of connecting with internet
- Topic No.9: Dial up Connection
- Topic No.10: Broad Band
- Topic No.11: ISDN
- Topic No.12: Leased Line
- Topic No.13: VSAT
- Topic No.14: RF Link
- Topic No.15: Cable

Unit No.3 World Wide Web

- Topic No.16: WWW and its evolution
- Topic No.17: web page
- Topic No.18: web server
- Topic No.19: HTTP protocol.
- Topic No.20: Web Browser:
- Topic No.21: Concept of URL
- Topic No.22: Hypertext, hyperlinks, hypermedia
- Topic No.23: Search engines, Proxy servers.

Unit No.4 Services of Internet

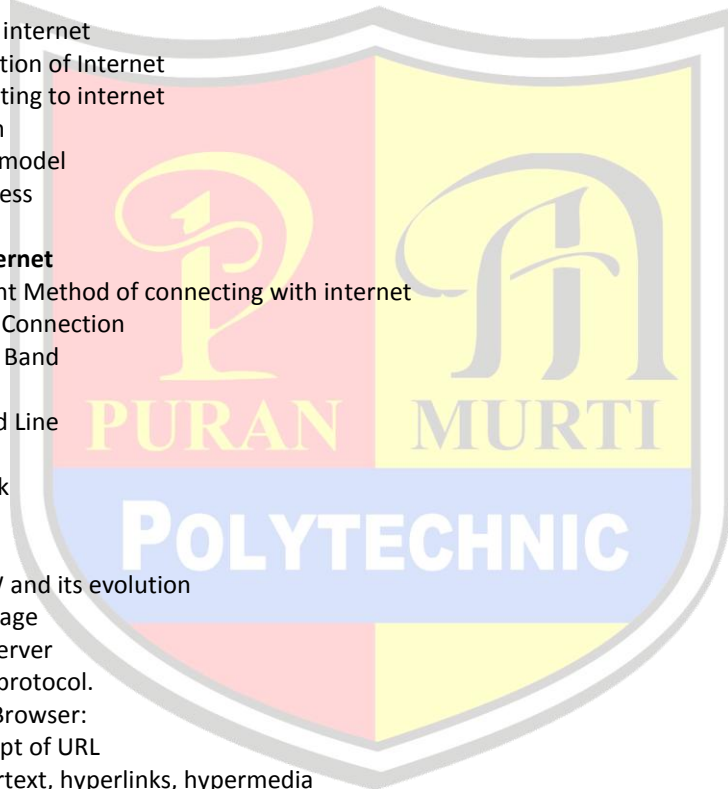
- Topic No.24: E-mail.
- Topic No.25: Telnet, USENET,
- Topic No.26: Newsgroup,
- Topic No.27: FTP, IRC,
- Topic No.28: Video Conferencing, Ecommerce.
- Topic No.28: Comparing email with snail mail. .

Unit No.5 Developing Web Portals using HTML

- Topic No.29: Introduction to HTML:.
- Topic No.30: How to create a HTML document
- Topic No.31: HTML Tags

Unit No.6 Using Front Page.

- Topic No.32: Introduction





Topic No.33: Advantages of developing webpage using front page

Topic No.34: Introduction to front page editor

Unit No.7 Flash

Topic No.35: Introduction to flash and its working environment.

Topic No.36: Introduction to animated GIF's

Topic No.37: Difference between flash and GIF's.

Topic No.38: Advantages of flash.

Topic No.39: Drawing tools

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 4 | - | - | 25 | - | 100 | 3 | - | - | 125 |

TEXT BOOKS:

1. Internet by Margy Levine Young, Complete Reference, Tata McGraw Hill
2. The HTML by Ivan Byross; Bpb

REFERENCE BOOKS

1. Flash to the Core and Interactive Sketch Book by Joshva Davis
2. Designing Web Standards by Keffrey Weldom

INSTRUCTIONAL STRATEGY

Students must be extensively exposed to internet, HTML and Flash as the subject is practical oriented. Development of a web site given at the end of the semester would add to the proper understanding of the topic.

SUGGESTED DISTRIBUTION OF MARS FOR FACILITATING THE PAPERSETTER

| Topic No. | Time Allotted (in hrs) | Marks Allotted (%) |
|--------------|------------------------|--------------------|
| 1 | 10 | 14 |
| 2 | 6 | 10 |
| 3 | 6 | 10 |
| 4 | 6 | 10 |
| 5 | 20 | 32 |
| 6 | 4 | 6 |
| 7 | 12 | 10 |
| Total | 64 | 100 |



PM

POLYTECHNIC

A Unit of Puran Murti Educational Society
Approved by AICTE, Ministry of HRD, Govt. of India,
Affiliated to State Board of Technical Education, Panchkula, Haryana

Subject: Internet & Web Designing (Practical)

Subject Code: 120834

LIST OF PRATICALS

1. Setting up internet on a standalone machine.
2. Familiarization with web browser and search engine.
3. Creating email account, sending and receiving emails.
4. Using search engine for finding information of internet.
5. Using IRC.
6. Demonstration of Video conferencing.
7. Demonstration of e-commerce.
8. Demonstration of TELNET.
9. Creating web pages using basic tags, lists, images, hyperlinks, tables and frames.
10. Practice on using FLASH.

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |



Subject: Computer Workshop (Practical)

Subject Code: CWP (P)

DETAILED CONTENTS

Part-A

1. Familiarization with various components and parts of personal computers, motherboard details, hard disk and hard disk drive, floppy disk drive. CD Rom drive, DVD, keyboard, display devices, various chips (memory chips and CPU); serial and parallel ports, assembly of complete PC making it operational, fault finding. Fault diagnosis, repair and maintenance of inkjet, Dot matrix and Laser printers, Modems, Connectors and Cables, ratings and fault diagnosis of UPS (600VA,1KVA, 2KVA, 5KVA)
2. Assembly and Disassembling of PCs: Power supply, linear power supply and switch mode power supply, trouble shooting of SMPS.

Part-B

3. Loading of various operating system, LINUX, Windows XP, 2007, 2008. Familiarization of their features with practical demonstrations. Changing settings on Windows XP, 2007, 2008.
4. Loading software like MS-Office, Visual Basic, Adobe Photoshop, Macromedia Flash. Corel Draw, AutoCAD.
5. Installation and Uninstallation of Antivirus Soft wares
6. Virus detection, prevention and cure. Use of PC tools. Learning settings of at least two Antivirus packages.
7. Installation and configuration of latest version of database software like Oracle, My SQL/SQL Server
8. Visit to computer manufacturing industry or assembly unit

| STUDY SCHEME | | | EVALUATION SCHEME | | | | | | Total Marks |
|--------------|---|---|---------------------|------------|-----------------------------------|-----|------------|-----|-------------|
| | | | Internal Assessment | | External Assessment (Examination) | | | | |
| Hrs/week | | | Theory | Practical | Written Paper | | Practical | | |
| L | T | P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| - | - | 6 | - | 50 | - | - | 50 | 3 | 100 |