1. MOTHERBOARD COMPONENTS AND MEMORY STORAGE DEVICES

Part – A

1. Define software?
2. What is firmware?
3. What is direct RDRAM?
4. What is expansion slot?
5. What is HDD partition?
6. Define Chipset?
7. What is the use of AGP?
8. Define mother board.
9. What is the use of port?
10. Define SMPS.
11. What are the front panel indicators?
12. Define Bus.
13. What is the expansion of PCMC/A & AGP?

Part – B

1. Explain cache memory?
2. Write Blu-ray disc parameters?
3. What are the layers in RW-CD?
4. Differentiate LCD and LED display?
5. What is the difference between Hardware, Software and Firmware?
6. What are the Hard disk specification explain any one in detail?
7. Define formatting and its types.
8. Draw the PCI block diagram.

Part – C

1. Explain the architecture and block diagram of multi-core processor?
2. Explain the construction, reading and writing operations of DVD-ROM?
3. Explain the construction and working of hard disk?
4. Explain the construction of DVD reader/Writer?
5. Explain briefly about DDR2 and DDR3?
6. Explain the main memory and any two memory devices?
7. Explain the working principle of CD-R, CD-RW?
8. Explain any two bus standards in details?
9. Explain the working principles of Ultra ATA, Serial ATA?

2. I/O DEVICES AND INTERFACE

Part – A

1. What is parallel I/O port?
2. List the types of printers?
3. What is line printer?
4. What is the main principle of thermal printer?
5. What is TFT display?
6. Expand the term LED.
7. What are membrane and mechanical keyboard?
8. Define: Blue tooth interface.
9. List out the types of printers.
10. Define: Spike Isolator.
11. Expand the term UPS.
12. What is Multi – Function Printer?
13. Write the signal specification problems with interfaces.

Part – B

1. Write the keyboard signals?
2. Explain the operation of optical mouse.
3. Write the working principle of Ink jet printer.
4. What are the features of MFP?
5. Explain the working principle of modem.
6. Explain in detail about SVGA.
7. Write the working principle of LCD.
8. Explain Bluetooth interface.
9. Explain ON Line UPS?
10. Explain Serial port?

Part – C

1. Explain the working of wireless keyboard with block diagram.
2. Explain the construction and operation of laser printer.
3. Explain the working principle of LED and LCD displays.
4. Briefly explain the working principle of offline UPS.
5. Briefly explain the working of servo stabilizer.
6. Explain the construction and operation of Dot Matrix printer?

3. MAINTENANCE AND TROUBLE SHOOTING OF DESKTOP AND LAPTOPS

Part – A

1. Define: BIOS.
2. List out the types of adapter.
3. Give the types of RAM.
4. What is CMOS?
5. What is POST? List out the tests performed by POST
6. What are the types of error messages?
7. Give an example for anti -virus software.
8. What is ESD?
9. What are the signatures of viruses?
10. What is firewall?

Part – B

1. Write down the steps involved in OS installation.
2. Explain Power Management.
3. How will you upgrade BIOS?
4. Write about SMD Components.

Part – C

1. Explain about advanced chipset features.
2. Explain the IPL hardware and POST test sequence.
3. Draw the block diagram of laptop motherboard and explain It.?
4. Explain about troubleshooting laptops.
5. Explain firewalls?

. 4. COMPUTER NETWORK DEVICES AND OSI LAYERS

Part – A

1. What is data communication?
2. List the characteristics of data communication.
3. List the components of data communication.
4. What is data flow?
5. List the types of data flow.
6. What is simplex?
7. What is half duplex?
8. What is full duplex?
9. What is topology? List its types.
10. State two disadvantages of bus topology.
11. State two advantages of star topology.
12. State two advantages of ring topology.
13. State two advantages of mesh topology.
14. State two disadvantages of mesh topology.
15. Define : networks
16. List the types of networks.
17. What is internet?
18. What is intranet?
19. What is extranet?
20. What are client and server?
21. What is peer to peer network?
22. State the advantages of client server network.
23. What is wireless router?
24. What is protocol?
25. What are defacto and dejure standards?

Part – B

1. Define TCP?
2. Explain SMTP?
3. Briefly explain about the components of data communication.
4. What are simplex, half duplex and full duplex modes?
5. What is hybrid topology?
6. Briefly explain about internet, intranet and extranet.
7. What is client server network?
8. Write about data communication standards.

Part – C

1. Explain about the OSI model with diagram.
2. Explain the bus, star, ring and mesh topologies.
3. Compare the bus, star, ring and mesh topologies.
4. Explain about LAN, WAN and MAN.
5. Write about CAN and HAN.
6. What are internet, intranet and extranet?
7. Explain about the switch, routers and gateway.

5.802.X AND TCP/IP PROTOCOLS

Part – A

1. What is IGMP?
2. What is TCP/IP?
3. List the layers in TCP/IP networking model.
4. Give examples for connection oriented service and connectionless services.
5. What are TCP and UDP?
6. Write any two comparisons between TCP and UDP.
7. What is socket?
8. List the 802.X protocols.
9. What is fast Ethernet?
10. What are IP address and MAC address?
11. Give any two applications of ICMP.
12. What is classful addressing?
13. What is sub netting?
14. What is subnet mask?
15. List the benefits of sub netting.
16. What is super netting?
17. What is supernet mask?
18. What is the use of FTP?
19. What is Telnet?
20. State the limitations of POP.
21. What is HTTP?
22. What is URL?
23. What is DNS?

Part – B

1. What is connection oriented service and connectionless services?
2. List the applications of UDP.
3. What is Gigabit Ethernet?
4. What is dotted decimal notation? Give example.

Part – C

1. What is the concept of CSMA/CD? Draw the PDU format and explain.
2. Explain socket with diagram.
3. Explain about TCP header with diagram.
4. Compare TCP and UDP.
5. Explain the structure of Token bus.
6. Explain the structure of Token ring.
7. Compare 802.X protocols.
8. Explain the structure of IP datagram.
9. Explain about ARP and RARP.
10. Explain about ICMP and IGMP.
11. Explain about Telnet and FTP.
12. Explain about SMTP and POP.
13. Explain about HTTP.
14. Explain about DNS
15. Explain about UDP header with diagram.