Computer Hardware and maintenance

CHAPTER 2

3 Marks each

1.Explain the Run Length Limited(RLL) Encoding Method with example?

2.Explain the term: Formatting?

4 Marks each

3. Explain the MFM recording techniques with a suitable example?

4.Explain the term related to Hard Disk:

  i. Track.

  ii. Sector

  iii. Cylinder

  iv. Cluster.

CHAPTER 3

3 Marks each

5.Describe any six characteristics of CRT color monitor?

6.Explain block diagram of video accelerator card?

7.What are the advantages and disadvantages of LCD monitor?

8.Distinguish between Interlace and Non-interlace monitor?

4 Marks each

9.State any two differences between Interlaced and Non-interlaced monitors?

10.Explain passive matrix and active matrix LCD with diagram?

11.Draw the block diagram of color monitor .Give the function of each block.

12.Describe the following term related to LCD:

   i. Refresh rate.

   ii. Response time.

CHAPTER 4

3 Marks each

13.Write working principle of mechanical key switch with neat diagram?

14.Explain in brief working laser printer with neat diagram?

15.With neat diagram,explain capacitive and Membrane switch?

16.Explain working principle of Dot matrix with neat diagram?

17.Define Modem.State the specification of modem?

18.Describe working of Inkjet printer?

19.Explain the working principle of membrane key switch?

20.With neat diagram describe working of flat-bed scanner?

21.With neat diagram explain working of opto-mechanical mouse?

22.Explain block diagram of internal modem?

23.Write any two advantages and disadvantages of laser printer over dot matrix?

24.Write any six characteristics of printer?

25.List types of keyboard switches and give their uses?

3 MARKS

1.Draw neat diagram of SMPS ? Explain working of the SMPS

2.Draw pin diagram of signal description ATX connector.

3.With a neat diagram define blackout and brounout surge and spike

4.List the different protection devices and explain it

5.Draw the block diagram and describe the working of offline UPS

6.Compare online and offline UPS

7.Write features of USB and Fire wire

8.What is RS232 and explain with block diagram

4 MARKS

9.With the neat block diagram explain the importance of centronic interface

10.Which are the SCSI connectors

11.Give the test sequence of POST

12.Explain block diagram of logic analyzer for troubleshooting of PC

13.Explain the necessity of diagnostic software

14.Draw the schematic block diagram of logic probe and describe the working

15.Give the preventive maintenance of hard disk and keyboard

16.Draw the block diagram of north bridge and south bridge architecture and explain it

17.Explain the four features of PCI BUS

18.Explain the extended memory

19.Explain the concept of cache of memory

20.Explain the troubleshooting and name the equipment used for the troubleshooting

21.Enlist the characteristics of power supply

22.Define load and line regulation