2024

PC System Technology

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions.*

1.	a)	Discuss the various generations of a computer system.	10
	b)	Write down the different components on a present day PC motherboard and give a brief description of each of them.	10
2.	a)	Explain hard disk formatting and partitioning. What is FAT? What are the differences between FAT12 and FAT32.	5+2+4= 11
	b)	Explain the working of a compact disk (CD) drive.	6
	c)	Differentiate between SRAM and DRAM.	3
3.	a)	Draw and explain the various parts and working of CRT display used in PCs.	10
	b)	Define pixel, resolution, dot-pitch, color depth, aspect ratio and refresh rate of a CRT display.	10
4.	a)	What is chipset. Explain in detail northbridge and southbridge. Give diagram for each.	10
	b)	What do you mean by operating system? Name some of them. What is its role in the functioning of a PC? Write the differences between MS-DOS and Windows operating systems.	10
5.	a)	What do you mean by peripheral devices? Name some input and output devices used in PCs.	4
	b)	Classify printers? Discuss each of them.	8
	c)	What are USB and Firewire ports? Discuss the variants	4+4=8

		of USB.	
6.	a)	Explain the functions and voltage levels of a PC-SMPS.	10
	b)	What is an Uninterruptible Power Supply (UPS)? Discuss and differentiate between online and offline UPS systems with the help of diagram.	10
7.		Write short notes on -i) NTFS, ii) PS/2 port, iii) POST, iv) Small Computer System Interface (SCSI).	5*4=20