Total number of printed pages: **Programme (Dipl.)/Semester V/DECE515A**

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)	Draw a neat diagram of a basic computer structure and explain. What do you mean by data and instructions?	10
	b)	Describe different types of PC ROM (read only memory).	6
	c)	Differentiate between SRAM and DRAM.	4
2.	a)	Describe hard disk formatting. Define seek time, latency time and access time.	6+4=10
	b)	Classify memory used in PCs. What is a memory hierarchy?	6
	c)	What is DDR? Discuss.	4
3.	a)	Explain the construction of a hard disk drive with the help of a neat diagram.	10
	b)	What do you mean by file system of a hard disk? State the important features of FAT 16, FAT 32 and NTFS systems.	10
4.	a)	Draw and explain the various parts and working of CRT display used in PCs.	10
	b)	Define pixel, resolution, dot-pitch, color depth and refresh rate of a CRT display.	10
5.	a)	State the different parts/components on a present day PC motherboard and give a brief description of them.	8

	b)	Describe the functionalities of ALU and Control unit of a PC processor?	4
	c)	Discuss briefly the functions of BIOS and POST. State the important differences between DOS and Windows.	5+3=8
6.	a)	Describe different levels of cache memory and their importance.	5
	b)	Discuss about the IBM PC family as PC, PC-XT and PC-AT with their important features.	8
	c)	Explain the different memory modules used in PC motherboards.	7
7.		Write short notes on -i) USB, ii) CMOS battery for PC, iii) Fire-wire, iv) Hard disk partitioning.	5*4=20

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