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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE – NOVEMBER - 2022

COMPUTER ORGANISATION

(Maximum Marks : 75) [Time : 3 hours]

PART-A

I. Answer **all** the following questions in one word or one sentence. Each question carries 1 mark.

(9x1=9 marks)

1	W. I. A. C.	Outcome	level
1	TILL I CD LID		
1	Write the expansion of RAID.	M 1.09	R
2	What is EEPROM?	M 1.05	R
3	Printers are usually classified as eitherortype.	M2.05	R
4	PCI stands for	M2.04	R
5	Write any two registers essential for instruction execution.	M3.02	U
6	State the purpose of microprogram counter.	M3.03	R
7	Define control word.	M3.03	R
8	Mention the role of a microprocessor in microcomputers.	M4.01	U
9	List the pointer registers in 8086.	M4.02	R

PART - B

II. Answer any Eight questions from the following. Each question carries 3 marks.

(8x3=24marks)
Module Cognitive

		Outcome	level
1	Differentiate DRAM and SRAM.	M 1.05	U
2	List any three RAID Levels.	M 1.09	R
3	Give any three features of USB.	M2.04	R
4	Give the control sequences for the implementing unconditional branch instruction.	M3.02	U
5	Outline the principle of pipelining.	M3.04	U
6	Explain micro operations involved in a fetch cycle.	M3.02	R
7	Mention the two phases of instruction execution.	M3.01	R
8	List any three features of 8086.	M4.01	R
9	Differentiate homogeneous and heterogeneous multicore processors.	M4.04	U
10	Mention the purpose of different control flags of 8086.	M4.02	U



PART - C

Answer all questions from the following. Each question carries 7 marks.

(6x7=42marks)

		Module Outcome	Cognitive level
III	Describe various functional units of a computer system with a	M1.01	
	diagram		
	OR		
IV	Outline the memory hierarchy with respect to speed, size and cost	M1.06	6 U
	with neat diagram.		
V	Explain the concept of a virtual memory with a neat sketch.	M1.08	B U
	OR		
VI	Write about the physical characteristics of the hard disk.	M1.09	U
VII	Explain I/O interfacing with memory mapped I/O and program controlled I/O.	M2.01	U
	OR		
VIII	Explain the working of interrupts.	M2.02	2 U
IX	What is DMA? Illustrate the role of DMA controller.	M2.03	3 R
	OR		
X	Explain about flat panel displays.	M2.05	5 R
XI	Draw the single bus organization of the data path inside a processor.	M3.01	U
	OR		
XII	Explain the functioning of microprogrammed control unit with a neat sketch.	M3.03	3 U
XIII	Describe the general purpose registers of 8086.	M4.02	2 R
	OR		
XIV	Describe the general architecture of Pentium processor.	M4.03	B R
