TED(21)– 3131

REVISION 2021

Q I D :

DIPLOMA EXAMINATION IN

ENGINEERING/TECHNOLOGY/MANAGEMENT/COMMERCIAL PRACTICE.

Computer Organisation

Time:3hours

MaximumMarks: 75

PARTA

I. **Answer all the following questions in one word or sentence.**   **(9x1=9Marks)**

1	---------- register contains the data to be written into or read from a addressed location	M1.02	R
2	A ------- is a communication pathway connecting two or more devices	M1.03	R
3	The acronym SCSI stands for-----------	M2.04	R
4	Name any four input devices	M2.05	R
5	The individual control word in the micro routine is referred as----	M3.03	U
6	Aprogram counter(PC) is defined as-------	M 3.01	R
7	Pentium processor uses ---------and hence can issue multiple Instructions per cycle	M4.03	U
8	List any 2 application of Multicore Processors	M4.04	R
9	Name general purpose registers of 8086	M4.02	R

PARTB

II. Answer any Eight questions from the following

(8 x 3 = 24 Marks)

1	List memory hierarchy with respect to speed, size and cost.	M1.06	R
2	Illustrate connection of memory to the processor	M 1.04	U
3	List the features of PCI	M 2.04	R
4	Define DMA and list the 3 registers in a DMA controller for data transfer operation	M 2.03	U
5	Draw the sequence of 4 stage pipeline	M 3.04	U
6	Write 3 action sequence need to execute the instruction MOV [R2],R1	M 3.02	U
7	List and define basic functional registers in the processor	M 3.01	R
8	Give the names of segment registers of 8086	M 4.02	R
9	Describe Role of Microprocessor in Micro Computer	M 4.01	U
10	List any 3 features of Multicore Processors	M 4.04	R

PARTC

III. **Answer all questions from the following** **(6 x 7= 42 Marks)**

1 Describe various functional units of a Computer system with diagram	M1.01	U
OR 2 Explain cache memory and state locality of reference	M1.07	U
3 Explain the bus structure	M1.03	U
OR		
4 With the help of a neat diagram show Organisation of bit cells in a memory chip.	M1.05	U
5 Summarize the sequence of events involved in handling an interrupt request from a single device	M2.02	U
OR		
6 With the help of a neat diagram show how the Standard Interfaces are used in a typical computer system	M2.04	U
7 Compare memory mapped I/O and Program controlled I/O.	M2.01	U
OR		
8. Give brief note on any 3 input or output device	M2.05	R
9. Explained about hardwired control with the help of a neat diagram	M3.03	U
OR		
10. Illustrate Fetching a word from Memory	M3.02	U
11. Explain the architecture of 8086 microprocessor with the help of a neat diagram	M4.02	U
OR		
12. Outline architecture of a Pentium Processor	M4.03	U