Roll No. | | | | | | | | | |

(90)

COER University

END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours
Program Name : BCA
Course Name : Computer Organization

Total Marks : 100
Semester : IV
Course Code : SOC258

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	List the different types of bus architecture.	CO 1	1
(b)	What is bus and explain its types?	CO 1	1
(c)	Write a short note on Shift Registers.	CO 1	1
(d)	The following memory units are specified by the number of words times the number of bits per word. How many address lines and input-output data lines are needed in each case? (a) 2K x 16; (b) 64K x 8; (c) 16M x 32; (d) 4G X 64.	CO 1	3
(e)	Construct a diagram that shows how a bus and memory transfer works.	CO 1	3

Q. No 2	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Differentiate Micro programmed control Microinstruction and Micro programmed Sequencing.	CO 2	4
(b)	Describe the working of Binary adder.	CO 2	1
(c)	Illustrate how data is transferred between components in a multiple-bus organization.	CO 2	4
(d)	Define hardwired control unit and micro programmed control unit.	CO 2	1
(e)	Construct a flowchart to illustrate the execution of a complete instruction.	CO 2	3

Q. No 3	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Define the concept of general register organization with the help of block diagram?	CO 3	1
(b)	Write a short note on processor organization.	CO 3	1
(c)	Briefly describe Reduced Instruction Set Computer.	CO 3	1
(d)	Define Interrupt Handling in detail.	CO 3	1
(e)	Explain Reduced Instruction Set Computer (RISC) and its characteristics.	CO 3	2

Q. No 4	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	Differentiate RAM and ROM chips with block diagram.	CO 4	4
(b)	Explain the memory hierarchy with describing the capacity, speed and price to purchase.	CO 4	2
(c)	Differentiate between Cache Memory and main memory.	CO 4	4

Q. No 5	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	Differentiate RISC and SISC.	CO 5	4
(b)	What is a multiprocessor system? Describe its characteristics.	CO 5	1
(c)	Describe and differentiate between Vector and Array processing. Are there any similarities between the two?	CO 5	3

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