

P-839

Total Pages : 3

Roll No.

BCA-11

Computer Organization

Bachelor of Computer Application (BCA)

4th Semester Examination, 2023 (June)

Time : 2 Hours]

[Max. Marks : 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION-A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

(2×19=38)

1. Explain the Different I/O techniques viz. Programmed I/O, Interrupt-Driven I/O and Direct Memory Access.

2. What do you mean by addressing mode? Discuss the different addressing mode of 8085 with example.
3. What do you mean by cache coherence? Mention the condition which cache coherence occurs. Explain, how cache coherence problem can be resolved.
4. With a neat block diagram, show how the basic computer registers are connected to the common bus. Explain the working of the 16-bit common bus.
5. With a neat diagram, explain the instruction pipeline processing in RISC architecture.

SECTION-B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

1. Draw the block diagram of single-bus organization of the data paths inside the CPU.
2. Draw the block diagram of a DMA controller explain its functioning.

3. Differentiate between hardwired & micro-programmed Computers.
 4. Compare synchronous counters with asynchronous counters.
 5. What is the function of a Multiprocessor system and list out the various characteristics of Multiprocessors?
 6. Draw the instruction word format and indicate the number of bits in each part.
 7. What is the difference between microprocessor and micro program? Is it possible to design a microprocessor without a micro program? Are all micro programmed computers also microprocessors?
 8. Write a short notes on Demultiplexer.
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