DE - 2409

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DISTANCE EDUCATION
B.C.A./B.C.A(LATERAL) DEGREE EXAMINATION,
DECEMBER 2011
MICROPROCESSORS AND PERSONAL COMPUTERS
(2003 onwards)

Time : Three hours   Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. (a) With a neat block diagram explain the function of various buses in a microprocessor system? (10)

   (b) Discuss the evolution of microprocessors. (10)

2. (a) Explain in detail about the architecture of 8085. (10)

   (b) What are the various registers of 8085? Discuss their function. (10)

3. (a) Explain in detail the types of addressing modes of 8085. (12)

   (b) Explain instruction cycle and machine cycle. (8)

4. (a) Write a program to add two 8-bit numbers, the sum may be 16 bits. (10)

   (b) Write an assembly language program to find 1's complement of an 8 bit number. (10)

5. (a) Explain in detail about RAM, PROM, EPROM. (12)

   (b) Briefly explain about the magnetic disk. (8)

6. (a) Explain in detail.
      (i) The memory mapped I/O scheme. (5)
      (ii) The I/O mapped I/O scheme. (5)

   (b) Briefly explain about direct memory access (DMA) data transfer scheme. (10)

7. (a) Describe the details of a motherboard and I/O cards. (10)

   (b) Explain about ISA, VESA and PCI. (10)

8. (a) Explain in detail about active preventive maintenance procedures? (10)

   (b) Explain the data backup system. (10)

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