

DISTANCE EDUCATION

B.C.A./B.C.A. (Lateral) DEGREE EXAMINATION, MAY 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 microprocessor based system. (10)
- (b) Write short notes on MSI and VLSI. (10)
2. (a) Draw the functional block diagram of 8085 and explain it. (10)
- (b) Explain in detail about interrupts. (10)
3. (a) Explain in detail about Instruction formats. (10)
- (b) Explain the following instruction set with examples.
 - (i) Data transfer group (5)
 - (ii) Arithmetic group. (5)
4. (a) With a neat flow chart write a program to find the 1's complement of a given number. (10)
- (b) Write a program to add two 8 bit numbers, the sum may be 8 bit. (10)
5. (a) Explain in detail about RAM and ROM. (10)
- (b) How can you expand memory size and explain the storage capacity of magnetic disc. (10)
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) Draw the internal organization of 80486 and briefly explain the function. (10)
- (b) Explain in detail about VGA and SVGA video cards. (10)
8. (a) Explain in detail about active preventive maintenance procedures. (10)
- (b) Explain the data backup system. (10)
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