6437
BOARD DIPLOMA EXAMINATION
JUNE- 2019
DIPLOMA IN ELECTRONICS AND COMMUNICATION ENGINEERING
MICROPROCESSORS
FOURTH SEMESTER EXAMINATION

Time: 3 Hours   **Total Marks: 80**

PART - A   (3m x 10 = 30m)

Note 1:Answer all questions and each question carries 3 marks

2:Answers should be brief and straight to the point and shall not exceed 5 simple sentences

1. **What is the output of following of instructions**:

    (a) **IN 8CH**   (b) **OUT F8H**.

2. Explain the following instructions.
    (a)LDA 8050H   (b) STA 9070H

3. **State the importance of instruction queue**.

4. **Compare maximum and minimum mode operation.**

5. Explain **LOOPZ** operation of 8086 microprocessor

6. Explain **WAIT** operation of 8086 microprocessor

7. What are the steps required for calling a subroutine?

8. Write an assembly language program to divide two 8-bit numbers?

9. What are the Advantages of RISC over CISC?

10. **Write any three differences between 80386 and 80486**

PART - B   (10m x 5 = 50m)

Note 1:Answer any five questions and each carries 10 marks

2:The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. **Draw and explain the functional block diagram of 8085.**

12. (a) Explain the interrupt response in 8086 microprocessor   **5M**

    (b) Explain different types of interrupts   **5M**

13. (a) Differentiate between 8- bit and 16- bit microprocessors
6M

    (b) State the need of memory segmentation   4M

14. Explain various addressing modes of 8086 microprocessor with two examples each

15. Explain the arithmetic instructions of 8086 microprocessor with two examples of each?

16. Write an assembly language program to a smallest number from an array.

17. (a) Distinguish between Real address mode and Protected virtual address mode in 80286?   4M

    (b) Explain the memory management of 80286 in detail?   6M

18. Draw and explain the functional block diagram of 80386.

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