BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

QUESTION BANK

Unit Test-II

Program: - Computer Engineering Group   Program Code: **IF**

Course Title: Digital Techniques and Microprocessor Semester: - III

Course Abbr. & Code: -DTM (313305)   Scheme: K

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CHAPTER-3 16-Bit Microprocessor 8086 (CO3) 12 Marks

2 Marks
1. State the functions of following pins of 8086. (CO3)
   a) MN/MX b) DT/R'
4 Marks

2. Explain Concept of Memory Segmentation and Pipelining. (CO3)
3. Explain Minimum mode configuration of 8086 in detail. (CO3)
4. Explain Maximum mode configuration of 8086 in detail. (CO3)
5. Draw the neat interfacing diagram in Maximum mode of 8086. (CO3)
6. Draw the neat interfacing diagram in Minimum mode of 8086. (CO3)
7. If DS=345A H and SI=13DC H, Calculate physical address. (CO3)

CHAPTER-4 Basic Assembly language programming using 8086 (CO3) 16 Marks

2 Marks
8. What is algorithm? (CO4)
9. State function of assembler? (CO4)
10. State function of Linker? (CO4)
11. State function of debugger? (CO4)
12. List two assembly directives. (CO4)

4 Marks
13. Describe various addressing modes of 8086 with one suitable example each. (CO4)
14. Explain any two stack related instruction of 8086. (CO4)
15. Explain any four arithmetic instructions of 8086 with example. (CO4)
16. Explain any four rotation instructions of 8086. (CO4)
17. Describe various string instructions of 8086. (CO4)
18. State and explain any four flag manipulation instructions of 8086. (CO4)

CHAPTER-5 Assembly language programming using loops and Branching instructions (CO5)
14 Marks

19. Write assembly language program for addition of two hexadecimal numbers. (8-bit) (CO5)
20. Write assembly language program for addition of two hexadecimal numbers. (16-bit) (CO5)
21. Write assembly language program for subtraction of two hexadecimal numbers. (8 bit) (CO5)
22. Write assembly language program for subtraction of two hexadecimal numbers. (16 bit) (CO5)
23. Write assembly language program for addition of two BCD numbers. (CO5)
24. Write assembly language program for multiplication of two BCD numbers. (CO5)
25. Write assembly language program for multiplication and division of two numbers. (CO5)
26. Write assembly language program to find smallest hexadecimal number. (CO5)
27. Write assembly language program to find largest hexadecimal number. (CO5)
28. Write assembly language program to sorting of data. (CO5)
29. Write assembly language program for transfer of block of data. (CO5)
30. Write assembly language program for subtraction of two BCD numbers. (16 bit) (CO5)