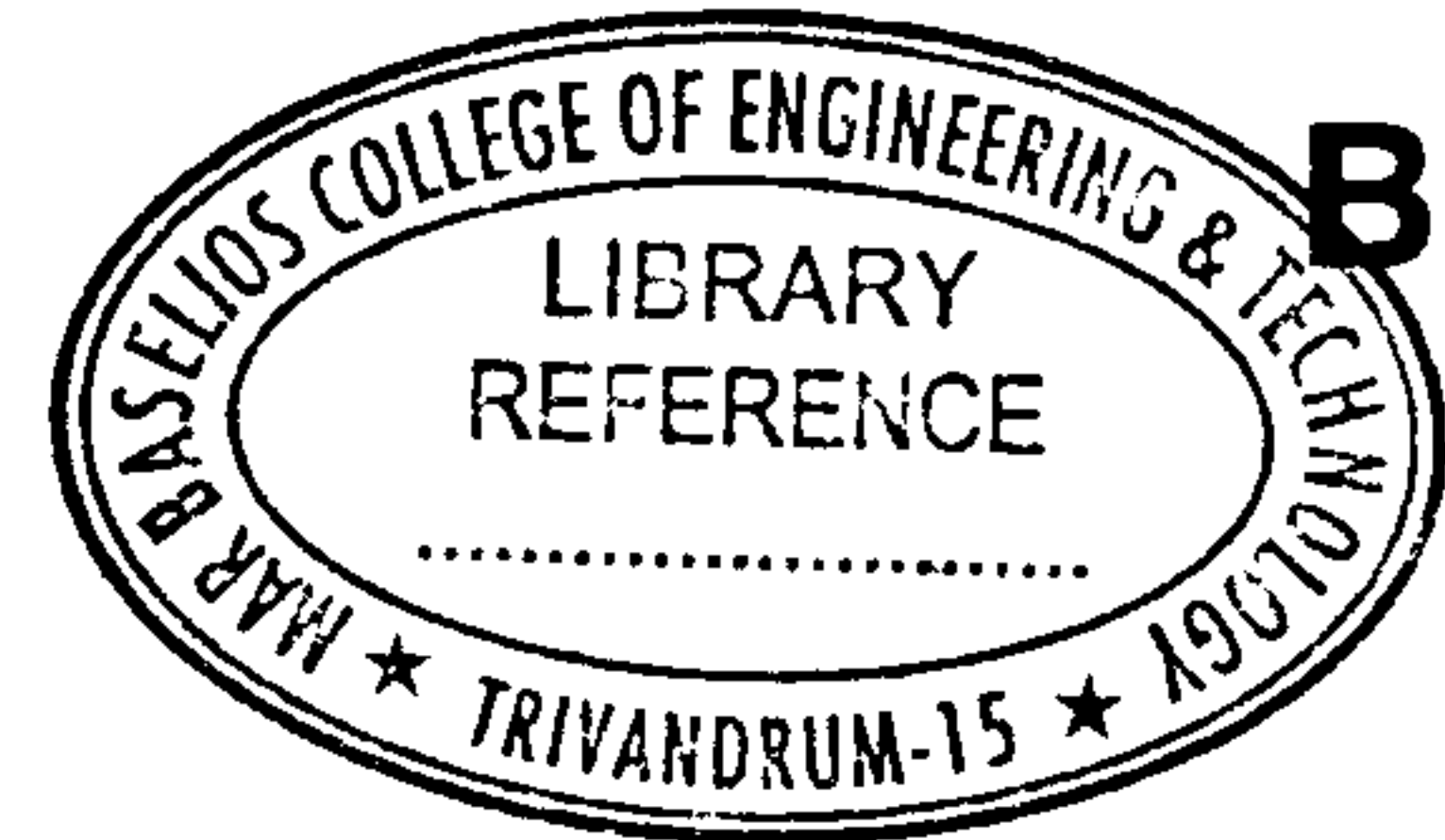




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B – 5562

Reg. No. :

Name :

**Sixth Semester B.Tech. Degree Examination, March 2017
(2008 Scheme)**

**Branch : ELECTRICAL AND ELECTRONICS
08.602 : Microprocessors and Applications**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. What is meant by demultiplexing of AD bus ?
2. Explain the following instruction of 8085 μ p .
 - a) SUB M
 - b) POP D
3. Write a delay subroutine using two register. What will be the maximum delay obtained under this condition ?
4. What is interrupt ? Explain enabling and disabling of interrupt ?
5. Differentiate between hardware and software interrupts.
6. What are I/O ports ? What are programmable and non programmable ports ?
7. List the main features of intel 8255.
8. What are different operating modes of intel 8255 ?
9. What is meant by pipe lining ?
10. What is meant by memory segmentation ? **(10×4=40 Marks)**

P.T.O.



PART – B

Answer **one full** question from **each** Module.

Module – I

11. a) Describe the various general and special purpose registers of 8085 microprocessor. 10
- b) Hundred 8 bit numbers are stored in memory location starting from 4000 H. Write an ALP to transfer even numbers of array to location starting from 4100 H. 10
12. a) Explain the terms machine cycle, T-states and instruction cycle. 6
- b) Draw the timing diagram of instruction MVI A, 10 H. 8
- c) Write an ALP to find product of two 8 bit numbers. 6

Module – II

13. a) Draw the internal block diagram of 8255 PPI and explain each block in detail. 12
- b) Give the memory map and interfacing of two 8K RAM and two 4K ROM chips. 8
14. a) Explain the different data transfer schemes used in 8085 μ p. 10
- b) With relevant flow chart and block diagram, explain microprocessor based temperature control system. 10

Module – III

15. a) Explain the internal architecture of an 8086 μ p. 10
- b) Discuss the register organization of 8086. Explain the function of each register. 10
16. a) Explain the maximum mode and minimum mode operation of 8086. 10
- b) Describe the flag register format of 8086. What are the functions of control flags ? 10
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