



Enrolment No. _____

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

MID SEMESTER EXAMINATION, SEPTEMBER-2016

Subject Code: 2150907

Date: 26/09/16

Subject Name: MAMI

Sem: 5TH EE

Time: 10:00 TO 10:50

Total Marks: 20

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- QUE.1** (A) Define the terms: 3
1) Auxiliary Carry Flag
2) Draw Clock Circuit of 8051
3) Overflow Flag
- (B) Explain van-neumann and harvard architecture with block diagram 3
- QUE.2** (A) Explain how address/data lines Ad0 - Ad8 are demultiplex. Draw the logic diagram to generate control signals MEMW, MEMR, IOR and IOW from IO/M, WR, RD 3
- (B) Draw the functional block diagram of 8085 microprocessor. 4
- OR**
- (B) Draw the functional block diagram of 8051 microcontroller. 4
- QUE.3** (A) Explain the addressing modes of 8051 with the help of examples. 3
- (B) Write an ALP to divide the data in RAM location 15H by the data in RAM location 16H. Put the Quotient and remainder in external RAM locations 2000H and 2001H 4
- OR**
- (A) What is bit level instruction in 8051? Explain all bit level instruction in detail. 3
- (B) What is interrupt? What are the interrupts available in 8085? Write interrupt vector table for vector interrupt. 4

***** ALL THE BEST *****