

**Government College of Engineering, Aurangabad**  
(An Autonomous Institute of Government of Maharashtra)

**TE IT (Rev) Examination**  
End Semester Examination Nov.2016

**IT 341:MICROPROCESSOR AND INTERFACING**

22 NOV 2016

Time: Three Hours

Max. Marks. 60

"Verify the course code and check whether you have got the correct question paper"

**N.B:-**

1. All questions are compulsory
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary and state clearly.
4. Use of non-programmable calculator is allowed.

**Q.1) Attempt any Two (12)**

- i) Elaborate the concept of memory segmentation in 8086. State its advantages.
- ii) Describe the interfacing of 8086 with even and odd memory banks with a neat diagram.
- iii) Draw and explain timing diagram of memory read cycle of 8086 in maximum mode.

**Q.2) Attempt any Two (12)**

- i) Illustrate various addressing modes of 8086 with examples.
- ii) Compare I/O mapped I/O and memory mapped I/O.
- iii) Write an assembly language program for block transfer from one memory location to other.

**Q.3) Attempt any Two (12)**

- i) Describe the Interrupt Vector Table in 8086. Calculate the interrupt vector address for INT 55H interrupt?
- ii) Explain DOS and BIOS interrupts.
- iii) Discuss operating modes of 8259.

**Q.4) Attempt any Two (12)**

- i) Draw and explain architecture of Programmable Peripheral Interface chip.
- ii) Explain Centronics printer interface.
- iii) Discuss sensors and transducers.

**Q.5) Attempt any Two (12)**

- i) Explain operating modes of 8253.
- ii) What is DMA ? State the need of it in 8086 system.
- iii) Write a short note on 8087 NDP.