

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V- EXAMINATION – SUMMER 2016

Subject Code: 150701

Date: 19/05/2016

Subject Name: Advance Processors

Time: 02:30 PM to 05:00 PM

Total Marks: 70

Instructions:

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

- Q.1** (a) Explain 8086 Architecture with neat diagram. **07**
(b) Explain segmentation and segment registers in details. **07**
- Q.2** (a) Describe MMX and Hyper Threading. **07**
(b) Explain the addressing modes of 8086 with example. **07**
- OR**
- (b) Explain the following instructions: **07**
1) LDS 2) PUSHF 3) DAA 4) CBW 5) SAR 6) RCR 7) RET
- Q.3** (a) List and explain the various Bit Manipulation and String instructions with examples. **07**
(b) Write an 8086 assembly program to find largest of two 8-bit numbers. **07**
- OR**
- Q.3** (a) List and explain the various loop instructions with examples. **07**
(b) Write an 8086 assembly program to sum of series of 8-bit numbers. **07**
- Q.4** (a) Answer the following. 1. Compare the procedures and ISRs. **07**
2. Interrupt priorities in 8086.
(b) Discuss Minimum mode operation of 8086 **07**
- OR**
- Q.4** (a) Explain 8086 interrupt vector table. **07**
(b) Explain different types of registers in 8086 microprocessor architecture. **07**
- Q.5** (a) Give and explain the architecture of SUN SPARC processor. **07**
(b) Draw and explain pin diagram of 80286 microprocessor. Also explain 80286 protected-mode operation. **07**
- OR**
- Q.5** (a) Draw and explain Intel 486 internal block diagram **07**
(b) What is macro? How can you define and call macros? Give an example of macro with parameter. **07**
