

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (OLD) - EXAMINATION – SUMMER 2018

Subject Code:150701

Date:09/05/2018

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 the concept of Segmentation in 8086 with its advantages. **07**
(b) State the differences between minimum mode and maximum mode of 8086. **07**

Q.2 (a) Explain following 8086 instructions. **07**
(i) LODS (ii) XLAT (iii) LEA
(b) Write an assembly language program to find of maximum and minimum number from a given array of ten 32 bit numbers. **07**

OR

(b) Write an assembly language program to reverse a given array of ten 16 bit numbers. **07**

Q.3 (a) Explain the concept of memory banks in 8086 memory interfacing with its advantages. **07**
(b) How Interrupt Descriptor Table is used to manage the interrupts? **07**

OR

Q.3 (a) Describe the Access Right Byte in 80286 processor. **07**
(b) Explain the differences between 8086 and 80286 processors. **07**

Q.4 (a) What is Virtual Memory? Describe the paging mechanism in association with it. **07**
(b) Explain the Gate descriptor in 80386 with its requirements. **07**

OR

Q.4 (a) Describe the features provided by MMX technology over Pentium processor. **07**
(b) Explain the significance of Privilege levels in 80286. **07**

Q.5 (a) Explain the concept of Hyper threading with its advantages. **07**
(b) Explain the merits and demerits of RISC and CISC CPU. **07**

OR

Q.5 (a) Describe the architecture of SUN SPARC processor. **07**
(b) Describe the architectural features of Core-2 duo processor. **07**
