

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– V • EXAMINATION – WINTER 2016

Subject Code: 150701

Date: 02/12/2016

Subject Name: Advance Processors

Time: 10:30AM – 01:00PM

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) Draw and explain 8086 pin diagram. **07**
(b) Explain the addressing modes of 8086 with example. **07**
- Q.2** (a) Draw and explain 8086 internal block diagram. **07**
(b) Explain 8086 interrupt vector table. **07**
- OR**
- (b) What is segmentation? List the various segment registers in 8086 and explain their role. **07**
- Q.3** (a) What are the differences between minimum mode and maximum mode operation of 8086? Draw minimum mode system with RAM, ROM and I/O port. **07**
(b) Briefly explain respond of 8086 when it receive signal on hardware interrupt pin NMI and INTR. **07**
- OR**
- Q.3** (a) Draw and explain memory read machine cycle of 8086 in minimum mode. Briefly explain ODD and EVEN bank concept in 8086. **07**
(b) Explain different categories of Assembly Language Instruction Set. **07**
- Q.4** (a) Draw and explain the internal block diagram of 80286 microprocessor. **07**
(b) Explain the 80386 microprocessor register set. **07**
- OR**
- Q.4** (a) Draw and explain the internal block diagram of 80486 microprocessor. **07**
(b) Explain the addressing modes of 80386 with examples. **07**
- Q.5** (a) Describe Reentrant and Recursive procedures. **07**
(b) Explain the architecture of SUN SPARC processor. **07**
- OR**
- Q.5** (a) Differentiate the RISC architecture and CISC architecture. **07**
(b) Briefly explain superscalar architecture, Hyper thread technology and core 2 duo technology in Intel P6 family processor . **07**
