

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(OLD) • EXAMINATION – WINTER 2017****Subject Code:160805****Date: 08/11/2017****Subject Name: Advance Microprocessor****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 BIU (Bus Interface Unit) & EU (Execution Unit) of 8086 in details **07**
(b) Explain interfacing of 8086 microprocessor with co-processor. **07**
- Q.2** (a) Describe different addressing modes of 8086 Microprocessor with example. **07**
(b) Explain variable, suffix & operators in brief. **07**
- OR**
- (b) Explain concept of pipelining and its advantages of 8086. **07**
- Q.3** (a) Explain the following Assembler directives of 8086 Microprocessor. **07**
EQU, DW, ENDP, EXTRN, ENDS, ASSUME, EVEN
(b) What is MACRO? How it differs from Procedure? Explain use of macro with one simple program. **07**
- OR**
- Q.3** (a) Describe the following instruction of 8086 Microprocessor. **07**
LAHF,XLAT,AAA,ROL,DAA,BTC,IN
(b) What is the Multiprocessing System? Write Applications of Multiprocessing system. **07**
- Q.4** (a) Write a program to add a profit factor to each element in the cost array & put the result in a prices array, where profit factor is 15h & cost =10h, 12h, 23h , 40h. **07**
(b) Describe Memory mapped I/O and Direct I/O. Give the main advantage and disadvantage of each. **07**
- OR**
- Q.4** (a) Write a program to find out the number is even or odd from given series of numbers. **07**
(b) Explain the Rules & Advantages for memory segmentation. **07**
- Q.5** (a) Explain internal interrupt of 8086. **07**
(b) Explain typical configuration of 8086 Microprocessor Minimum mode. **07**
- OR**
- Q.5** (a) Explain BIOS routines. **07**
(b) Write down the difference between 8085 & 8086. **07**
