

**B.Tech. DEGREE EXAMINATION, MAY - 2015**

**(Examination at the End of Second Year)**

**COMPUTER SCIENCE**

**Paper - VI : Microprocessors**

**Time : 3 Hours**

**Maximum Marks : 75**

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**Answer question No.1 compulsory**

**(15)**

**Answer ONE question from each unit**

**(4 × 15 = 60)**

- 1) a) Define procedures?  
b) Write different types of flags?  
c) Define DMA.  
d) Define Interrupts?  
e) What is Macros?  
f) Explain about while – Do implementation.  
g) Define Assembler?  
h) What is debugging.

**UNIT – I**

- 2) a) Draw the architecture of 8086 micro processor and explain about each block.  
b) Write an ALP to divide a 16 bit number with a 8 bit number and store the result in memory.

OR

- 3) a) Write an ALP to convert packed BCD to ASCII.  
b) Write an ALP to perform addition of two 16 bit numbers.

**UNIT - II**

- 4) a) Write the differences between procedures and macros and explain them with suitable examples.  
b) Explain if –then else statement with suitable examples.

OR

- 5) a) What are the logical instructions and explain them with examples.  
b) What are the Assembler directives.

### **UNIT - III**

- 6) a) Explain about addressing a Memory and ports in Micro computer system.  
b) Explain 8086 hardware review.

OR

- 7) a) Define Interrupt vector Table? Draw and explain interrupt vector table.  
b) Explain Hardware interrupt applications.

### **UNIT - IV**

- 8) a) Explain the DMA transfer.  
b) Explain 8086 maximum mode of operation.

OR

- 9) a) Explain Interfacing of Dynamic RAM.  
b) Write short note on 80186 Processor.

