Code No: 136AU **R16**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, May - 2019
COMPUTER ORGANIZATION
(Electrical and Electronics Engineering)

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

used paper 16-05-19 FN

PART - A

(25 Marks)

1.a)	Define Digital Computer.	[2]
b)	Write about Instruction codes.	[3]
c)	What is General Bus Operation?	[2]
d)	Write about Special Processor Activities.	[3]
e)	What are interrupt services?	[2]
f)	Define Macros. Give example.	[3]
g)	Write about Intel 8089.	[2]
h)	What are interrupts? Why we need Priority Interrupt.	[3]
i)	Define Array Processors.	[2]
j)	Explain Pipelining.	[3]

PART - B

(50 Marks)

2. Explain the components of the Computer system. [10]

OR

3. What is Micro operation? Briefly explain the arithmetic micro operations. [10]

4. With the help of functional diagram explain the operation of 8086 microprocessor. [10]

OR

5. List various addressing modes supported by the 8086 microprocessor? Explain them with suitable example instructions. [10]

6. Write an assembly language program to find the sum of first 15 decimal numbers. [10]

OR

7. With the help of a neat circuit diagram and timing diagram, explain the maximum mode operation of 8086 microprocessor. [10]

8. Draw the circuit of a BCD adder / subtractor and explain its operations. [10]

OR

9. Explain the multiplication of positive numbers using array multiplier with a neat sketch. [10]

10. Explain about Inter processor communication in detail. [10]

OR

11. Write about a) Main Memory b) Cache Memory. [10]

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