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Soad.

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
MID TERM (SUMMER SEMESTER EXAMINATION)- June-2018

COURSE CODE: 10B11CI401

MAX. MARKS:50

COURSE NAME: MICROPROCESSORS AND CONTROLLERS

COURSE CREDITS: 4

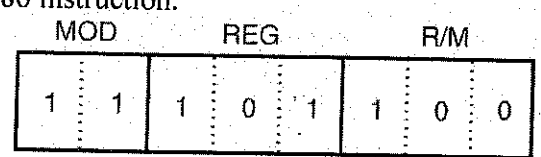
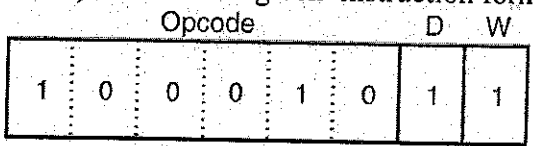
MAX. TIME: 2 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. a) Draw and explain the architectural diagram of 8086 microprocessor [8+4]
b) State the functions for the following pins of 8086
(i) NMI (ii) ALE (iii) INTA (iv) BHE

Q2. a) Explain the memory organization of 8086 microprocessor [8+4]
b) Suppose [AX] = 85H and [BX] = 64H, [SP] = 2000H.
What will be the value of AX, BX and SP after the following set of instructions are executed?
(i) PUSH AX (ii) POP BX

Q3. a) Discuss different Addressing Modes of 8086. [8+4]
b) Discuss the given instruction format of the 8086 instruction.



Q4. a) given the MACHINE Language instruction [4+4]
00011001 10001100 10010000 11001010
GIVE the Assembly language instruction with the format
b) Give the status of PSW after this manipulation

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0011 0100 1101 1100
+0000 0111 0010 1110
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0011 1100 0000 1010

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Q5 Differentiate between [6]
(i) Physical address and Effective Address
(ii) LEA and MOV
(iii) MAX/MIN mode of 8086