

Exam.Code:0922
Sub. Code: 7965

1059
B.E. (Information Technology)
Fourth Semester
ITE-406/434: Computer Architecture and Organization
(Batch 2015-2016)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Discuss the need for Opcode.
- b) Give full form of RISC and CISC
- c) What is implied addressing mode?
- d) List two ways of setting the priority of an interrupt.
- e) Describe Associative memory in brief.

(5x2)

UNIT - I

II. The operations to be performed with a flip flop F are specified by the following register transfer statement:

xT₃ : F Set F to 1

yT₁: Clear F to 0

zT₂: Complement F

wT₅: Transfer value of G to F

Otherwise the content of F must not change. Draw the logic diagram showing the connections of the gates that form the control functions and the inputs of the flip flop F. Use J K flip flop and minimize the number of gates. (10)

III. Compare and contrast hardwired controlled and micro-programmed control. (10)

IV. Explain with examples 3 address, 2 address, 1-address and zero address instructions. (10)

UNIT - II

V. Describe in detail the working and need for DMA. (10)

P.T.O.

(2)

- VI. What is the significance of Cache memory? Explain the three mapping procedures for organization of Cache memory. (10)
- VII. How will you define a Multiprocessor? Discuss different schemes available for establishing an Interconnection network. (10)

x-x-x