27169

Name : .....

Reg. No: .....

EIGHTH SEMESTER B.TECH (ENGINEERING) DEGREE EXAMINATION, MAY 2012

AI 04 801 – COMPUTER AIDED PROCESS CONTROL

Time : Three Hours **Maximum : 100 Marks**

(Answer all questions)

I (a) Write a note on DDC software.

(b) Explain the role of ADC in data acquisition technique.

(c) Explain PLC solution criterion.

(d) Write a note on Micro Plus.

(e) Compare PLC and distributed control strategies.

(f) What is a PLC controller?

(g) Differenciate between danical and fuzzy sets.

(h) What are self tuning regulator.

$(8 \times 5 = 40)$

II (a) (i) Draw the block diagram of a typical data acquisition system and explain the major design considerations.
(ii) What are RTOS? Explain clearly.

(Or)

(a) (i) What do you meant by announciators? Explain briefly.
(ii) What is a relay logic.

III (a) (i) What are PLCS?
(ii) What are the advantages of PLC

(Or)

(b) (i) What are the PLC solution and PLC operation.
(ii) What is networking of PLCs.

IV (a) (i) Explain the comment PLC versus DCS
(ii) What is PROFIBUS

(Or)

(b) (i) What is DLS software configuration. Explain its communication.
(ii) Explain DLS with an example.

V (a) (i) What are the basic principles of
(a) Artificial Neural Network.
(b) Fuzzy logic controller

(Or)

(b) (i) Explain the principle of model reference adaption control system.
(ii) What do you mean by optimum control? Explain the basic theory.

$(4 \times 15 = 60)$

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