MAY 2014 **P/ID 17502/PCASB**

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Explain how a binary number is converted to other number systems. Give examples.

2. Draw and explain the basic logic gates.

3. Give the design procedure of combinational circuit.

4. What is a ROM? Give its types.

5. List and explain the characteristics of flip flops.

6. Write a note on memory Register.

7. What is microprogammed CPU organisation?

8. What is a sequence? Explain.

PART B — (7 × 10 = 70 marks)

Answer any SEVEN questions.

9. Discuss the various binary codes.

10. Explain canonical and standard forms.

11. Discuss X–OR and equivalence functions.

12. Discuss the working of various types of flip–flops.

13. Explain in detail the issues related to counter design.

14. What is a ripple counter? Explain with suitable diagram.

15. Discuss on 'Bus organisation'.

16. Explain the various functions of processor unit.

17. Discuss on 'Design of accumulator'.

18. Give an example of hardwired control and explain.

———————