

Register Number :

Name of the Candidate :

**6 6 2 1**

**B.Sc. DEGREE EXAMINATION, 2008**

( COMPUTER SCIENCE )

( SECOND YEAR )

( PART - III )

( PAPER - VII )

**210 / 240. COMPUTER ARCHITECTURE  
AND MICROPROCESSORS**

( Revised Regulations )

( Common with B.Sc. - IT - Revised Regulations )

( Including Lateral Entry )

December ]

[ Time : 3 Hours

Maximum : 100 Marks

**SECTION - A** (8 × 5 = 40)

*Answer any EIGHT questions.*

*All questions carry equal marks.*

1. What are XOR and AND gates. Give truth table for 2 input XOR and AND gates.

**Turn over**

2. What is a counter ? List the applications of counters.
3. With a neat block diagram, explain the bus system of 8085.
4. What is memory map ? - Explain.
5. What is Data masking ? - Discuss.
6. Write an ALP moving a block of data from one location to another location. Draw the flow chart.
7. Explain how delay time is calculated in a delay routine.
8. What are subroutines ? Explain with examples.
9. Explain the BCD to Binary Conversion with suitable example.
10. Give a short note about software development tools.

**SECTION - B** (3 × 20 = 60)

*Answer any THREE questions.  
All questions carry equal marks.*

11. (a) What is the function of registers ? - Explain.  
(b) State and prove Demorgan theorem.

12. With a detailed block diagram, explain the internal architecture of 8085 highlighting each block.
13. What is an instruction ? How are the instructions classified for 8085 microprocessor ? Explain with suitable examples.
14. Explain how a stack can be constructed in an ALP. Using a suitable program, explain how data is stored in a stack and retrieved.
15. Write an ALP to convert a binary to ASCII code equivalent and also draw flow diagram.