



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2017

CS 2505- COMPUTER ORGANIZATION & ARCHITECTURE

Date: 05-05-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART – A

Answer ALL of the following:

(10x2=20 Marks)

1. Draw NOR gate and write its truth table.
2. Define Flip-flop.
3. What is Decoder?
4. What is Multiplexer?
5. What is an Operation code?
6. Define Effective address.
7. Define Control word.
8. What is Interrupt Cycle?
9. What is Program counter?
10. What is Program Status word?

PART – B

Answer ALL of the following:

(5x8=40 Marks)

11. a. Draw Different types of logic gates and write its truth table.

(or)

- b. Explain Full adder with diagram.

12. a. Briefly explain about 8 to 1 Multiplexers.

(or)

- b. Explain serial in serial out, bi directional Shift Register with example.

13. a. Discuss on Timing and Control.

(or)

- b. Explain Instruction Cycle in detail.

14. a. Explain Control registers and memory.

(or)

- b. Explain Register stack with example.

15. a. Explain Various Instruction formats in detail.

(or)

- b. Briefly explain Data transfer instructions.

PART – C

Answer any TWO of the following:

(2x20=40 Marks)

16. a. Explain JK Flipflops and D flipflops in detail.
b. Write short notes on memory unit.
17. a. Discuss Various Memory reference Instructions.
b. Explain Design of Accumulator logic.
18. a. Explain Program Control in detail.
b. Explain the different types of addressing mode in detail.
