Register Number

SATHYABAMA UNIVERSITY
(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E/B.Tech-CSE/IT
Title of the Paper: Digital Computer Fundamentals Max. Marks: 80
Sub. Code: 412305-511305-512305-6C0044   Time: 3 Hours
Date: 11/11/2010   Session: FN

PART - A   (10 X 2 = 20)
Answer ALL the Questions

1.   Convert $(256)_8 = (\ )_{10}$.

2.   What are the uses of parity bit?

3.   Draw the symbol diagram for AND, OR and NOR gates.

4.   Define - Demorgan's law.

5.   What is the use od BCD Adder?

6.   Differentiate Decoder and demultiplexer.

7.   Differentiate synchronous and asynchronous flip flops.

8.   Define – Binary counters.

9.   Differentiate Static RAM and Dynamic RAM.

10. Define – magnetic tapes.

PART – B   (5 x 12 = 60)

Answer All the Questions

11. Explain the algorithms for complementing values.

(or)

12. Explain various alphanumeric codes.

13. Explain about Karnaugh graph in detail.

(or)

14. Explain the concepts of Boolean algebra.

15. Differentiate ADDER and SUBTRACTER with examples.

(or)

16. Explain about (4*1) multiplexer.

17. Explain with example-shift registers.

(or)

18. Design a ripple and synchronous counters.

19. Explain about random access memories.

(or)

20. Explain the uses of cache memory.