17U136 (Pages:2) Name: ……

Reg. No…….

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2017

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

CC15U CSC1 C01- COMPUTER FUNDAMENTALS

(Complementary Course)

(2015 Admission Onwards)

Time: Three Hours Maximum: 64 Marks

PART A

Answer ***all*** questions. Each question carries 1 mark.

1. Write truth table of XOR gate.
2. What is the use of plotter?
3. What is the specialty of EPROM?
4. Define an algorithm.
5. What is a nibble
6. What is the 1's complement of 10101101_2?
7. Apply De Morgan's theorem to A(A+B) .
8. Convert $FEDB_{16}$ to binary form.
9. What is the use of parity bit?

(9x1=9 Marks)

PART B

Answer ***all*** questions. Each question carries 2 marks.

10. Write algorithm to find largest among two numbers.
11. Perform 11011_2-10101_2 using 2's complement
12. Short note on various types of ROM.
13. Convert to POS form A+B'C+A'C
14. Write Short note on Cache memory.

(5x2=10 Marks)

PART C

Answer ***any five*** questions. Each question carries 5 marks.

15. Which are Universal gates? Why are they called so? Explain with implementation.
16. Explain with example hamming code.
17. Explain the classifications of primary memory
18. Write algorithm and flowchart to find roots of quadratic equation.

19. Convert the following.

    a) $984_{10}=?_{7}$

    b) $10110110_{2}=?11$

    c) $FA2C.74_{16}=?_{10}$

20. Write short note on micro programmed and hardwired control unit.

21. Write truth table, logic diagram and formula of half adder and full adder.

22. Explain various types of RAM.

(5x5=25 Marks)

PART D

Answer ***any two*** questions. Each question carries 10 marks

23. With diagram explain basic computer organization

24. Explain various secondary storage devices.

25. Simply using K-Map $F(A,B,C,D)=\sum(0,1,2,3,4,8,9,10,11,12,15)$

(2x10=20 Marks)

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