TELANGANA UNIVERSITY
S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029)
V SEMESTER INTERNAL ASSESSMENT I EXAMINATIONS
DIGITAL ELECTRONICS & MICROPROCESSOR QUESTION BANK

- Fill in the blanks :-

1. A binary digit is called a bit

2. Decimal 21 is equal to 10101 in binary

3. According to binary addition, 1 + 1 = 10

4. $(1100110)_2 = (102)_{10}$

5. The AND gate is also called a co-incidence circuit

6. NAND and NOR logics are also known as Universal Gates

7. In a NOT gate, when input is high, the output in Law

8. The 2's complement of a binary 10100 is 01100

9. The digital system operates on binary system

10. Binary addition of (1+1+1+1) gives 100

11. Octal 45 is equivalent in binary 100101

12. When an electrical I/P signal A = 11011 is applied to NOT gate its output is 00100

13. An Half adder is constructed from XOR and AND gates

14. An EXOR gate producer an output as 'I', when inputs are different

15. Shift resister is classified into 4 types

16. The full form of SIPO is serial in parallel int

17. The universal shift resister is capable of shift data left, right and parallel load capabilities

18. To active entire clip function of an enable I/P to multiplexer clip.

19. A digital multiplexer is combinational circuit that selects one to many

20. In a multiplexer, the selection of a particular input line is controlled by select lines

21. How many NOT gates required to 4 to 1 multiplexer 02

22. A Resister is defined as group of Flip-Flops to store binary information

23. A Register is a combination of Flip-Flaps

24. How many types of Flip-Flops 4

25. Minimum No. of MOS required to make dynamic RAM is 4

26. AND, OR, NOT gates are called primary gates

27. In Bipolar family the smallest propagation delay is ECL

28. Mod-6 and Mod-12 counters are most commonly used in Digital Clocks

29. The output of AND gate is low, when any input is low

30. A simple Flip-Flop is a 1-bit memory

31. A ripple counter speed is limited by propagation delay of each Flip-Flop

32. MUX circuit used to parallel to serial converter

33. CMOS logic family uses low power

34. In TTL family high output voltage corresponding to 2.4 to 5 V

35. TTL stands Transistor – Transistor – Logic

36. CMOS logic family has highest famout

37. The odd number of is in a binary word odd polity

38. The output broken expression for Ex-OR Gate $y = \overline{A}B + A\overline{B}$

39. The Full adder consist of two HA's & OR gate

40. The ex-NOR gate output is unity when Input s are same

II. Short Questions.

1. State De morghon's theorems ?

2. Explain types of Logic families ?

3. Draw truth table of Ex-NOR gates ?

4. Define positive and negative logic ?

5. Construct OR gate using NAND gates only ?

6. Construct Ex-OR gates using NOR gates only ?

7. Explain Race around conditions ?

8. Draw truth table of JK Flip-Flap ?

9. Draw truth table of AND gate ?

10. What is CMOS logic ?