

No. of Printed Pages : 2

21BSC4C4ELL



Sl. No.

B.Sc. IV Semester Degree Examination, Sept./Oct. - 2024

ELECTRONICS

DSC 4 : Digital Electronics and “C” Programming

(NEP)

Time : 2 Hours

Maximum Marks : 60

Note : Answer *all* sections.

SECTION - A

Answer **all** questions.

10x1=10

1. (a) Define octal number system.
(b) Expand BCD.
(c) Expand XNOR gate.
(d) Name any two I/P devices.
(e) What is latch circuit ?
(f) What is symbol for NAND gate ?
(g) Mention array in C-programming.
(h) Expand SOP and POS in logic simplification.
(i) What is MSI Scale ?
(j) Expand RTL and CMOS.

SECTION - B

Answer **any four** questions.

4x5=20

2. Convert $(10101001)_2$ into Hexa decimal system.
3. Explain Half Adder Circuit.
4. Explain NAND and NOR gates.
5. Explain the basic structure of C-language.
6. Classify the logic families with devices.
7. Explain un-conditional statements in “C” programming.



P.T.O.

SECTION - C

Answer **any three** questions.

3x10=30

8. With neat logic symbol explain Basic logic gates with Truth table.
9. Explain Full Adder Circuit with truth table.
10. Explain 1 to 16 decoder.
11. Explain the switch statement with syntax, flow chart and example.
12. Convert the following Boolean equation to logic diagram.
$$AB + \overline{AB} + (A + B)C$$
13. Write short notes :
 - (a) Excess - 3 codes
 - (b) TTL logic families

- o O o -

