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SUBJECT CODE NO: - BNP - 2662
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. (NEP) (P-2024) F.Y Sem II
Examination November / December 2025
Electronics Digital Electronic-I

[Time: 1:00 Hours]

[Max. Marks: 30]

Please check whether you have got the right question paper.

N. B

- i. Question No.1 is multiple choice objective type and it is compulsory. It carries 10 marks.
- ii. Attempt any four questions from Q.2 to Q.7. Each of these question carries 5 marks.
- iii. Figures to the right indicate full marks.

Part – A

Q1 Multiple Choice Questions

10

1. The value of radix or base in binary number system is _____.
a) 2
b) 8
c) 10
d) 16
2. The 1's Complement of 10011100 is _____.
a) 10011100
b) 10011111
c) 11100011
d) 01100011
3. _____ is also known as Inverter
a) AND
b) OR
c) NOT
d) X-OR
4. When both inputs are same then output is One (High) in _____ logic gate?
a) OR
b) X-NOR
c) AND
d) NOT
5. A Multiplexer is a _____ circuit?
a) Combinational
b) Sequential
c) Both a and b
d) None of the above

Part – B

Attempt Any Four Questions from Q.2 to Q.7

Q2 $(5070)_{10} = (?)_8 = (?)_2$

05

Q3 $(110101)_2 - (100101)_2 = (?)_2$ using 2's Complement subtraction

05

Q4 Explain De-Morgan's First Theorem?

05

Q5 Explain POS (Product of Sum)?

05

Q6 Explain Half adder?

05

Q7 Explain 2's Complement adder?

05

