



RAN-2303000501049005

B.Sc. (NCF-NEP) (Sem. - I) Examination November - 2025

EL-MDC-103 : Electronics for Computer Science

[Total Marks: 25

સૂચના : / Instructions

(1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

Fill up strictly the above details on your answer book.

Seat No.:

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Student's Signature

Q.1. One word or short answer. (Any 5)

(05)

1. What is a number system?
2. Give the full form of ASCII.
3. What are the three basic logic gates?
4. What is a race condition in flip-flops?
5. What is register?
6. What is RAM?

Q.2. Answer. (Any 2)

(10)

1. Convert the Hexadecimal numbers 123, 456, 789, ABC, DEF into Octal number.
2. How do we perform 1's complement of 4-bit binary number? Do the subtraction of 1000 from 1110 in 1's complement.
3. What is demultiplexer? Discuss the 1-to-8 demultiplexer in detail.

Q.3. Answer. (Any 2)

(10)

1. What is a race condition in flip-flops? Discuss J-K flip-flop and its application.
2. Explain the operation of universal shift register.
3. State the difference between static and dynamic RAM.