

K.G.D.M. Arts, Commerce & Science College, Niphad
F.Y.B. Sc.(C.S.) (NEP-2024 Pattern) SEM-II
Internal Exam-March 2026

Time: 1Hrs.
Marks - 20M

8M

- 1) What is Octal Number System?
- 2) Write the names of Universal Gates.
- 3) Full form of : i) ASCII ii) BCD
- 4) Define Positive & Negative Logic System.
- 5) What is K-Map?
- 6) Explain Even & Odd Parity.
- 7) What do you mean by SOP & POS Form?
- 8) Why EX-OR Gate is used as parity checker.
- 9) Define Minterm & Maxterm.
- 10) Explain the rules for Binary Addition.
- 11) What is Alphanumeric Code.

12M

- 1) Explain the 2's Complement Method for Subtraction.
- 2) Draw the circuit symbol of AND, OR & NOT Gates. Write their truth tables & logical expressions.
- 3) What is the radix used for decimal, binary, octal & hexadecimal number system?
- 4) Design the Binary & Gray Code Converter Using K-Map.
- 5) State & Prove De-Morgan's Theorem.
- 6) Simplify the following equation using K-Map:
$$\overline{Y} = ABCD + ABC + AB + A B$$
- 7) Solve The Following
 - i) $(8CA)_{16} = (?)_2$
 - ii) $(29.47)_{10} = (?)_2$
 - iii) $(345)_{10} = (?)_2$

BEST OF LUCK..!