

B.Sc. Sem.-1 Examination

MDC-ELE-114T

Electronics

February 2025

Time : 1-00 Hour]

[Max. Marks : 25

- Instructions :** (1) All questions are compulsory.
 (2) All questions carry equal marks.
 (3) Symbol used have their usual meaning.

1 Give the colour code for carbon resistor. Also discuss about wire-wound resistor & potentiometers in detail. 10

OR

1 List different types of capacitors. Discuss the theory when two capacitors are connected in series & parallel. Also discuss energy stored in capacitor. 10

2 (a) $101010.11_{(2)} = \dots\dots\dots_{(10)} = \dots\dots\dots_{(16)}$ 10
 (b) $3472.33_{(10)} = \dots\dots\dots_{(2)} = \dots\dots\dots_{(8)}$
 $= \dots\dots\dots_{(16)}$

OR

2 (a) Explain about Boolean law & theorems in detail. 10
 (b) Write notes on Excess-3 code.

3 Answer in short (Any Five) : 5

- (1) $100K\Omega = M\Omega$
 (2) 100 nano farad = micro farad
 (3) Define Q factor of a coil.
 (4) Give the full form of ASCII
 (5) Which logic gate is used to construct Binary to Gray code?
 (6) Draw the truth table of 2 input NAND gate.