

2024

PHYSICS

B.Sc. First Semester End Examination - 2024

PAPER - SEC-101T

Full Marks : 20

Time : 1 hour

*The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own
words as far as practicable.
Illustrate the answers wherever necessary.*

Group - A

1. Answer any five questions out of eight questions given.

2×5=10

- a) State Ohm's law. 2
- b) How can multimeter be used as a voltmeter? 2
- c) What is the use of function generator? 2
- d) How can one construct a voltmeter using an ammeter? 2
- e) How does frequency of wave is measured by CRO? 2

(Turn Over)

(2)

- f) What are the advantages of Breadboard? 2
- g) What do you know by transistor and what is its use? 2
- h) Find the value of capacitance for the capacitor having code printed 102 and 101? 2

Group - B

Answer any two questions out of four questions given.

5×2=10

- 2. (i) How an ammeter and a voltmeter are connected in an electrical circuit? Explain with circuit diagram. 3+2
- (ii) Draw and write the colour code for the resistance (470 ohm) and $(0.56 \pm 10\% \text{ ohm})$
- 3. Give block diagram of Cathode Ray Oscilloscope. 5
- 4. Discuss on different types of error coming from an experiment. 5
- 5. (i) What do you know about IC chip?
- (ii) Write down the measurement function of a multimeter.

2+3