

(6 pages)

Reg. No. :

Code No. : 30464 E Sub. Code : CSPH 41

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024.

Fourth Semester

Physics — Skill based Subject

MAINTENANCE OF ELECTRONIC APPLIANCES

(For those who joined in July 2021 and 2022 only)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer :

1. _____ stores charge.
(a) Capacitors (b) Resistors
(c) Both (a) and (b) (d) None of the above
2. What is the SI unit of resistance?
(a) Ohm (Ω) (b) Ampere
(c) Coulomb (d) Meter
3. The signal frequency in CRO is
(a) Less than 1 MHz (b) More than 1 MHz
(c) More than 10 MHz (d) More than 10 Hz
4. A Lissajous patterns are used to measure
(a) Voltage and frequency
(b) Frequency and phase shift
(c) Frequency and amplitude distortion
(d) Amplitude and flux
5. Piezoelectric transducer is used for measuring
(a) Non electrical quantities
(b) Electrical quantities
(c) Chemical quantities
(d) None of the above
6. With the increase in the intensity of light, the resistance of photovoltaic cell
(a) Increases (b) Decreases
(c) Remains same (d) None of the above

7. What is the meaning of MODEM?

- (a) Modern electronic machine
- (b) Modulator and demodulator
- (c) Modulator and convertor
- (d) Modern development machine

8. Cell phone communication is a _____

- (a) Full simplex (b) Full duplex
- (c) Simplex (d) Half simplex

9. ISO number in film

- (a) Film speed rating
- (b) Quality standard number
- (c) Internal system number
- (d) Aperture order number

10. A digital image is made up of thousands of

- (a) Pixels (b) Bitmap
- (c) Resolution (d) Vector images

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) How to soldering and desoldering? Explain it.

Or

(b) What is star and delta connection of resistors and capacitors?

12. (a) Describe the measurement of resistance and voltage using multimeters.

Or

(b) Explain about waveforms and Lissajolle's figures.

13. (a) Discuss about photo resistors.

Or

(b) Discuss about photovoltaic cells.

14. (a) What is the difference between dish antenna and DTH system?

Or

(b) Comparison between telephone and cellular telephone.

15. (a) Write short notes about Lens shutter and aperture.

Or

- (b) Explain about filters.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Explain different types of resistors and write down its characteristics.

Or

- (b) Explain different types of capacitors and write down its characteristics.

17. (a) Draw the block diagram of CRO. Explain the principle and operation of CRO.

Or

- (b) Explain the working theory of A/F and R/F oscillators.

18. (a) Discuss about characteristics of transducers and explain its basic requirements.

Or

- (b) Explain different types of transducers. Write in detail about the classification of transducers.

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19. (a) Explain with the neat sketch the basic concepts of radio transmitter and receiver.

Or

- (b) Describe the principle and operation of mobile phone.

20. (a) Describe with a neat diagram, parts of camera and accessories.

Or

- (b) Explain the working theory of flash photography.

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