

(6 pages)

Reg. No. :

Code No. : 10464 E Sub. Code : CSPH 41

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

Fourth Semester

Physics

Skill Based Subject — MAINTENANCE OF
ELECTRONIC APPLIANCES

(For those who joined in July 2021-2022)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Which one of the following is a passive component?
- (a) resistor (b) vacuum triode
(c) transistor (d) diode

2. The material used in soldering is
- (a) copper (b) zinc
(c) water (d) wax
3. Multimeter is a _____ instrument.
- (a) multipurpose (b) analog
(c) digital (d) current
4. The insulation of wiring can be tested with
- (a) multimeter (b) gauss meter
(c) watt meter (d) megger
5. The transducer which needs an external power supply for its operation is called _____
- (a) active transducer
(b) passive transducer
(c) inactive transducer
(d) capacitive transducer
6. Active transducers work on the principle of _____
- (a) energy conversion
(b) mass conversion
(c) energy alteration
(d) volume conversion

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7. The antenna is a conductor that radiates or intercepts _____ wave energy.

- (a) electrochemical
- (b) electrical
- (c) mechanical
- (d) electromagnetic

8. The heart of mobile communication system is

- (a) base terminal station
- (b) base station controller
- (c) mobile switching center
- (d) none of the above

9. The aperture of a camera lens controls the

- (a) image sharpness
- (b) depth of field of an image
- (c) amount of light reaching the sensor
- (d) all the above

10. Before images are transferred to the memory card, they are stored in the

- (a) sensor
- (b) buffer
- (c) secondary memory card
- (d) none of the above

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PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Outline the resistor – colour coding.

Or

(b) Compare grove board and bread board.

12. (a) Outline the measurement of voltage.

Or

(b) Describe the XY mode lissajons figures.

13. (a) Give the basic requirements of a transducer.

Or

(b) Explain the working of a light transducer.

14. (a) Explain the basic concepts of radio transmitter.

Or

(b) Describe about dish antenna.

15. (a) Write the parts of camera and accessories.

Or

(b) Write about digital data transfer from a digital camera to computer.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Describe the various types of resistors.

Or

- (b) Describe how printed circuit board is prepared and used.

17. (a) What is a multimeter? How does it work?

Or

- (b) Describe the construction and working of LCD displays of instruments.

18. (a) Describe the classification of transducers.

Or

- (b) Explain the action of a piezoelectric transducer.

19. (a) Outline the basic concepts of radio receiver.

Or

- (b) What is ISDN? Explain the network arrangements in ISDN.

20. (a) Explain the various elements of flash photography.

Or

- (b) Explain :

(i) ISO speed and

(ii) Resolution in the context of digital photography.

