

(6 pages)

Reg. No. :

Code No. : 10440 E Sub. Code : CSPH 41

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023

Fourth Semester

Physics – Skill Based Subject

MAINTENANCE OF ELECTRONIC APPLIANCES

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer :

1. How many conductors does the capacitor consist of?
(a) one (b) two
(c) three (d) four
2. Colour bands for 1.5 ohms resistor will be
(a) Brown green brown
(b) Brown green golden
(c) Brown golden green
(d) Brown golden golden

3. CRO cannot be used to measure _____
(a) frequency (b) phase
(c) power (d) voltage
4. Which one of the following meters can be substitute a multi-meter?
(a) Voltmeter (b) Ohmmeter
(c) Both (a) and (b) (d) None of the above
5. The transducer used for the measurements are
(a) Resistance temperature detectors
(b) Thermistors
(c) Ultrasonic
(d) All 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 name for convert digital signal to analog signal?
(a) Modulation (b) Demodulation
(c) Bypass (d) Encapsulation

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8. Identify the frequency of the crystal used for outgoing calls in mobile phones

- (a) 26 MHz (b) 99 MHz
(c) 108 MHz (d) 5.5 MHz

9. Which of the materials is most used for the filaments in the incandescent?

- (a) Tungsten (b) Silver
(c) Both (d) None of the above

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) What is colour coding? Give any two examples.

Or

(b) Write short notes about groove board, bread board and printed board.

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12. (a) How to measure voltage, frequency, and phase in CRO?

Or

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

13. (a) Discuss about resistive transducers.

Or

(b) Write short notes about piezoelectric transducers.

14. (a) What is mobile communication system? Explain it.

Or

(b) Describe MODEM. Explain it.

15. (a) How to transfer the data from camera to computer? Explain.

Or

(b) Explain about a camera.

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[P.T.O.]



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) Explain the principle and working theory of CRO.

Or

- (b) Briefly explain digital storage oscilloscope.

18. (a) What is transducer? Briefly explain its characteristics.

Or

- (b) Write in detail about light transducers.

19. (a) Explain TV antennas and resonance antennas and discuss about its characteristics.

Or

- (b) Explain mobile communication system and discuss working theory of mobile phone.

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

Or

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