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Reg. No. :

Code No. : 20302 E Sub. Code : ASPH 31

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

Third Semester

Physics

Skill Based Subject — MAINTENANCE OF
ELECTRICAL APPLIANCES

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. An example of non-ohmic resistance
 - (a) diode
 - (b) tungsten wire
 - (c) carbon resistance
 - (d) copper wire

2. An ammeter is a

- (a) secondary instrument
- (b) absolute instrument
- (c) recording instrument
- (d) integrating instrument

3. The dielectric strength of transformer oil is expected to be

- (a) 1 KV (b) 33 KV
- (c) 100 KV (d) 330 KV

4. Continuous cooling transformation diagrams are mainly drawn for

- (a) iron (b) manganese
- (c) any alloy (d) steel

5. Why the split AC become very popular?

- (a) can fix if an window
- (b) take less amount
- (c) silent operation
- (d) very cheap.

6. Water heater was invented by
 (a) Sir Joseph Henry
 (b) Sir Alfred Lee Loom's
 (c) Sir Edwin Rund
 (d) Sir Joseph Nicephone
7. The contact resistance of a manually operated switch is
 (a) zero (b) very high
 (c) very low (d) none of the above
8. Which switch should have?
 (a) A high insulation resistance
 (b) Low insulation
 (c) Insulation resistance equal to content resistance
 (d) None of the above
9. Lamination's of core are generally made of?
 (a) Case iron (b) Carbon
 (c) Silicon steel (d) Stainless steel
10. Wedding generator win have _____
 (a) lap winding (b) wave winding
 (c) delta winding (d) duplex wave winding

PART B — (5 × 5 = 25 marks)

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

11. (a) Write a short note on galvanometer and working principle.

Or

- (b) Write a short note on Ohm's law and application.

12. (a) Describe the working principle of hot plates.

Or

- (b) Write a short note on testing of transformer.

13. (a) Write a short note on stabilizer.

Or

- (b) Write a short note on electric bulbs.

14. (a) Give a short note on single phase and three phase connection.

Or

- (b) Give a short note on color code for insulator.

15. (a) Write a short note on ELCB.

Or

(b) Explain about the relays and fuses.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain about the electrical power.

Or

(b) Explain about the ohm's law and application of ohm's law.

17. (a) Explain about the cooling of transformer.

Or

(b) Explain about the transformer losses.

18. (a) Explain about the stabilizer.

Or

(b) Explain about the Fridge and air conditioner.

19. (a) Explain about the overloading earth.

Or

(b) Explain about the RMS and peak values.

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20. (a) Explain about the inverter.

Or

(b) Explain about the overloading devices.

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