

CBSE Class 12 Electrical Technology 2019 - Set 312

Question Paper

Conducted by the Central Board of Secondary Education (CBSE)



Time Allowed: 2 Hours

Maximum Marks: 40

General Instructions

- (i) This question paper contains 28 questions in two sections.
- (ii) Section A: Attempt any ten questions from Questions 1–12 (1 mark each), any five from Questions 13–19 (2 marks each), and any five from Questions 20–26 (3 marks each).
- (iii) Section B: Attempt any one question from Questions 27 and 28 (5 marks each).

Section A

Answer any ten questions :

1. The heating element of an electric iron is similar to the heating element of a

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|-------------------------|------------------------------|
| (A) Room heater element | (B) Bowl type heater element |
| (C) Hot plate element | (D) None of the above |

2. If rotary switch of two-element hot plate indicates HIGH, it means that

- | | |
|--|--|
| (A) Its two elements are connected in series | (B) Its one element is connected with supply |
| (C) Any one of (a) and (b) | (D) None of the above |

3. The type of fault in electric kettle may be

- | | |
|-----------------------------|------------------------------|
| (A) Open circuit fault only | (B) Short circuit fault only |
| (C) Both (a) and (b) | (D) None of the above |

4. Exhaust fan is generally used in

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|-------------------|----------------------|
| (A) Room cooler | (B) Air cooler |
| (C) Desert cooler | (D) All of the above |

5. Timer is used in

- | | |
|------------------------------|-------------------------------|
| (A) Ordinary washing machine | (B) Automatic washing machine |
| (C) Both (a) and (b) | (D) None of the above |

6. Washing machine is not working. It may be due to

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|--------------------------------------|-----------------------------------|
| (A) Electric supply is not available | (B) Open circuit in electric cord |
| (C) Burning out of motor winding | (D) All of the above |

7. Most quantity of water is required in

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|-------------------------------------|------------------------------------|
| (A) Ordinary washing machine | (B) Semi-automatic washing machine |
| (C) Fully automatic washing machine | (D) All of the above |

8. Motor is used in the following :

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|----------------------|-----------------------|
| (A) Hair dryer | (B) Curler |
| (C) Both (a) and (b) | (D) None of the above |

9. Shading ring is used in

- | | |
|----------------------|-----------------------|
| (A) Universal motor | (B) Shaded pole motor |
| (C) Both (a) and (b) | (D) None of the above |

10. Following type of motor is used in blower type room cooler :

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|----------------------------------|-----------------------|
| (A) Shaded pole motor | (B) Split phase motor |
| (C) Single phase capacitor motor | (D) None of the above |

11. Defect in split phase motor may be due to
(A) Centrifugal switch (B) Stator winding
(C) Both (a) and (b) (D) None of the above
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12. To handle heavy equipment, the following are used :

- (A) Crane (B) Chain
(C) Pulley (D) All of the above
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Attempt any five questions.

13. Describing the construction of hot plate, write the functions of its main parts.

14. Write in brief the probable faults in an electric geyser.

15. Describe the construction of a blower type room heater.

16. What faults may be possible in an electric mixer and how can these be removed ?

17. What is the difference between room cooler and desert cooler ?

18. Write step-by-step procedure of fault removal in a vacuum cleaner.

19. What safety precautions should be taken while loading and unloading of heavy machinery ?

Attempt any five questions.

20. Describe the construction of a bowl type room heater.

21. Describe the construction of an OTG.

22. Explain the working of an automatic toaster.

23. Describe the method of over-hauling of a washing machine.

24. What are the common defects in an emergency light ? How can these be rectified ?

25. Explain the procedure of testing and repairing a defective electric hand drill machine.

26. What could be the causes of electric shock ? What are the main precautions to avoid these ?

Section B

Attempt any one question.

27. What is the difference between an ordinary room heater and a blower type room heater ? What precautions should be taken while using them ?

28. What is the difference between a ceiling fan and an exhaust fan ? Explain in detail. Also describe the installation procedure of an exhaust fan.

- End of Question Paper -