



C14-EE-506

4641

BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2018
DEEE—FIFTH SEMESTER EXAMINATION

MAINTENANCE OF ELECTRICAL EQUIPMENTS

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the principle of operation of electric iron. 3
2. List any six parts of an electric kettle. $\frac{1}{2} \times 6 = 3$
3. If the motor used in electric fan is not working, state any three reasons for it. $1+1+1=3$
4. List the devices used to suppress spikes in supply voltages. $1+1+1=3$
5. List any three tasks that have to be undertaken in the preventive periodical maintenance of power transformers. $1+1+1=3$
6. State the checklist for air blast circuit breakers for periodic maintenance. $1+1+1=3$
7. List the annually and semiannually checkings of UPS. $1+1+1=3$

- * 8. Explain the need of safety. 3
9. List any three Do's and Dont's of electrical supervisor at substations. $1\frac{1}{2}+1\frac{1}{2}=3$
10. State the methods to avoid electrical hazards. $1+1+1=3$

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (a) Explain the construction of room-heater with diagram. 5
 (b) Explain the construction of immersion type water heater. 5
12. Explain various tests required for repairing of immersion type water heater. 10
13. Draw the block diagram of off-line UPS (interactive type) and explain the function of each block. 5+5
14. With the help of a neat diagram, explain on-line preferred UPS. 5+5
15. Explain the preventive and periodical maintenance schedules for batteries. 10
16. Explain the preventive and periodical maintenance schedules of relays. 10
17. (a) State the applications of different fire extinguishers. 5
 (b) Write short notes on wet chemical and dry chemical fire extinguishers. 5
- * 18. Explain the first aid methods followed to rescue a person met with electric shock. 10
