* 4641 *

C14–EE–506

# 4641

## BOARD DIPLOMA EXAMINATION, (C–14)

## OCT/NOV—2017

## 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.** List any six parts of an electric oven. ½×6=3

**2.** List any six parts of toaster. ½×6=3

**3.** Draw a labelled connection diagram of a.c. ceiling fan with regulator. 3

**4.** List the advantages of SMPS. 1+1+1=3

**5.** Write a brief note on commutator maintenance. 3

**6.** List the problems of an induction motor winding overheating. 1+1+1=3

**7.** List any three tasks that have to be undertaken in the preventive maintenance of lighting arresters. 1+1+1=3

**8.** List the equipments used for electrical and general safety. 1+1+1=3

**9.** List the applications of class-B fire extinguishers. 1+1+1=3

**10.** What is the necessity of safety? 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.** List the steps involved in dismantling and assembling of immersion water heater. 5+5=10

**12.** Explain steps for locating faults in an electric iron with circuit diagrams. 10

**13.** Explain the block diagram of UPS and explain the function of each block. 5+5=10

**14.** *(a)* Explain the preventive periodical maintenance schedule for motor starters. 5

*(b)* Explain the preventive periodical maintenance schedule for air conditioners. 5

**15.** Explain the preventive and periodical maintenance schedule of plinth mounted transformer yard and power transformer. 5+5=10

**16.** Explain the preventive and periodical maintenance schedule for $SF_6$ circuit breakers. 10

**17.** Explain the Do's and Don'ts of electrical supervisor at substations. 5+5=10

**18.** *(a)* State various types of fire extinguishers. 5

*(b)* List any five causes of electrical hazards. 5

★ ★ ★