



C-14-EC-106

4039

BOARD DIPLOMA EXAMINATION, (C-14)

APRIL/MAY—2015

DECE—FIRST YEAR EXAMINATION

ELECTRONIC ENGINEERING MATERIALS AND PRACTICES

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 three methods to prevent the corrosion.
2. Write the difference between conductor and semiconductor.
3. List any three uses of PVC in electrical applications.
4. Define Curie point.
5. List the alloys used for bimetallic strips and fuse material.

1½+1½

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6. What are the demerits of adhesive?
 7. Write the use of ball-peen hammer.
 8. Define brazing.

* 9. What is the purpose of tempering?

10. Draw any three safety symbols in electrical industry.

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. Explain the general properties of copper.

12. (a) Explain the factors affecting the insulating resistance. 5

(b) Write the electrical properties of insulating materials. 5

13. Explain the hysteresis and hysteresis losses.

14. Define ferrites and write the important properties of ferrites.

15. Explain the process of riveting.

16. Explain the process of soft soldering.

17. Explain the process of annealing and normalization. 5+5

* 18. Explain the method of first-aid treatment for someone suffering from electric shock.
