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C14-EE-501

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**BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DEEE - FIFTH SEMESTER EXAMINATION**

ELECTRICAL UTILIZATION

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

- Instructions :**
1. Answer **All** questions.
 2. Each question carries **three** marks.
 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. Define (i) Luminous flux (ii) Luminous intensity
2. Define (i) MSCP (ii) Solid angle.
- * 3. List the types of lamp fittings.
4. State the advantages of electric heating.
5. State the advantages of dielectric heating.
6. State advantages of welding.
7. What are the three types of a refrigeration system?
8. State the parts of air conditioning system.
9. State the advantages of CFLS
10. State the three benefits of energy efficient system.

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PART-B

10X5=50

Instructions :

1. Answer any **Five** questions.
2. Each question carries **ten** marks.
3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain domestic, industrial, street lighting for illumination.
12. A lamp having a candle power of 300 in all directions is provided with a reflector which directs 70% of total light uniformly on circular area 40m in diameter, the lamp is hung at 15m above the area
(a) Calculate illumination
(b) Calculate illumination at center.
13. Explain briefly working principle of direct resistance heating and its application.
14. Explain construction and working principle of core less type induction furnace with neat diagram.
15. Explain with neat sketch seam welding process.
16. Compare the AC welding process with DC welding process in 6 aspects.
17. Explain refrigeration system with neat electric circuit
18. Explain construction of magnetic induction lamp.

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