

**Roll No:**

**KARPAGAM COLLEGE OF ENGINEERING, COIMBATORE -641 032.**

**B.E Electronics and Communication /Electronics and Telecommunication  
Semester:II**

**Continuous Internal Assessment: II**

**Date: 16.03.2016**

**Time: 1 Hours 30 Min**

**Session:AN**

**Maximum: 50 Marks**

**Answer ALL Questions PART A – (10 x 2 = 20 marks)**

- A1. Classify Batteries.
- A2. State the significance of Separators.
- A3. Mention the types of Automobile batteries.
- A4. State any four advantages of Lead-Acid Battery.
- A5. Mention the types of Torpedo batteries.
- A6. List any two advantages of fluorescent lamp.
- A7. Define luminous flux.
- A8. Define and express candle power in terms of solid angle.
- A9. A 10-W fluorescent lamp has a luminous intensity of 35 cd. Find (a) the luminous flux it emits and (b) its luminous efficiency
- A10. Define luminous intensity

**Answer ALL Questions PART B– (2 x 15 = 30 marks)**

- B1. (a) (i) Explain the construction and working principle of Lead (6) acid battery with neat diagram.
- (ii) Compare Lead acid battery with Ni-Cd and Ni-Fe (4) batteries.
- (iii) Explain the construction and working principle of Nickel- (5) Iron battery with neat diagram.

(OR)

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**Answer ALL Questions PART B– (2 x 15 = 30 marks)**

- B1. (a) (i) Explain the construction and working principle of Lead (6) acid battery with neat diagram.
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- (iii) Explain the construction and working principle of Nickel- (5) Iron battery with neat diagram.

(OR)

- (b) (i) Explain the construction and working principle of Nickel-Cadmium battery with neat diagram. (6)
- (ii) Compare primary cells and secondary cells (4)
- (iii) State and Explain What is ampere-hour and watt-hour efficiency (5)

- B2. (a) (i) Explain the construction and working principle of fluorescent lamp with neat diagrams. (6)
- (ii) With neat diagram explain the construction and working principle of sodium vapour lamp. (5)
- (iii) Mention any two advantages and disadvantages of sodium vapour lamp. (4)

(Or)

- (b) (i) Along with necessary diagrams explain the construction and working principle of mercury vapour lamp. (6)
- (ii) State and prove laws of illumination (5)
- (iii) Define the terms Light and Radiant Efficiency. (4)

**Staff Incharge**

**HoD/EEE**

- (b) (i) Explain the construction and working principle of Nickel-Cadmium battery with neat diagram. (6)
- (ii) Compare primary cells and secondary cells (4)
- (iii) State and Explain What is ampere-hour and watt-hour efficiency (5)

- B2. (a) (i) Explain the construction and working principle of fluorescent lamp with neat diagrams. (6)
- (ii) With neat diagram explain the construction and working principle of sodium vapour lamp. (5)
- (iii) Mention any two advantages and disadvantages of sodium vapour lamp. (4)

(Or)

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- (b) (i) Along with necessary diagrams explain the construction and working principle of mercury vapour lamp. (6)
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