

Reg. No. :

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**Question Paper Code: 98367**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

One credit

Electrical and Electronics Engineering

**19UEE867-ENERGY STORAGE SYSTEMS**

(Regulations 2019)

Duration: 1.30 Hours

Maximum: 50Marks

Answer All Questions

PART A - (5 x 2 = 10 Marks)

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|--|-------|
| 1. Outline the significance of energy storage systems. | CO1-U |
| 2. Define cycle life of battery.                       | CO1-U |
| 3. List the key measures of merit for batteries.       | CO2-U |
| 4. Define energy density and power density.            | CO2-U |
| 5. Define discharge rate.                              | CO2-U |

PART – B (2 x 20= 40 Marks)

- |  |       |      |
|--|-------|------|
| 6. (a) Explain in detail about the magnetic energy storage system              | CO1-U | (20) |
| OR   |       |      |
| (b) Analyze the operation of pumped storage plant for supplying the peak load. | CO1-U | (20) |
|  |       |      |
| 7. (a) Explain in detail about the thermal energy storage system               | CO2-U | (20) |
| Or   |       |      |
| (b) Explain in detail about the magnetic energy storage system                 | CO2-U | (20) |

