

B.E. Sixth Semester (Electrical & Electronics Engineering) (CGS)
10395 : Elective-II : Power Supply Systems
6 FEFP 05 / 6 FEEX 05 / 6 FEEL 05 / 6 FEEE 05

P. Pages : 2

Time : Three Hours



AU - 2766

Max. Marks : 80

- Notes :
1. All question carry equal marks.
 2. Answer **three** question from section A and **three** question from section B.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and equations should be given wherever necessary.
 6. Illustrate your answer necessary with the help of neat sketches.
 7. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Provide site selection criteria for the thermal power plant. 7
b) Explain working of "Fire Tube Boiler" with neat diagram. 7

OR

2. a) Explain Coal Handling Plant & Ash Handling Plant in a thermal plant. Explain working. 7
b) Explain the importance of transmission system in structure of power system. 7
3. a) Explain in detail the working of gas turbine. 7
b) Explain radioactivity and hazards of nuclear fuel. 6

OR

4. a) What are the material used coolant? Explain its importance in Nuclear reactor. 7
b) What is combined cycle generation in Gas-turbine operated power plant? Explain. 6
5. a) What is hydro-graph? Explain it in detail. 7
b) Explain working of Surge Tank. 6

OR

6. a) Explain the difference in working of a hydro-power plant & pumped storage power plant. 7
b) Explain Coordinated operation of Hydro-Nuclear power plant with help of load curves. 6
7. a) Explain importance and use of current transformer & potential transformer in a substation. 7
b) Explain what is substation earthing? 7

OR

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|----|----|---|---|
| 8. | a) | Explain working of circuit breaker & isolator. | 7 |
| | b) | Explain importance of lightning arrester. | 7 |
| 9. | a) | Draw a single line diagram of primary and secondary distribution system showing voltage levels, loads. Explain. | 7 |
| | b) | Explain with neat diagram term feeder & distributor. | 6 |

OR

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|-----|----|--|---|
| 10. | a) | Explain type of conductors used in distribution system. | 7 |
| | b) | Give difference between radial and ring main distributor. | 6 |
| 11. | a) | What are different types of internal wiring? Explain conduit wiring with neat diagram. | 7 |
| | b) | List out different types of lighting connections & connecting & disconnecting devices. | 6 |

OR

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| 12. | a) | Explain earthing practices for the domestic wiring. | 7 |
| | b) | What is fuse? Explain its working. | 6 |
