

Code : 15ME63B

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Number*

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VI Semester Diploma Examination, March/April-2022

POWER PLANT ENGINEERING

Time : 3 Hours]

[Max. Marks : 100

- Instructions :** (i) Answer any six questions from Part – A.
(ii) Answer any seven questions from Part – B.

PART – A

1. List any five factors considered for location of Power Plants. **5**
2. Explain Load curve. **5**
3. List any three advantages and any two disadvantages of Hydro-Electric Power Plant. **5**
4. Explain briefly the principle of over feed stoker (firing). **5**
5. List any five types of Hydro-electric Power Plants. **5**
6. List any three advantages and any two disadvantages of Wind Power Plant. **5**
7. List any five applications of Solar cell. **5**
8. List any five social issues related to Power Plant. **5**
9. Explain about Acid rain and Acid snow. **5**



PART – B

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| 10. (a) | Sketch and explain the Storage River Plant. | 5 |
| (b) | Sketch and explain the Pumped Storage Plant. | 5 |
| 11. | Sketch and explain the layout of Hydro-Electric Power Plant. | 10 |
| 12. | Sketch and explain the general layout of Thermal Power Plant. | 10 |
| 13. | Explain with a neat sketch, Electro Static Precipitator (ESP) system. | 10 |
| 14. | Explain with a neat sketch Boiling Water Reactor (BWR). | 10 |
| 15. | Sketch and explain open cycle Gas Turbine Power Plant. | 10 |
| 16. (a) | List any three advantages and any two disadvantages of Gas Turbine Power Plant. | 5 |
| (b) | Explain the various methods involved in disposing of nuclear wastes. | 5 |
| 17. | Explain with a block diagram of Wind Energy Conversion System (WECS). | 10 |
| 18. | Sketch and explain layout of Diesel Power Plant. | 10 |
| 19. (a) | Explain briefly pollution by Thermal Power Plants. | 5 |
| (b) | Explain briefly about Green House Effect. | 5 |
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