



C14-M-603

4753

**BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DME-SIXTH SEMESTER EXAMINATION**

ENERGY SOURCES AND POWER PLANT ENGINEERING

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

1. Write the advantages of Non renewable energy sources.
2. Define solar constant.
3. Write the advantages of wind energy.
4. What are the applications of fuel cell?
5. What is the composition of biogas?
6. Mention any three factors to be considered for selection of site for tidal power plant.
7. What are the advantages of pulverized coal system?
8. Write the functions of condenser in steam power plant.
9. State any three desired properties of control rod material.
10. What is green house effect?

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. Describe the working of a natural circulation solar water heater with a neat sketch.

12. Explain the working of a horizontal axis wind mill with a neat sketch.

13. Explain the working of MHD generator with a simple sketch.

14. Draw a neat sketch of float type biogas digester and explain its working.

15. Draw a layout of tidal power plant and explain its major components.

16. Draw the layout of steam power plant and name the parts.

17. Describe the working of BWR-Power plant with a neat sketch and mention its advantages.

18. (a) Explain various ways of nuclear waste disposal.

(b) Explain the adverse effects of environment pollution on men, materials and on plants.
