

Q.1 a) Discuss the various factors affecting biogas production.

[6]

b) Explain with neat sketch the floating drum type of bio gas plant.

[6]

Q.2. Pahadi mandir may be the potential site for Wind power generation, you have been assigned task for preparing a feasibility report. State which important factors/parameters you will consider and step by step the procedure you will follow in order to prepare report.

[8]

Q.3. a) List various advantages of fuel cells.

[5]

b) Can we use geothermal energy for air conditioning (heating during winter and cooling during summer)? Justify your answer with proper explanation of such system with neat sketch.

[6]

Q.4. Define simple payback period, NPV and IRR and explain how to calculate them.

[9]

Q.5. a) Explain with neat sketch Pelamis wave energy system.

[6]

b) "Kalpasar" will be the world's biggest renewable energy project of its own kind. Explain with neat sketch.

[9]

Q.6. Out of all the projects which are submitted in the course this semester, explain in detail any one project, other than yours, which you like the most. It should not be your project.

[8]

Q.7. a) Explain with neat sketch Binary cycle geothermal plant.

[4]

b) Explain with neat sketch Hydroelectric power plant.

[3]

*****BEST LUCK*****