



Date: 23-04-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART – A

Answer **ALL** questions:

(10x2=20)

1. What are conventional sources of energy?
2. List any two advantages and limitations of renewable energy sources.
3. Define the efficiency of solar distillation.
4. What are the constituents of biogas?
5. State the basic principle of a solar cell.
6. What are the advantages of wind power?
7. List out the different types of fuel cells.
8. Discuss the advantages of Tidal energy.
9. What is UNFCCC?
10. Why energy audit is important?

PART – B

Answer any **FOUR** questions:

(4x7.5=30)

11. Write an essay on global warming.
12. Describe the heat transfer mechanism of convection process.
13. List out the merits and demerits of wind energy conversion system.
14. What are the different types of concentrating solar collectors?
15. What are the different types of OTEC power plants? Describe their working in brief.
16. Describe the principles of energy conservation and energy audit.

PART – C

Answer any **FOUR** questions:

(4x12.5=50)

17. What are fossil fuels? Explain the impact of conventional energy sources on environment.
18. What is the principle of solar photovoltaic power generation? What are the main elements of a PV system?
19. Write short notes on (a) Solar greenhouses (b) Solar distillation.
20. With a neat diagram, explain the basic component of WECS system.
21. With a neat sketch, explain the principle, construction and working of a MHD power generation.
22. Explain the patterns of energy consumption in domestic, industrial, transportation and agricultural sectors.
