

Q.P. Code : 24797

[Time: 3 Hours]

[Marks: 80]

Please check whether you have got the right question paper.

- N.B:
1. Answer any four questions out of remaining six questions.
 2. Illustrate your answer with neat sketch if required.
 3. Assume suitable data if required mention the same.

- Q.1. a) Explain organic Rankine cycle & its advantages. 10
b) Explain Topping & Bottoming cycle with examples. 10
- Q.2. a) Write a short note on sizing of waste heat boilers. 05
b) Compare unified combined cycle with fired combined cycle. 10
c) Explain financial consideration in waste heat recovery systems. 05
- Q.3. a) Explain in brief sources of waste heat recovery in Diesel engine. 10
b) Classify different waste heat boilers 10
- Q.4. a) Explain cost of co generation 10
b) Describe selection criteria of waste heat recovery technologies. 10
- Q.5. a) Explain in brief Tri-generation. 10
b) Write principles of thermodynamics and state second law of thermodynamics. 10
- Q.6. a) Explain different part load characteristics selection of co generation technologies. 10
b) Elaborate cogeneration applications in various process industries. 10
