Roll No. Total No. of Pages: 01

Total No. of Questions: 08

M.Tech. (CSE) (Artificial Intelligence) (Sem.-3)

WASTE TO ENERGY

Subject Code: MTAI-OE6-18

M.Code: 92903

Date of Examination: 19-12-22

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWELVE marks.
 - 1. a) Explain the significance of agro-based and forest residue waste as fuel.
 - b) Explain the function of Incinerators and gasifiers as conversion devices.
 - 2. What do you mean by biomass pyrolysis and discuss its types?
 - 3. a) Discuss various equilibrium and kinetic considerations in gasifiers operations.
 - b) Explain downdraft and updraft gasifiers.
 - 4. Discuss in brief about biomass stoves with respect to improved chullahs and explain its types?
 - 5. Discuss in brief the constructional features and design of bio energy system?
 - 6. Discuss various methods to manufacture of pyrolytic oils as well as gases and also explain its industrial applications?
 - 7. Write a short note on alcohol production from biomass?
 - 8. Discuss in details the design as well as operational differences between Fixed and Fluidized bed combustors?

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

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