

Reg. No. :

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Question Paper Code: 96T04

M.E. DEGREE EXAMINATION, MAY 2022

Open Elective

19PPE604-Bioenergy From Waste

(Regulation 2019)

Duration: Three hours

Maximum: 100 Marks

PART – A (5 x 20 = 100 Marks)

(Answer All questions)

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|---|-----------------------------------------------------------------------------------------------------------|--------|------|
| 1 | (a) Give brief description on LCA and MRF. | CO1- U | (20) |
| | Or | | |
| | (b) Briefly describe about the Municipal Solid Waste (MSW) , Industrial waste and Biomedical Waste (BMW). | CO1- U | (20) |
| 2 | (a) What is incineration? Explain briefly about its types. | CO2- U | (20) |
| | Or | | |
| | (b) What are the types, methods and sitting consideration of landfill classification. | CO2- U | (20) |
| 3 | (a) What is pyrolysis? Explain the process with schematic diagram to convert MSW to electricity. | CO3- U | (20) |
| | Or | | |
| | (b) What is briquetting process? Discuss about its utilization and advantages of briquetting. | CO3- U | (20) |
| 4 | (a) Explain the process involved in Anaerobic digestion of sewage and municipal wastes. | CO4- U | (20) |
| | Or | | |
| | (b) Briefly explain about land fill gas generation and utilization. | CO4- U | (20) |

5. (a) Explain briefly on Environmental and health impacts of waste to energy conversion. CO5- U (20)

Or

(b) Discuss about the rules related to the handling, treatment and disposal of MSW and BMW in India. CO5- Ana (20)