QP CODE: 21102687

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Reg No : .....

Name : .....

B.VOC DEGREE EXAMINATIONS, OCTOBER 2021

Fourth Semester

B.Voc Renewable Energy Technology and Management

RETTG403 - BIOENERGY

2019 Admission Onwards

C5D6E800

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. List out the advantages of biomass over fossil fuel.
2. Write a note on Eucalyptus plantation.
3. What is the purpose Briquetting?
4. Explain rotary dryer.
5. What is meant by anaerobic fermentation?
6. What is meant by retention time?
7. Explain Community night soil based biogas plant.
8. What is incineration?
9. Write a note on Raw material for Methanol production.
10. What is CFB?
11. Define combustion.
12. What are the equipments required for bagasse based cogeneration?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Write a short note on Size reduction of Biomass resources.
14. Write a short note on storage of biomass.

15. Explain about Floating Drum type biogas plant in not more than hundred words.

16. Explain the construction details of Janata model biogas plant.

17. Explain Deenbandhu biogas plant.

18. Write a note on Pyrolysis temperature.

19. Briefly describe down draught gasifier.

20. Bring out the difference between fixed bed and fluidized bed gasifier.

21. What are the advantages and disadvantages of woody biomass?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Write Short note on (i) Energy Crops (ii) Vegetable oil crops (iii) aquatic crop (iv) Urban Waste (v) Industrial Waste

23. Briefly explain about feedstocks for biogas production.

24. Explain thermo chemical conversion technology.

25. Briefly describe the cogeneration plant in rice mill.

(2×15=30)