

Mid-West University
Examinations Management Office
End Semester Examinations 2081

Bachelor level/ B.Sc. / 6th Semester

Time: 3 hours

Subject: Microbiology (BOT463)

Full Marks: 60

Pass Marks: 30

Candidates are required to give their answer in their own words as far as Practicable. The figures in the margin indicate full marks.

Group – A

Answer in briefly any four only

[4x8=32]

1. Explain briefly about fermentable substrate, biochemistry of alcoholic fermentation and methods of fermentation of alcohol.
2. What are the scopes of microbiology? Explain the distribution of microorganism with suitable examples.
3. How the Agaricus biosporus mushroom is cultivated? Explain the suitable method and process in its production.
4. What do you mean by spawn? Describe how spawn is prepared in laboratory?
5. Write notes on; i) single cell protein and ii) occurrence and importance of protozoa

Group – B

Answer in short any seven only

[7x3= 21]

6. Why biological cycle is not functional without microorganism? Explain in context of Nitrogen cycle with necessary diagram.
7. Explain batch culture and continuous culture with necessary illustrations.
8. Give general account on mechanism of symbiosis. Explain the types and benefits of mycorrhizal association of plant.
9. What do you mean by biofuel? Discuss its importance.
10. Discuss the production method and use of organic acids.
11. Explain the process of antibiotic production in brief.
12. Why mycotoxin is hazardous to organism? Explain its mode of action.
13. Compare and contrast the primary and secondary metabolites.

Group – C

Answer in very short any seven only.

[7x1=7]

14. Why Gram negative bacteria are more pathogenic than Gram positive bacteria?
15. What is the use of laminar air flow in microbiology laboratory?
16. Define Antagonism.
17. Write the name of diseases caused by virus?
18. Mention the economic importance of Yeast.
19. Why cyanobacteria is considered as good source of biofertilizer?
20. Enlist the name of plants used to reduce water pollution.
21. What do you mean by pure culture?
22. Write name of dyes that are used in Gram staining of bacteria?

The End