C 82415 (Pages : 2) Name.....

Reg. No.....

SECOND SEMESTER B.A./B.Sc. DEGREE EXAMINATION, APRIL 2020

(CBCSS—UG)

Botany

BOT 2B 02—MICROBIOLOGY, MYCOLOGY, LICHENOLOGY AND PLANT PATHOLOGY

(2019 Admissions)

Time : Two Hours Maximum : 60 Marks

Section A

Answer **all** *questions.*

Each question carries 2 *marks.*

Ceiling : 20 *marks.*

1. Differentiate amphitrichous bacteria from peritrichous bacteria.
2. Write notes on chemical measures employed to eradicate the pathogen.
3. Differentiate rusts from smuts.
4. Name a fungus most commonly employed as a model organism for research purposes. What are the benefits of selecting this fungus as model organism ?
5. Give an account of teleomorphic fungi.
6. Name the pathogen responsible for quick wilt of pepper. Name any two control measures to eradicate the pathogen.
7. Give an account of phyllosphere microbial flora.
8. Define ecological indicators. How could lichens be employed as ecological indicators ?
9. Briefly bring out the distinguishing characters of Basidiomycetes.
10. Mention the botanical name of any two lichens commonly employed in food products.
11. Differentiate autoecious fungi from heteroecious fungi.
12. What are prions ? Name a disease caused by prions.

Turn over

Section B

Answer **all** *questions.*
Each question carries 5 *marks.*
Ceiling : 30 *marks.*

13. Explain the role of lichens in toxicology and bioremediation.
14. Discuss the aetiology, description of the pathogen, symptoms and control measures employed against Citrus canker.
15. Differentiate bacteria based on gram staining techniques. Explain why gram positive and gram negative bacteria respond differently to gram stain ?
16. Bring out the economic importance of bacteria.
17. Bring out the role of fungi in industry.
18. Give an account of the general characters and phylogeny of the kingdom Fungi.
19. Write notes on the architecture of TMV and HIV with suitable diagrams.

Section C

Answer any **one** *question.*
The question carries 10 *marks.*

20. Explain the general characters, distribution and life cycle of *Puccinia* with suitable illustrations.
21. With suitable illustrations, give an account of the different types of genetic recombination found in bacteria.

(1 × 10 = 10 marks)