

2022

Microbiology

[HONOURS]

(CBCS)

(B.Sc. First Semester End Examination-2022)

PAPER-GE1T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Introduction and scope of Microbiology

Group-A

Answer any five questions of the following:	5x2=10
1. What are probiotics and prebiotics?	1+1
2. Write down the source of single cell protein.	2
3. Write down the differences between Transmission Electron microscope and Scanning Electron Microscope?	2
4. What is numerical aperture of a microscope?	2
5. What is mutualism? Give one example.	1+1
6. What is bioremediation?	2
7. Define monoclonal antibody.	2
8. What is commensalism?	2

(2)

Group-B

Answer any four questions of the following: 4x5 = 20

1. a) What is Koch's postulates in microbiology?
b) What are the principles of Germ theory of disease?
 $2\frac{1}{2} + 2\frac{1}{2}$
2. Write down the role of micro-organism in food spoilage. 5
3. Draw and describe the general structure of immunoglobulin.
5
4. Write Briefly on Whittaker's concept of Five Kingdom classification. 5
5. State the general characteristics of Protista and Fungi.
 $2\frac{1}{2} + 2\frac{1}{2}$
6. Write down the mode of action of moist heat sterilization. What is tyndallization? 4+1

Group -C

Answer any one question of the following: 1x10 = 10

1. What is innate immunity? What is binomial nomenclature?
Briefly describe transmission electron microscope with its applications. 2+2+6

(3)

2. Write a note on primary and secondary metabolites. What is fermentation? What is biofertilizer? Name one bacterial and fungal bio fertilizer.

$$2\frac{1}{2} + 2\frac{1}{2} + 2 + 2 + 1$$
