



DCW-003-2013016

Seat No. _____

B. Sc. (CBCS) (Sem. III) (W.E.F. 2019) Examination

July – 2022

Microbiology : MB-301

(Microbial Diversity - 2019)

[Old & New Course]

Faculty Code : 003

Subject Code : 2013016

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (i) All questions carry equal marks.
(ii) Any five questions from 10 question.
(iii) Total mark is on right side of questions.

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|---|---|---|
| 1 | (a) (1) Define Nomenclature. | 4 |
| | (2) Define Bio-diversity. | |
| | (3) What is Kingdom ? | |
| | (4) Define Prokaryotes. | |
| | (b) What is Molecular Chronometers ? | 2 |
| | (c) What is Numerical Taxonomy ? | 3 |
| | (d) Write note on microbial evolution. | 5 |
| 2 | (a) (1) Define Taxonomy. | 4 |
| | (2) Define Phylogenetic Tree. | |
| | (3) What is phenons ? | |
| | (4) Define Eucaryotes. | |
| | (b) What are Archaea ? | 2 |
| | (c) What is importance of taxonomy ? | 3 |
| | (d) Write on some morphological characteristics used in taxonomy. | 5 |

3	(a) (1) Define bacterial Endospore.	4
	(2) Define Gram Negative bacteria.	
	(3) What are aerial hyphae ?	
	(4) Define motility.	
	(b) What are pathogenic bacteria ?	2
	(c) What are phototrophic bacteria ?	3
	(d) Write note on Actinomycetes.	5
4	(a) (1) Define Anaerobic bacteria.	4
	(2) What is Gram staining ?	
	(3) Define Gram positive bacteria.	
	(4) What is pseudomotility ?	
	(b) What are Asporogenous rods ?	2
	(c) Write on Dissimilatory Sulfate reducers.	3
	(d) Write on Anoxygenic and Oxygenic phototrophs.	5
5	(a) (1) Define Halophiles.	4
	(2) What are Thermophiles ?	
	(3) What are Extremophiles ?	
	(4) Define Yeast.	
	(b) What are methogens ?	2
	(c) What are Barophiles ?	3
	(d) Write on "Actinomycetes importance".	5
6	(a) (1) What are Spirochaete ?	4
	(2) Name are endospore forming bacteria.	
	(3) Name substrate for amylase enzyme.	
	(4) Define bacterial Capsule.	
	(b) Name any two Gram negative bacteria.	2
	(c) What are Phototrophic Bacteria ?	3
	(d) Write note on Rickettsia.	5

- 7 (a) (1) Define fungi. 4
 (2) Define mycelia.
 (3) Define Algae.
 (4) Name one Algal product.
 (b) Occurance of protozoa. 2
 Habitate.
 (c) Write few characteristics of fungi. 3
 (d) Write on Economic importance of Algae. 5
- 8 (a) (1) What are Zoospore ? 4
 (2) Name any one enzyme.
 (3) What is Aplanospore ?
 (4) What is Sporangium ?
 (b) Name asexual type of reproduction in Fungi. 2
 (c) Occurance or Habitate of Fungi. 3
 (d) Write few characteristics Protozoa. 5
- 9 (a) (1) Define Capsomers. 4
 (2) Define Bacteriophage.
 (3) What type of Host Virus requires ?
 (4) What are spikes ?
 (b) Name few structural part of virus. 2
 (c) Name Cultivation techniques of animal Viruses. 3
 (d) What is Lytic cycle of Virus ? 5
- 10 (a) (1) Define plant virus. 4
 (2) Full form of TMV.
 (3) What is Non-lytic cycle of virus ?
 (4) How many types of viruses on the basis of their host ?
 (b) Name diseases cause by virus. 2
 (c) What are Prions ? 3
 (d) What is Lysogeny cycle ? 5