



PBD-003-001320

Seat No. _____

B. Sc. (Sem. III) (CBCS) Examination

November / December - 2018

MB - 301 : Microbial Diversity

(Old Course)

Faculty Code : 003

Subject Code : 001320

Time : **2.30** Hours]

[Total Marks : **70**

- Instructions :** (1) All questions are Compulsory.
(2) Figures on right indicates total marks of the question.
(3) Draw neat Diagrams wherever necessary.

1 Objective type questions : **20**

- (1) What are Stromatolites ?
- (2) Define Species.
- (3) T_m value of DNA is _____
- (4) _____ is often called the Father of Taxonomy.
- (5) Give an example of Thermophile.
- (6) Bacillus subtilis and Bacillus megaterium are _____ shaped bacteria.
- (7) Colony of a Mycoplasma resembles to a _____
- (8) Serratia marcescens produces _____ colour pigment.
- (9) Define Barophiles.
- (10) Give an example of spirochaete.
- (11) Tuberculosis is caused by _____
- (12) Give a name of disease caused by Rickettsia.
- (13) Give an example of yeast.
- (14) Give an example of Algae.
- (15) Give an example of Protozoa.
- (16) Mode of nutrition of Fungi is _____

- (17) Define capsid.
- (18) Give an example of Bacteriophage.
- (19) Study of Virus is known as _____
- (20) Give an example of Plant virus.

- 2** (a) Answer in brief : (Any **Three**) **6**
- (1) What is Biodiversity?
 - (2) Explain SSM
 - (3) What are the locomotory organs of Protozoa.
 - (4) Explain structure of TMV.
 - (5) What are Cyanobacteria?
 - (6) What is Polyphasic Taxonomy?
- (b) Answer in detail : (Any **Three**) **9**
- (1) Explain Taxonomy Ranks.
 - (2) Explain Universal Phylogenetic tree.
 - (3) What are fruiting bodies ?
 - (4) Discuss Thermophiles.
 - (5) Explain Ultra Structure of Algae with Diagram.
 - (6) What are Virioids and Prions.
- (c) Writes Notes on : (Any **Two**) **10**
- (1) Explain Lysogeny in. detail.
 - (2) Discuss economic importance of Fungi.
 - (3) Discuss economic importance of Algae.
 - (4) Describe in detail Halophiles.
 - (5) Discuss classification of animal viruses.
- 3** (a) Answer in brief : (Any **Three**) **6**
- (1) General features of Algae.
 - (2) What are Methanogens?
 - (3) What is plaque assay?
 - (4) What are oncogenic viruses? Give an example.
 - (5) Write down four properties of Actinomycetes.
 - (6) Write down four properties of Spirochaetes.

- (b) Answer in detail : (Any **Three**) **9**
- (1) Write a note on endosymbiosis.
 - (2) Describe general features of Protozoa.
 - (3) Write names of Major Divisions of Fungi.
 - (4) Discuss Mycoplasma in Brief.
 - (5) Explain chick embryo method.
 - (6) What are molecular chronometers?
- (c) Writes Notes on : (Any **Two**) **10**
- (1) Write a Note on Numerical Taxonomy.
 - (2) Extremophiles.
 - (3) Reproduction in Fungi.
 - (4) Lytic Life cycle Of Virus.
 - (5) Major Characters used in Taxonomy.
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