



RAN - 2103000205021051

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T.Y.B.Sc. (Sem. V) Examination October - 2023

Bioscience (Microbiology)

BS-501: Microbial Taxonomy & Virology

Time: 2 Hours]

[Total Marks: 50

सूचना : / Instructions

(१)

नीचे दशविवेक निशानीवाणी विगतो उत्तरवली पर अवश्य लपववी.
Fill up strictly the details of signs on your answer book

Name of the Examination:

T.Y.B.Sc. (Sem. V)

Name of the Subject :

Bioscience (Microbiology) BS-501: Microbial Taxonomy & Virology

Subject Code No.: **2103000205021051**

Seat No.:

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Student's Signature

- (2) Figures to the right indicate full marks.
(3) Draw neat & clean diagram wherever necessary.

Q.1. Multiple choices Questions. (MCQ)

08

- The highest taxonomic rank is _____
(A) Kingdom (B) Division
(C) Domain (D) Phylum
- Binomial system was introduced by _____
(A) Carl Woese (B) Carl Linnaeus
(C) Carl Landsteiner (D) Charles Darwin
- An examples of methanogens _____
(A) Methanobacteria (B) Methanococci
(C) Methanosarcina (D) All
- Which of the following is an anoxygenic photosynthetic bacteria?
(A) Green sulfur bacteria (B) Green nonsulfur bacteria
(C) Purple sulfur bacteria (D) All

5. Which of the following are plant viruses?
 - (A) TMV
 - (B) Tobamovirus
 - (C) Caulimovirus
 - (D) All
6. Which of the following are oncogenic viruses?
 - (A) HTLV
 - (B) EBV
 - (C) HBV
 - (D) All
7. Which process requires by prophage to become active and initiate a lytic cycle?
 - (A) Lysogenic conversion
 - (B) Induction
 - (C) Lysis updating
 - (D) Cyclic module
8. Lysogeny was described by which scientist?
 - (A) Andre Lwoff
 - (B) David Baltimore
 - (C) R. Monod
 - (D) L. Pasture

Q.2. (A) Give Specific answers 04

1. What is phylogenetic tree?
2. Define Oncoviruses
3. Name any two sulfur bacteria.
4. What is Prophage?

(B) Write short notes on any two of the following 10

1. Archea
2. Penetration of animal viruses
3. Major division of life

Q.3. (a) Describe in detail Phenetic, Genotypic, Phylogenetic classification. 14

(b) Write in detail about Taxonomic ranks

OR

Q.3. Discuss about introduction and organization of Bergey's Manual of Systematic Bacteriology, in detail. 14

Q.4. Explain any two of the fallowings. 14

1. Describe three direct counting methods and two indirect counting methods used to enumerate viruses
2. Replication of Animal viruses.
3. Nucleic acid classification of viruses