

**SECOND SEMESTER B.Sc. DEGREE [SUPPLEMENTARY/IMPROVEMENT]
EXAMINATION, APRIL/MAY 2015**

(UC—CCSS)

Core Course—Microbiology

MB 2B 02—MICROBIAL TAXONOMY

Time : Three Hours

Maximum : 30 **Weightage**

Part A

*Answer **all** the following.*

Fill in the blanks :

- 1 _____ proposed the five kingdom classification.
- 2 **Anoxygenic phototrophs** do not evolve _____ during photosynthesis.
- 3 **Flexous** spiral forms of bacteria are known as _____
- 4 _____ are the cell wall deficient bacteria.

Choose the correct answer :

- 5 A sexual spores arranged in chains formed by molds with **sepatae hyphae** are :

- (a) **Sporang iospores** . (b) Basidiospores.
(c) **Conidiospores**. (d) None of these.

- 6 Which of the following is a **locomotory** organ ?

- (a) Cilia. (b) Flagella.
(c) Both (a) and (b). (d) None of these.

- 7 Who proposed three domain classification system ?

- (a) Karl **Woose**. (b) Linnaeus.
(c) **Haeckel**. (d) **Alexopoulos**.

- 8 _____ is an example of a photosynthetic bacterium.

- (a) **Chlorobium**. (b) *Clostridium*.
(c) **Corynebacterium**. (d) All of these.

Answer in a single word :

- 9 Name a bacterium that 'eats' another bacterium.
- 10 Association of algae and fungi.
- 11 Virus that infect bacteria.
- 12 Fungus associated with plant roots.

(12 x ¼ = 3 **weightage**)**Turn over**

Part B

Answer **all** the following.

Comment on :

- 13 Cyanobacteria.
- 14 Chemolithotrophs.
- 15 Phage typing.
- 16 Ciliates.
- 17 Bacteriochlorophyll.
- 18 Serotyping.
- 19 Heteroduplex.
- 20 Basidiomycetes.
- 21 Dimorphic fungi.

(9 x 1 = 9 weightage)

Part C

Answer any **five** from the following.

Write short notes on :

- 22 Retroviridae.
- 23 Bacteriophage.
- 24 Ascomycetes.
- 25 Five kingdom classification.
- 26 Numerical taxonomy.
- 27 PCR.
- 28 Bergey's manual.

(5 x 2 = 10 weightage)

Part D

Answer any **two** of the following

Write essay on :

- 29 Various criteria used in bacterial classification.
- 30 Describe fungal classification proposed by Alexopoulos.
- 31 Describe the molecular methods used in taxonomy.

(2 x 4 = 8 weightage)