

The H.N.S.B. Ltd. Science College, Himatnagar

Internal Theory Examination, March - 2017

B.Sc. Semester-4

Sub: Microbiology

Date: 09/03/2017

Time: 1½ hr

Marks: 40

Paper : CC MI 401 MICROBIAL BIODIVERSITY

Part -A Give answer of following.

[05]

Q.1 On the basis of which type of rRNA Carl Woese has given classification

(A) 5 S

(B) 16 S

(C) 23 S

(D) 70 S

Q.2 Pseudomurein is a characteristic of the cell wall of _____?

(A) Eukaryotic cell

(B) Prokaryotic cell

(C) Archae bacteria

(D) Bacteria and archae bacteria

Q.3 Streptococci and Tetrads are characterised by _____ arrangement respectively

(A) Chain of cocci & four cocci

(B) Chain of cocci & eight cocci

(C) Cluster & pair of cocci

(D) None of the above

Q.4 Plasmodium species are

(A) Fungi

(B) Protozoa

(C) Bacteria

(D) Viruses

Q.5 Which of the following is not a characteristic of morphological methods

(A) Cell Size

(B) Cell arrangement

(C) Flagella or endospore

(D) Colony shape

PART-B Answer any five of following.

[05]

Q.7 Give functions of bacterial flagella.

Q.8 Full form of TEM & AFM

Q.9 Define : Axenic culture

Q.10 Give the examples of archae bacteria

Q.11 Define: Tetrads and Sarcinae.

Q.12 Define: Nomenclature

Q.13 Define: Biodiversity

PART-C Answer any three of the following.

[06]

Q.14 What is Species? Explain role in classification.

Q.15 Who coined term Biodiversity? Give two value of it.

Q.16 Define: Heterotrophs and chemotrophs

Q.17 Give name of any two examples of each selective and differential medium.

Q.18. Explain : Genetic Biodiversity.

Q.19. Write note on PCR.

PART-D Answer any four of the following.

[12]

Q.20 Discuss G+C% as method of identification

Q.21 Write note on protozoa.

Q.22 Discuss origin of life.

Q.23 Discuss microbial diversity as index of environmental change.

Q.24 Discuss types of bacterial cell wall

Q.25 Short note on : *Chlamydiae*

PART-E Answer any two of the following.

[12]

Q.26 Describe in detail any two methods of bacterial identification

Q.27 Explain biodiversity among bacteria with cell shape and arrangement

Q.28 Define enrichment. Give brief note on different isolation method.

Q.29 Write a note on methanogens.

-: Best of Luck:-