

Science College, Himatnagar Exam No: _____.

B.Sc. Semester-IV Internal Examination Mar/Apr-2016

SUB: CC MI 201 FUNDAMENTALS OF BACTERIOLOGY

Date: 28/03/2016

Time: 11:30 am to 1:00 pm

Total Marks: 40

Part –A Answer any five of following questions. [05]

Q.1 which of the following is resistant to both heat and desiccation ?

(A) Spore (B) Cyst

(C) Capsule (D) Pilli

Q.2 A gram positive bacterium is stained _____ by the Gram's stain

(A) Pink (B) Green

(C) Violet (D) Blue

Q.3 Binomial nomenclature means writing the name of organisms in two words

(A) Order and family (B) Family and class

(C) Species and strain (D) Genus and species

Q.4 Addition of salt to a culture medium only allows the salt –tolerent bacteria to grow. This is an example of

(A) Complex media (B) Enriched media

(C) Selective media (D) Differential media

Q.5 Which of the following is the arrangement of organisms into groups or taxa?

(A) Nomenclature (B) Phylogeny

(C) Classification (D) Identification

PART-B Answer any three of following [05]

Q.6 Give the name of complex which is present in endospore?

Q.7 Define : paratroph

Q.8 Give examples of various selective and differential media.

Q.9 Define: Nomenclature

- Q.10 Effect of heavy metal in biocontrol.
Q.11 Give the names of various techniques used for classification of bacteria.
Q.12 Give contribution of Robert H. Whittaker?

PART-C Answer any **three** of the following [06]

- Q.13 Give concept of Species.
Q.14 Explain scheme of five kingdom system with its limitation
Q.15 Define : Microbicidal and Microbiostatic
Q.16 What are goals and importance of taxonomy?
Q.17 Enlist different nutritional requirements for the growth of microorganisms.

PART-D Answer any **four** of the following. [12]

- Q.18 Give functions of capsule.
Q.19 Mention steps of bacterial sporulation.
Q.20 Explain various modes of cell division.
Q.21 Mechanism of action of formaldehyde and phenol.
Q.22 Draw alabeled diagram of typical bacterial cell.
Q.23 Give characteristics of bacterial growth in batch culture.

PART-E Answer any **two** of the following. [12]

- Q.24 Give details about nuclear material of bacterial cell.
Q.25 Comparison of Gram positive cell wall and Gram negative cell wall.
Q.26 Write properties of chemicals used in microbial control and describe any one of them.
Q.27 Give details on nutritional diversities in bacteria.

-: Best of Luck :-