

Roll No. _____

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

Internal Examination September/October - 2016

B.Sc. Sem-1

Subject: MICROBIOLOGY

Date: 03/10/2016

Marks: 40

Paper : CC- MI -101 FUNDAMENTALS OF MICROBIOLOGY

Time: 1½ hr

Part –A answer any five of following.

[05]

Q.1 Which is structural staining?

- (a) Capsule staining (b) Gram staining
(c) Acid-fast staining (d) All of above

Q.2 Sterilization by dry heat can be achieved by

- (a) Autoclave (b) HEPA
(c) Hot air oven (d) only b

Q.3 Contribution of Antony van leeuwenhoek include

- (a) Microscope (b) Pasteurization
(c) a & b both (d) only b

Q.4 Virology is the study of

- (a) bacteria (b) Fungi
(c) Algae (d) Virus

Q.5 Each Basic dye contain

- (a) positive charge (b) negative charge
(c) only b (d) a & b both

Q.6 What is the resolution power of Scanning Electron Microscope

- (a) 1-2 nm (b) 1-10nm
(c) 1-12 nm (d) 1-5nm

PART-B Answer any five of following.

[05]

Q.7 Define microscopy.

Q.8 Give Full form of HEPA.

Q.9 Define: pure culture.

Q.10 Role of mordant.

Q.11 What is colony?

Q.12 What is magnification?

Q.13 Give the examples of dyes used in microbiology.

PART-C Answer any **three** of the following.

[06]

Q.14 List out preservation techniques.

Q.15 What is negative staining? Explain its principle in brief.

Q.16 Explain sterilization by autoclave.

Q.17 Give difference between Scanning & transmission electron microscope

Q.18 Explain Koch's postulates.

PART-D Answer any **four** of the following.

[12]

Q.19 Applications of Microbiology.

Q.20 Explain Radiation by UV and gamma rays.

Q.21 Describe Dark field microscopy.

Q.22 Explain : simple , complex ,differential media

Q.23 Contribution of Louis Pasteur, Iwanowsky, Edward Jenner

Q.24 Explain Micromanipulator.

PART-E Answer any **two** of the following.

[12]

Q.25 Golden era of microbiology.

Q.26 Explain principle of Gram's staining

Q.27 Explain fluorescence microscopy.

Q.28 Define any two techniques for pure culture .

-: Best of Luck :-