

**D 32482**

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**Name**

**Reg. No. ....**

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, JANUARY 2013**

**(CCSS)**

**Microbiology**

**MB 1B 01—GENERAL MICROBIOLOGY**

**Time : Three Hours**

**Maximum : 30 Weightage**

**I. Answer *all* twelve questions :**

**Choose the correct answer :**

**1 Serum can be sterilized by :**

**(a) By Autoclaving.**

**(b) By Tyndallization.**

**(c) By Pasteurization.**

**(d) By filtration.**

**2 Which among the following is an enrichment media ?**

**(a) Blood agar.**

**(b) MacConkey agar.**

**(c) Selenite broth.**

**(d) Chocolate agar.**

**3 Site of action of chloramphenicol is :**

**(a) 30s ribosome.**

**(b) Nucleic acid.**

**(c) Cell wall.**

**(d) 50s ribosome.**

**4 Helical bacteria are known as :**

**(a) Cocci.**

**(b) Vibrio.**

**(c) Spirilla.**

**(d) Bacillus.**

**Answer in one word :**

**5 Example for selective differential media.**

**6 Expand HEPA.**

**7 Function of carboxysomes.**

**8 Penicillin's site of action on bacteria.**

**Fill in the blanks :**

**9 The protein present in flagellar filament is \_\_\_\_\_**

**10 The anti-microbial agents used to treat infections are called \_\_\_\_\_**

**11 Cyanophages infect \_\_\_\_\_ cells.**

**12 The refractive index of oil is \_\_\_\_\_**

**(12 x  $\frac{1}{4}$  = 3 weightage)**

**Turn over**

II. Answer *all* nine questions :

- 13 Prokaryotic ribosome.
- 14 Biomembrane.
- 15 Bacteriostasis.
- 16 Phenol coefficient.
- 17 Magnetosomes.
- 18 Paul Ehrlich.
- 19 Action of Tetracycline.
- 20 'O' antigen.
- 21 Mesosomes.

(9 x 1 = 9 weightage)

III. Write short notes on any *five* questions :

- 22 Structure and function of **endospore**.
- 23 Storage granules in bacteria.
- 24 Structure of **bacteriophages**.
- 25 Differences between Prokaryotes and **Eukaryotes**.
- 26 Describe pure culture techniques.
- 27 Contribution of Robert Koch in the field of Microbiology.
- 28 Explain the structure and function of bacterial cell wall.

(5 x 2 = 10 weightage)

IV. Answer any *two* questions :

- 29 Discuss the various physical methods of sterilization.
- 30 With diagram, explain the **ultrastructure** of Bacteria.
- 31 Write an essay on Microscopy.

(2 x 4 = 8 weightage)