D 73702 **(Pages : 2)** **Name**

Reg. No . . . . . .

FIRST SEMESTER B.Sc. DEGREE (SUPPLEMENTARY/IMPROVEMENT) EXAMINATION, NOVEMBER 2014

(UG-CCSS)

Core Course—Microbiology

MB 1B 01—GENERAL MICROBIOLOGY

Time : Three Hours **Maximum : 30 Weightage**

Section A

I. Answer all *twelve* questions. Each question carries IA weightage :

1 Acid fast staining is used to stain :

(a) *Corynebacterium.* **(b)** *E.coli.*

(c) Mycoplasma. **(d)** Actinomycetes.

2 Which among is a neutral dye :

(a) Eosinate methylene blue. **(b) Crystal violet.**

(c) Malachite green. **(d) Fulgen.**

3 Who developed aseptic technique :

(a) Robert Koch. **(b) Jenner.**

(c) Louis Pasteur. **(d) Paul Ehrlich.**

4 Which among is a spirocheate :

(a) *Bacillus cereus.* **(b)** *Borrelia.*

(c) Caryophanon. **(d)** *Saprospira.*

5 What is temporal gradient ?

6 What is tyndalization ?

7 Give two examples for transport media.

8 Write any two antiviral drugs.

9 The protein present inflagellar filament is _____

10 The aerobic organism produce _____ enzyme to eliminate superoxide radicals.

11 A single isolation of pure culture is known as _____

12 The antimicrobial agents used to treat infections are called _____

(12 x ¼ = 3 weightage)

Turn over

Section B

II. Answer *all* nine questions. Very briefly :

13 Phenolic compounds.

14 Negative staining.

15 Cold sterilization.

16 Selective-differential media.

17 Actinomycetes.

18 Pleomorphic bacteria.

19 HEPA filter.

20 Goose neck experiment.

21 Inclusion bodies.

(9 x 1 = 9 weightage)

Section C

III. Answer any *five* questions :

22 Structure of Bacteriophages.

23 "Is nutrient media" is a universal media ? Explain.

24 Sterilization by radiation.

25 Methods to evaluate potency of antimicrobial agents.

26 Explain the principle and function of electron microscope.

27 Discuss about antiviral and antitumor chemotherapeutic agents.

28 Explain the structure and function of bacterial cell membrane.

(5 x 2 = 10 weightage)

Section D

IV. Answer any *two* questions in detail :

29 With neat diagram, explain the structure of a bacterial cell.

30 Discuss about various staining methods employed in Microbiology to study the structure and morphology of Bacteria.

31 **Discuss about different Microscopes their mode of working and specific uses.**

(2 x 4 = 8 weightage)