C 41809 (Pages : 2)

Name..

Reg. No.............................

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL/MAY 2013

(CCSS)

Microbiology

MB2 B02—MICROBIAL TAXONOMY

Time : Three Hours   Maximum : 30 Weightage

Part A

I. Objective Type Questions. Answer *all* twelve questions :

1 Who proposed three domain classification ?

    (a) Carl Woese.   (b) Linnaeus.

    (c) Haeckel.   (d) Whittaker.

2 Prototroph can grown in :

    (a) Minimal medium.   (b) Enriched **medium.**

    (c) Special medium.   (d) Selective **medium.**

3 Nitrifying bacteria oxidize nitrite to nitrate :

    (a) *Nitrobacter.*   (b) *Nitrosolobus.*

    (c) Nitro somonas.   (d) *Nitro sococeus.*

4 The causative agent of Q fever :

    (a) *Rickettsia typhi.*   (b) *Rickettsia rickettsii.*

    (c) *Coxiella burnetii.*   (d) *Mycoplasma.*

5 What is biovar ?

6 What is a Strain ?

7 What is hyperparasitism ?

8 What is cyanophages ?

9 Algal an fungal association is known as _____

10 Tree like representation of result of taxonomic analysis is called ————

11 The colonization of fungi on plant roots are called _____

12 One of the unicellular and uninucleated algae is _____

(12 x   = 3 weightage)

Turn over

Part B

II. Short Answer Type Questions. Answer *all* nine questions :

13 What is serotyping ?

14 What is stromatolites ?

15 What is dendrogram ?

16 What are capsomeres ?

17 What is prophage ?

18 What is prions ?

19 What is heteroduplex ?

20 What is facultative anaerobe ?

21 What is Nutalism ?

x 1 = 9 weightage)

Part C

III. Short Essay or Paragraph Questions. Answer any *five* questions :

22 Explain methods to calculate IG + C content.

23 Discuss about economic importance of algae.

24 Explain sexual reproduction in fungi.

25   Expalin five kingdom classification.

26 Describe asexual reproduction of protozoa.

27 Describe lytic and lysogenic cycle of bacteriphages.

28 Give a brief account on RNA viruses.

(5 x 2 = 10 weightage)

Part D

IV. Essay Questions. Answer any *two* questions :

29 Discuss about major characteristics used in bacterial taxonomy.

30 Describe Alexopoulose classification of fungi.

31 Discuss about different levels of classification employed in bacterial taxonomy.

(2 x 4 = 8 weightage)