

C 82423

(Pages : 2)

39

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Zoology

ZO4 : CT11 – MICROBIOLOGY AND BIOTECHNOLOGY

Time : Three Hours

Maximum : 36 Weightage

I. Answer all *fourteen* questions :

1. What is bioremediation ?
2. Define replica plate method for microbial multiplication.
3. Comment on Bergey's manual.
4. Differentiate gram -ve and gram +ve bacteria.
5. What are nutritional mutations ?
6. Comment on bacterial motility.
7. Explain the 'H' and 'N' in H₅N₁.
8. What are cosmids ?
9. What is forensic medicine ?
10. Explain Electroporations.
11. Comment on RNA i.
12. Outline biosensors.
13. Explain chromosome walking.
14. Define VNTR.

(14 × 1 = 14 weightage)

II. Answer any *seven* of the following :

15. Critically comment on GM crops.
16. Discuss intellectual property rights.
17. Write on plant tissue culture media.
18. Explain DNA finger printing.
19. Describe shuttle and expression vectors.
20. Explain lactic fermentation.

Turn over

21. Provide the epidemiology of tuberculosis.
22. Discuss the major characteristics in microbial systematics.
23. Illustrate the structure of a bacterial cell.
24. Describe the measurement of microbial growth.

(7 × 2 = 14 weight)

III. Answer any *two* of the following :

25. Write the mechanism of PCR and its applications in science.
26. Discuss the recent technologies in pollution control.
27. Describe the biosynthesis and transport of nutrients in bacteria.
28. Provide an account on physical and chemical control of micro-organisms.

(2 × 4 = 8 weight)