

17U619

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Name:

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

CC15U ZO6 B14 - BIOTECHNOLOGY, MICROBIOLOGY AND IMMUNOLOGY

Zoology - Core Course
(2015 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

I. Answer **all** questions in one or two sentences. Each question carries 1 mark.

1. What is blue biotechnology?
2. Name the different classes of immunoglobins.
3. What is YAC?
4. Mention any two methods for measurement of growth in bacteria.
5. What is a toxoid vaccine?
6. Name any two bacterial stains.
7. Expand ELISA.
8. What is RFLP?
9. Mention any two chemical compounds used for transfection.
10. Name any two diseases caused by protozoa.

(10 x 1 = 10 Marks)

II. Answer any **ten** of the following. Each question carries 2 marks.

11. Give a short note on Prions.
12. What is NK CELL?
13. What is meant by inoculation?
14. Mention the environmental factors affecting microbial growth.
15. What is an adjuvant?
16. Mention any four uses of monoclonal antibodies.
17. Mention the functions of DNA ligase.
18. Write a note on attenuated vaccines.
19. Give a short note on Bt cotton.
20. Mention any four normal micro flora of the human body.
21. Give a short note on dendritic cells.
22. What is bioleaching?

(10 x 2 = 20 Marks)

III. Answer any *five* of the following. Each question carries 6 marks.

23. Briefly describe hybridoma technology.
24. Write down the principles and applications of PCR.
25. Describe the cells and organs involved in human immune system.
26. Discuss the role of any three enzymes of rDNA technology.
27. Give an account of different growth phases of bacteria.
28. Briefly describe DNA sequencing.
29. List out any six diseases caused by virus and note down the symptoms.
30. Write an account on various transfection methods.

(5 x 6 = 30 Marks)

IV. Answer any *two* of the following. Each question carries 10 marks

31. Give a detailed account of molecular markers.
32. Mention the various products of industrial fermentation and their uses.
33. Describe briefly about any five autoimmune diseases.
34. Describe different types of cloning vectors.

(2 x 10 = 20 Marks)
