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Name.....

Reg. No.....

FIFTH SEMESTER (CBCSS-UG) DEGREE EXAMINATION, NOVEMBER 2023

Zoology

ZOL 5B 07T—BIOTECHNOLOGY MICROBIOLOGY AND IMMUNOLOGY

(2019 Admission onwards)

ime: Two Hours and a Half

Maximum: 80 Marks

Section A

- I. Short answer questions. Each question carries 2 marks.
 - 1 What are oncogenic viruses?
 - 2 What is recombinant Insulin?
 - 3 Write briefly on prochlorophytes.
 - 4 What are monocytes and macrophages?
 - 5 What are epitopes?
 - 6 What is pasteurization?
 - 7 Comment on agglutination-inhibition reaction.
 - 8 What is bioremediation?
 - 9 What do you mean by Bioleaching?
 - 10 What are exogenous antigens?
 - 11 Distinguish between viroids and prions.
 - 12 Mention the applications of Bacteriophages.
 - 13 What are adjuvants? Explain Freund's adjuvant.
 - 14 What is whooping cough? What is the causative organism?
 - 15 Give an account of pBR322.

(Ceiling: 25 marks)

Section B

- II. Paragraph questions. Each question carries 5 marks.
 - 16 Give an account of vaccines and therapeutic agents in treatment.
 - 17 What is Myasthenia Gravis?
 - 18 Give an account of culture preservation techniques.

Turn over

- 19 Write an account on SCID.
- 20 Explain the uses of RELP and RAPD.
- 21 Give a brief account of any two protozoan diseases in human being.
- 22 Distinguish between dermatomycosis and opportunistic mycosis
- 23 What is Xenotransplantation?

(Ceiling:3

Section C

- III. Essay questions. Answer any two questions.
 - Give an account of rDNA technology and the enzymes involved in it.

 Illustrate the standard of the standard of
 - 25 Illustrate the structure of immunoglobulin. Briefly explain the classification and
 - 26 Give an account of Molecular markers and their uses.
 - 27 Explain the industrial applications of microorganisms.

 $(2 \times 10 = 10)$