

**18P324**

(Pages: 2)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

(Regular/Supplementary/Improvement)

(CUCSS-PG)

**CC17P ZO3 C09 - MICROBIOLOGY AND BIOTECHNOLOGY**

(Zoology)

(2017 Admission onwards)

Time: 3 Hours

Maximum : 36 Weightage

I. Answer *all* questions.

1. Forensic medicine.
2. Candidiasis.
3. TRIPS.
4. Types of viruses.
5. PAC.
6. Bio monitoring.
7. What is bioremediation.
8. Artificial skin.
9. NPV.
10. Alexander Flemming.
11. GEOs.
12. SSR.
13. Cholera.
14. RNAi.

**(14 x 1= 14 Weightage)**

II. Answer any *seven* questions.

15. Discuss different types of recombinant screening.
16. Explain steps involved in cloning.
17. Describe the components external to bacterial cell wall.
18. Role of biotechnology in insect pest control.
19. Brief account of Bergey's Manuel.
20. Short account of expression vectors.
21. Comment on various gene silencing techniques.
22. Briefly explain antenatal diagnosis.

23. Microbial drug resistance.

24. Pure culture preparation.

**(7 x 2 = 14 Weightage)**

III. Answer any *two* questions.

25. Discuss about the animal cell and tissue culture.

26. Describe ethical and social implications of biotechnology.

27. Write an essay on utilisation of energy by the microbes.

28. Briefly explain sequencing and synthesis of genes.

**(2 x 4 = 8 Weightage)**

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