

16P412

(Pages:2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2018

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC15 PZO4 C11 –MICROBIOLOGY & BIOTECHNOLOGY

(Zoology)

(2015 Admission onwards)

Time: Three Hours

Maximum: 36 Weightage

Part A

Answer *all* fourteen questions. Each question carries *1* weightage.

1. What is GISH?
2. What are Cosmids ?
3. What is the role of *Pseudomonas putida* in pollution control?
4. Comment on GATT and TRIPS
5. Mention the role of gene therapy in SCIDS.
6. Comment on RTase.
7. What are Restriction enzymes?
8. Comment on Candidiasis.
9. Describe Hausser counting chamber.
10. What are antibiotics? Mention the different types.
11. Comment on Yogurt and Kefir.
12. Comment on Bergey's Manuel.
13. Write short notes on Typhoid.
14. Comment on Spread plate and Pour plate techniques.

(14 x 1 = 14 Weightage)

Part B

Answer any *seven* questions. Each question carries *2* weightage.

15. Explain Sanger's method of DNA sequencing.
16. Comment on the technique behind the development of Flavr Savr tomato.
17. Explain Chromosome walking.
18. Discuss VNTR as a molecular marker.
19. What is PCR? Comment on its essential requirements.
20. Discuss the influence of environmental factors on microbial growth.
21. Write a note on different criteria used in microbial taxonomy.
22. Discuss microbial bioremediation.

23. Give an account of preparation of different types of microbial media.
24. Explain microbial characteristics and treatment of waste water.

(7 x 2 =14 Weightage)

Part C

Answer any *two* questions. Each question carries **4** weightage.

25. Write an essay on construction and screening of Genomic and cDNA libraries.
26. Discuss on ethical and social implications of biotechnology.
27. Write an essay on human diseases caused by Viruses.
28. Explain the structure of bacterial cell wall and the mechanism of Gram staining.

(2 x 4 = 8 Weightage)
