

C 60130

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Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2019

(CUCBCSS)

Biotechnology

BTY 6B 17—MEDICAL BIOTECHNOLOGY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer any **two** out of four questions in about 1,500 words.*

Each question carries 10 marks.

1. Describe the pathogenesis, laboratory diagnosis and treatment of toxoplasmosis.
2. Explain the humoral mediated immune response with examples.
3. Give a detailed account on Hepatitis B virus biology.
4. Give a detailed account on antimicrobial agents.

(2 × 10 = 20 marks)

Section B

*Answer any **seven** out of fourteen questions in about 750 words.*

Each question carries 5 marks.

5. Write short notes on procedure and types of sterilization methods.
6. Give an account on antifungal agents.
7. Detailed account on various biochemical methods used for the bacterial identification.
8. Write short notes on (a) IgM ; (b) IgD antibodies.
9. What are all the characteristic features of antigens ?
10. Explain lymphocytotoxicity assay.
11. Describe the etiology, pathogenesis of *Salmonella typhi*.
12. Write notes on botulism and its causative agents.
13. Give an account on Syphilis.
14. Write short notes on isolation and cultivation of virus.

Turn over

15. Mention the reservoir and vector of *Rickettsia typhi* infections.
16. Write notes on causative agent and pathogenicity of brain fever.
17. Explain the drug resistance in *M.tb*.
18. What kinds of prophylactic measurements are available against *Neisseria meningitidis* infections ?

(7 × 5 = 35 marks)

Section C

Answer **all** questions in about 300 words.

Each question carries 3 marks.

19. Explain the different types of culture media with examples.
20. Differentiate Myeloid and lymphoid progenitors.
21. Write short notes on (a) *Bacillus anthracis* ; (b) *Pseudomonas*.
22. Give a detailed account on oncogenic virus.
23. Write in detail the pathogenesis and lab diagnosis of HIV.

(5 × 3 = 15 marks)

Section D

Answer **all** questions in about 200 words.

Each question carries 2 marks.

24. What is Tyndallization ?
25. Mention secretory antibody ?
26. What is the causative agent of lyme disease ?
27. Mention the causative agent of swine flu ?
28. Mention different types of ELISA.

(5 × 2 = 10 marks)