

D 40121

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Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2018

(CUCBCSS—UG)

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 various fungal culture techniques and different types of fungal culture media.
2. Describe the domain structure of IgG molecule. Add a note on the functions of immunoglobulins
3. Write an essay on the laboratory methods for the diagnosis of Hepatitis C.
4. What are communicable diseases ? Write about the prophylactic measures for any *two* diseases.

(2 × 10 = 20 marks)

Section B

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

Each question carries 5 marks.

5. Give a detailed account on media selection for suitable microorganism development.
6. Explain the various methods of disinfections with suitable examples.
7. Give an account on the diagnostic procedure for superficial mycosis.
8. Write short notes on lymphoid lineage.
9. List-out and explain the structure and functions of different cells of immune system.
10. Explain the primary immune response.
11. Describe the virulence factors of *Streptococcus pyogenes* and its laboratory diagnosis.
12. Describe the etiology, pathogenesis, laboratory diagnosis and treatment of enteric fevers.
13. Classify *Enterobacteriaceae*.
14. Describe the laboratory diagnosis of H5N1 infections.

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15. Write notes on laboratory diagnosis of HSV virus.
16. Describe the disease caused by pox virus.
17. Explain common nosocomial pathogens.
18. Describe the various non pathogenic microorganisms in human body.

(7 × 5 = 35 marks)

Section C

Answer all questions in about 300 words.

Each question carries 3 marks.

19. What are the different biological/physiological factors influencing the growth and survival of microorganisms?
20. Explain the mechanism involved in humoral immune response.
21. Describe the diseases caused by Rhabdo viruses.
22. Discuss about the life cycle, pathogenecity and diagnosis of *M.tb*.
23. Explain antimicrobial therapy with suitable examples.

(5 × 3 = 15 marks)

Section D

Answer all questions in about 200 words.

Each question carries 2 marks.

24. Comment on Bacterial Spore.
25. What is avidity?
26. Comment on Toxic shock syndrome.
27. What is a Virion?
28. Name any four Retroviruses.

(5 × 2 = 10 marks)