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## C. U. SHAH UNIVERSITY

## Winter Examination-2018

Subject Name: Pharmaceutical Microbiology - Theory
Subject Code: BP303T
Semester: 3 Date: 01/12/2018

## Instructions:

(1) Use of Programmable calculator \& any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

## Q-I Answer followings (Answer all questions)

1. Classify Microscopes. 02
2. Describe various shapes of bacteria.02
3. Explain arrangement of bacterial cell. ..... 02
4. Classify culture media. ..... 02
5. Enumerate the methods for measurement of bacterial growth. ..... 02
6. Enumerate various techniques for isolation of pure culture. ..... 02
7. Give types of sterilization methods. ..... 02
8. Classify various Disinfectants. ..... 02
9. Enumerate the factors affecting disinfection. ..... 02
10. Give flow diagram of aseptic area. ..... 02
Q-II Long Answer (Answer any two)(20)
11. Describe structure of Bacterial cell with labeled diagram. ..... 10
12. Explain sterility testing for Pharmaceuticals. ..... 10
13. Explain various biochemical tests for identification of bacteria. ..... 10
Q-III Short Answer (Answer any seven)(35)
14. Briefly explain the Applications of microbiology in pharmacy. ..... 5
15. Explain Growth rate curve of bacteria. ..... 5
16. Describe various staining techniques for identification of bacteria. ..... 5
17. Discuss SEM or TEM with Ray Diagram. 5
18. Explain moist heat sterilization method. 5
19. Enumerate the evaluation methods for Disinfectants. Explain any one in 5 detail.
20. Explain microbial assay for antibiotics. 5
21. Discuss the factors affecting microbial spoilage of pharmaceutical products. 5
22. Describe laminar flow equipment for Aseptic area. 5

