

[Total No. of Questions - 9]
(2063)

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B. Pharmacy 4th Semester Examination

Pharmaceutical Microbiology

HBP-204

Time : 3 Hours

Max. Marks : 80

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt one question from Section A, B, C and D.
Section E is compulsory.

SECTION - A

1. (a) Write notes on the various methods used for identification of bacteria.
(b) Highlight the importance of microscopy in microbiology. **(8,8)**
2. Differentiate between bacteria and virus. Write notes on Rickettsiae. **(8,8)**

SECTION - B

3. (a) Write a note on the nutritional requirements of bacteria.
(b) Discuss the various preservatives used for ophthalmic preparations. **(8,8)**
4. Discuss the various aerobic and anaerobic medias used for sterility testing. **(16)**

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SECTION - C

5. (a) Discuss the various factors affecting the disinfection. (8)
- (b) Write notes on D value and Z value. (4,4)
6. Write notes on the following
- i. Sterilization by moist heat
- ii. Ethylene oxide sterilization (8,8)

SECTION - D

7. (a) Discuss the one level factorial design of antibiotic assay —
- (b) Write notes on (8)
- i. Immunological tolerance
- ii. T cell mediated immunity (4,4)
8. Discuss in detail the various types of antibodies and their structure. (16)

SECTION - E

9. (i) Distinguish between cell mediated immunity and humoral immunity.
- (ii) Distinguish between Chick Martin test and Rideal Walker test.
- (iii) What are heterotrophs and chemoorganotrophs.
- (iv) Distinguish between simple staining and differential staining. (4×4)