

Roll No.....

Total No. of Printed Pages: 1

Total No. of Questions: [13]

B. Pharmacy (Semester –3rd)
PHARMACEUTICAL MICROBIOLOGY
Subject Code: BP303T
Paper ID: [17170116]

Time: 03 Hours

Maximum Marks: 75

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 9 questions of 5 marks each. The student has to attempt any 7 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1 Attempt the following:

- a. Write a short note on EMEM media.
- b. Differentiate between Disinfectant and antiseptic.
- c. What precautions are required while autoclaving empty test tubes or petriplates?
- d. What do you mean by gram staining?
- e. What is Microbial Spoilage
- f. What are the common gases used for sterilization in microbiology?
- g. Why it is necessary to wrapped brown paper before autoclaving?
- h. Describe the main differences between prokaryotic and eukaryotic cells.
- i. Explain the significance of culture media composition in bacterial growth.
- j. What do you mean by Oxidase test.

Section – B

(5 marks each)

- Q2 Highlight the application of cell culture in Pharmaceutical Industry.
- Q3 What are the different types of media used for growth of bacteria?
- Q4 Write notes on: a) Importance of preservation of pure cultures b) Gram staining
- Q5 Explain construction, working, principle and validation of horizontal Autoclave.
- Q6 Write short notes on: a) Monitoring of sterilization process b) BCG vaccine
- Q7 Explain laminar air flow device.
- Q8 How will you carry out microbiological assay as per IP?
- Q9 What is Microbial Spoilage? Discuss the various factors affecting spoilage.
- Q10 Write a note on IMViC.

Section – C

(10 marks each)

- Q11 Explain briefly the study of principle, procedure, merits, demerits and applications of physical, chemical gaseous, radiation and mechanical sterilization methods.
- Q12 Write a note on various sources of contamination. Explain briefly.
- Q13 Describe the principle and working of phase contrast microscopy, dark field, microscopy and electron microscopy.