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BPHARM
(SEM III) THEORY EXAMINATION 2021-22
PHARMACEUTICAL MICROBIOLOGY

Time: 3 Hours**Total Marks: 75****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****10 x 2 = 20**

a.	Outline the differences between Prokaryotic and eukaryotic cell.
b.	Enlist (only names) equipments employed in large scale sterilization.
c.	Explain the uses of biological Sterility Indicators.
d.	Discuss the differences between gram positive and gram-negative bacteria.
e.	Explain the advantages of Chick Martin Test over Rideal Walker test.
f.	Illustrate the Media suitability test and Growth promotion test.
g.	Classify clean area in pharmaceutical industry.
h.	Enlist various sources of contamination in sterile area.
i.	Write a note on bacterial spoilage.
j.	Why are eye drops advised to be used or discarded within 30 days after opening?

SECTION B**2. Attempt any two parts of the following:****2 x 10 = 20**

a.	Discuss morphology, Classification and Reproduction of Fungi.
b.	Classify sterilization methods and explain sterilization by autoclaving.
c.	Discuss the design of an aseptic area. What special precautions are to be kept before designing to reduce the risk of contamination?

SECTION C**3. Attempt any five parts of the following:****7 x 5 = 35**

a.	Explain the bacterial growth curve.
b.	Discuss the biochemical tests for microbial identification in brief. Elaborate the Indole production test.
c.	Write a descriptive note on Sterility testing of Liquids and Solids as per IP.
d.	Describe in detail the methods for viral cultivation.
e.	Elaborate the methods for standardization of Vitamins.
f.	Enlist the applications of cell culture in pharmaceutical Industry.
g.	Write a note on different types of preservatives used in pharmaceutical industry.