



PAPER ID-410930

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Subject Code: BP303T

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BPHARMA
(SEM III) THEORY EXAMINATION 2023-24
PHARMACEUTICAL MICROBIOLOGY

TIME: 3 HRS**M.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.	Define microscope and microscopy.
b.	Write contribution of Louis Pasteur and Robert Koch in microbiology.
c.	Explain why moist heat sterilization is better than dry heat sterilization to kill endospores.
d.	Contrast between simple and differential staining.
e.	Explain the difference between fungi and mold.
f.	Explain pyrogens and write names of pyrogen testing methods.
g.	Define aseptic area.
h.	Name the methods used for microbial assay of antibiotics.
i.	Define antimicrobial agents with two suitable examples of pharmaceutical antimicrobial agents.
j.	Explain microbial spoilage and its types.

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

a.	Discuss preservative efficacy or challenge test.
b.	Write the principle and application of phase contrast microscope with diagram.
c.	Write note on virus cultivation methods. Classify viruses on basis of host specificity.

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

a.	Discuss working, layout, design, and construction of aseptic area.
b.	Describe the standardization procedure for microbial assay of antibiotics.
c.	Discuss sources of contamination and methods used for prevention in aseptic area.
d.	Explain application of cell culture in pharmaceutical industry.
e.	Explain IMViC biochemical tests for bacteria identification.
f.	Discuss bacterial growth measurement methods in detail.
g.	Discuss principle and procedure of gram staining method.