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BP 303 T
Pharmaceutical Microbiology
(723303)

W-19

P. Pages : 2

Time : Three Hours

Max. Marks : 75

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Diagram should be drawn wherever necessary.
5. All questions are compulsory.

1. a) Choose the proper alternative of the following.

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- 1) Bacteria are multiple by ----- method.

a) Reproduction	b) Meiosis
c) Fragmentation	d) Binary fission
- 2) Removal or killing of micro organism is known as -----

a) Filtration	b) Sterilization
c) Budding	d) Sporulation
- 3) Temperature range for 'Pasteurization' is

a) 60°C-70°C	b) 62°C-72°C
c) 65°C-75°C	d) 121°C-130°C
- 4) Oil immersion objective lens has an NA value of

a) 0.65	b) 0.85
c) 1.33	d) 1.00
- 5) Viruses and their structure are studied by

a) Light microscope	b) Dark-field microscope
c) Electron microscope	d) Spectroscopy
- 6) Which family organism is detect by IMViC test

a) Enterobacteriaceae	b) Solanaceae
c) Liliaceae	d) Fabaceae
- 7) In negative staining ----- stain is used.

a) Nigrosine	b) Safranin
c) Gram's Iodine	d) Alcohol

- 8) For preservation cells should be in ----- phase of their life cycle.

a) Log phase	b) Lag phase
c) Stationary phase	d) Decline phase
- 9) Circular shape bacteria are referred as -----

a) Bacilli	b) Cocci
c) Spirillum	d) Vibrio
- 10) Fungal cell-wall is made up from -----

a) Peptidoglycan	b) Pectin
c) Cellulare	d) Chitin

b) Solve the following questions.

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- 1) What is selective media & give its example.
- 2) Write down the mode of action of radiation sterilization.
- 3) Write down ideal properties of disinfectant.
- 4) Advantages of lyophilization method.
- 5) Give the properties of viruses.

2. Solve **any two** questions.

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- 1) What is pasteurization? Explain principle, working & construction of Autoclave. Give its advantage & disadvantage.
- 2) Explain designing of Aseptic area & give the requirements for aseptic area.
- 3) Define microscope. Explain principle, working & construction of electron microscope.

3. Solve **any seven** questions from the following.

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- 1) Explain viral reproduction by lytic cycle.
- 2) Describe various methods of measurement of bacterial growth.
- 3) Write sporulation process in brief with suitable phases.
- 4) Describe dry heat sterilization & its application.
- 5) Explain bacterial isolation method in brief.
- 6) Describe any three method of bacterial preservation.
- 7) Explain scope of pharmaceutical microbiology.
- 8) Define magnification & explain significance of oil-immersion lens.
- 9) Write a note on differential media with example.
