

B.Sc. (Part – I) (Semester I) CBCS (NEP) Examination Mar/Apr-2024

Balasaheb Desai College, Patan

Microbiology

Subject Code –88185

Basic techniques in Microbiology (Paper –II)

Day and Date –Thursday, 04/04/2024

Time – 2.30 pm to 4.30 p.m.

Total Marks- 40

Period- 2 hours

Total Pages- 02

- Instruction -**
- 1) *All the questions are compulsory.*
 - 2) *Figures to the right indicate full marks.*
 - 3) *Draw neat labelled diagrams wherever necessary.*

Q.1 Rewrite the following sentences choosing the correct alternatives given below. 08

1. ----- oil is used to observed slide under oil immersion microscope
a) Coconut oil b) Olive oil c) Cedar wood oil d) groundnut oil
2. ----- staining is an example of differential staining procedure.
a) Acid fast b) Capsule c) Negative d) Cell wall
3. ----- is stained by acid fast staining procedure.
a) *Lactobacillus* b) *Mycobacterium* c) *Corynebacterium* d) *Eubacterium*
4. In Electron microscope ----- filament is used in electron gun.
a) Copper b) Tungsten c) Aluminium d) Iron
5. ----- acts as a Counter stain in Gram's staining procedure.
a) Saffranin b) 95% alcohol c) Gram's iodine d) Crystal violet
6. Numerical aperture is -----
a) $n \sin \theta$ b) $n \sin \alpha$ c) $n \cos \theta$ d) None
7. The chemical agent used against sepsis is called as -----.
a) Sterilization b) Antiseptic c) Germicide d) Disinfectant
8. ----- process does not kill endospores.
a) Autoclave b) Incineration c) Hot air Sterilization d) Pasteurization

Q.2 Attempt following question (Any Two) (16)

1. Define Microscope. Explain compound microscope with its Principle, Ray diagram, working and applications.
2. Give different methods used for sterilization using different filters.
3. Give the procedure and mechanism of monochrome staining.

Q. 3 Write short notes on (any four) (16)

1. Types of stain
2. Negative staining

P.T.O.

3. Radiations as sterilizing agent.
 4. Scanning Electron Microscopy
 5. Procedure of Gram Staining
 6. Autoclave
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