

II SEMESTER

Model paper for Microbiology Major Course-3

SECTION-A

5 × 8 = 40 Marks

Answer all the following questions. Draw labelled diagrams wherever necessary.

1. (a) (i) Charaka Samhita (ii) Discovery of penicillin
(OR)
(b) (i) discovery of penicillin (ii) contribution of Louis Pasteur
2. (a) Explain Whittaker's five kingdom concept, threedomain concept of Carl Woese.
(OR)
(b) Discuss the basic and applied branches of Microbiology.
3. (a) General characteristics of Bacteria (Morphology, metabolic diversity & reproduction).
(OR)
(b) General characteristics of Virus (Nature, composition, host specificity, structure)
4. (a) Describe the Habitat, thallus organization, photosynthetic pigments, storage forms of food, reproduction of Algae.
(OR)
(b) Write a note on Protozoa.
5. (a) Describe the inoculation-Aseptic methods of introducing inoculum to growth media.
(OR)
(b) (i) Colony characteristics of bacteria (ii) Simple staining.

SECTION-B

10 × 1 = 10 Marks

Answer all the following questions.

1. Which of the following is not part Charak Samhita
 - a) Personal hygiene, Environmental cleanliness
 - b) purity of medicine, sterilization of instruments
 - c) Use of antibiotics
 - d) Quarantine & isolation of patients
2. Father of microbiology is _____
3. _____ Discovered vaccination for Small pox.
4. In Binomial Nomenclature the name consists of two words where the first term refers to the _____ and the second term refers to the _____.
5. The correct order of taxonomic groups from higher to lower rank is-
 - a) Kingdom –Order- Class- Family
 - b) Order –Class-Division- Family-Genus-Species
 - c) Kingdom-Order- Division- Family- Class- Genus-Species
 - d) Kingdom-Division-Class- Order- Family- Genus- Species
6. Prokaryotic cells do not have true nucleus and membrane bound organelles. True/False
7. Virus are
 - a) Autotrophs
 - b) Obligate intracellular parasites
 - c) Parasites
 - d) Saprophytes

8. Virus has
- Both DNA & RNA together as genetic material
 - It has either DNA or RNA but not both together
 - All of the above
 - None of the above
9. Fungi exists in two forms filamentous/ hyphal forms _____ and single celled form _____
10. Isolation technique which uses L- SHAPED glass rod, ethanol , solidified nutrient agar plates , bacterial culture is called as -
- Streak plate method
 - Spread plate method
 - Pour plate method
 - None of the above
11. Wet mount does not needing heat fixing and staining of bacteria as it allows bacteria to be alive. T/F
12. In wet mount specimen is placed on a drop of water on the slide, with a coverslip placed over it. T/F

Blue Print for Question Papers from II Semester onwards

Unit Number	Section-A (Essay/ Split Essay) In either or pattern	Section-B (MCQ/ True or False/ Fill in the blank) – No choice	Weightage of marks
Unit-1	8 Marks / 2×4 Marks	1 mark (2 Questions)	10 M
Unit-2	8 Marks / 2×4 Marks	1 mark (2 Questions)	10 M
Unit-3	8 Marks / 2×4 Marks	1 mark (2 Questions)	10 M
Unit-4	8 Marks / 2×4 Marks	1 mark (2 Questions)	10 M
Unit-5	8 Marks / 2×4 Marks	1 mark (2 Questions)	10 M