



KEEPING MOBILE PHONE/SMART WATCH, EVEN IN 'OFF' POSITION, IS TREATED AS EXAM MALPRACTICE

Answer any TEN Questions

(10 X 10 = 100 Marks)

- ✓ 1. List any five Scientists and write about their pioneering discoveries in microbiology and their significance. ¹⁰
- ✓ 2. Using suitable sketches compare and contrast the working principle of a Scanning electron microscope with Transmission electron microscope. ⁸
- ✓ 3. Given a choice to isolate bacteria from soil samples, how will you proceed? Explain the technique.
- ✓ 4. Classify the different types of culture media employed in a bacteriology laboratory, give examples. ⁶⁻⁷
5. Is it possible to differentiate bacteria based on the staining properties? If so – How? Explain the procedure. If not – Why? Discuss.
- ✓ 6. Using a neat sketch describe the structure of the bacterial cell and its components. ¹⁰
- ✓ 7. Classify algae with suitable examples. ¹⁰
8. What are the methods employed for the identification and classification of bacterium? Collate.
- ✓ 9. Write an essay on the microbial aerobic and anaerobic pathways for energy production. ⁸
- ✓ 10. Differentiate batch culture from synchronous culture and write their merits and demerits. ⁹⁻¹⁰
- ✓ 11. Plot a growth curve for bacterial culture in a liquid medium and explain. ⁸
- ✓ 12. What do you think would be probable cause for the recent virus outbreak? As a microbiologist how will you mitigate? ⁸⁻⁹