



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Differentiate between the following.

(15x2=30)

1. CHEMOLITHOTROPHS and CHEMO-ORGANOTROPHS
2. AMPHITRICHOUS and LOPHOTRICHOUS
3. VIRULENT and TEMPERATE Phages
4. PSYCHROPHILES and THERMOPHILES
5. PILI and FLAGELLA
6. FLUORESCENT Microscopy and ELECTRON Microscopy
7. TRANSDUCING PHAGE and PROPHAGE
8. MINIMAL medium and ENRICHED medium
9. WET HEAT STERILIZATION and DRY HEAT STERILIZATION
10. EXOGENOTE and ENDOGENOTE
11. LAG phase and EXPONENTIAL phase of bacterial growth
12. Ti PLASMID and F PLASMID
13. TRANSFORMATION and TRANSDUCTION
14. SPREAD plate culture and STREAK plate culture technique
15. ~~PROKARYOTES~~ and eukaryotes

Q.2. Answer the following Questions.

(5x6=30)

- i. Write a brief note about the symptoms and modes of transmission of VIRAL infection in plants.
- ii. Briefly explain the history of MICROBIOLOGY.
- iii. Explain the effect of various environmental factors on the growth of bacteria.
- iv. Explain in detail the structure and multiplication of BACTERIOPHAGES.
- v. What do you know about the term ZYGOTIC INDUCTION? Discuss.