

20. (a) What are the general characteristics of *Amoeba*?

Or

- (b) What is one-step multiplication curve?

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

21. Give a detailed account on the contributions of Louis Pasteur in the field of Microbiology
22. Explain elaborately on Whittaker's five kingdom classification.
23. Enumerate and explain the types of reproduction in algae.
24. Describe in detail on sexual reproduction in fungi.
25. Write an essay on Corona virus and its vaccines.

S.No. 8102

22 SACBT 1

(For candidates admitted from 2022–2023 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Part III — Allied

BASIC MICROBIOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (20 marks)

- I. (A) Choose the correct answer: ($5 \times 1 = 5$)
1. Who was awarded noble prize in 1905 for his investigations and discoveries on tuberculosis
- (a) Koch (b) Waksman
- (c) Ehrlich (d) Pasteur
2. Bacteria without cell wall is
- (a) Streptomyces (b) Salmonella
- (c) Mycoplasma (d) Archaea
3. Succession of three distinct generations of life cycle is seen in
- (a) Diplontic (b) Diplobiontic
- (c) Haplontic (d) Haplobiontic

4. Chitin is found in the cell wall of
 - (a) Bacteria
 - (b) Fungi
 - (c) Virus
 - (d) Algae
5. A virulent phage that undergoes lytic lifecycle
 - (a) Lambda phage
 - (b) Coliphage
 - (c) P4
 - (d) T4
- (B) Fill in the blanks: $(5 \times 1 = 5)$
 6. _____ is considered as the father of microbiology
 7. Carl Woese classification consists of _____ domains
 8. Chlorophyta are _____ algae.
 9. Fungi grows at _____ pH
 10. Polio is a highly infectious disease of the _____ system
- II. Answer the following questions. $(5 \times 2 = 10)$
 11. Define fermentation.
 12. What are Halophiles?
 13. What is Laminarin?
 14. What are Basidiospores?
 15. Define Prions.

PART B — $(5 \times 5 = 25)$

Answer ALL questions, choosing either (a) or (b).

16. (a) Write short notes on Alexander Fleming and his discovery

Or

 (b) Give a brief account on Martinus Beijerinck and his contributions
17. (a) Describe Binomial Nomenclature with an example.

Or

 (b) List out the general characteristics of Viruses.
18. (a) With a neat diagram explain the ultrastructure of an Algal cell.

Or

 (b) Explain the lifecycle of *Spirogyra*.
19. (a) Write notes on nutritional requirements of fungi.

Or

 (b) Explain the lifecycle of *Aspergillus*.