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(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2025 ONLY)

25PBY103

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2025

M.Sc.-BOTANY **MAXIMUM MARKS: 75**
SEMESTER: I **TIME : 3 HOURS**

APPLIED MICROBIOLOGY AND PLANT PATHOLOGY

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)

MULTIPLE CHOICE QUESTIONS.

1. Viruses are_____.
   a) Obligate saprophyte b) Obligate parasite c) Facultative saprophyte d) Facultative parasite
2. Which of the following is rich source of B vitamin ?
   a) Yeast extract b) Peptone c) Agar d) Beef Extract
3. Yogurt is made from_____.
   a) *Lactobacillus bulgaricus* b) *Streptococcus thermophilous*
   c) *Streptococcus cremoris* d) Mixed cultures of (a) & (b)
4. Penicillium is used in the production of _____.
   a) Amino acid b) Antibiotic c) Biofuel d) Organic acid
5. Bunchy top of banana is caused by_____.
   a) Virus b) algae c) Protozoa d) Fungi

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. (K2)

6. Explain protozoa.
7. Interpret gram staining.
8. Define yogurt.
9. Explain biofuel .
10. Define plant pathology.

SECTION – B (5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11.a) Interpret Five Kingdom concept.

(OR)

b) Describe the scope and branches of micro biology.

(Contd…….2)

12.a) Assess the role of different sterilization techniques of media.

(OR)

b) With sketch describe bacterial growth curve.

13. a) List the types of microorganism in food.

(OR)

b) Interpret the concept of prebiotic and probiotic

14. a) Describe any two apparatus used for continuous culture of bacteria.

(OR)

b) Describe the production of biofuel.

15. a) Assess the mode of entry of pathogen in to a host cell.

(OR)

b) Discuss the causal organism ,symptoms and control measures of leaf spot diseases of coconut .

SECTION – C (5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

16. a) Outline the Bergey's Manual of Systematic Bacteriology.

(OR)

b) Summarise the economic importance of microbes.

17. a) Analyze the micro organisms in soil.

(OR)

b) Analyze the micro organism of industrial waste .

18. a) Give an account of any two fermented milk products you have studied.

(OR)

b) Evaluate food spoilage and various methods to prevent it.

19. a) Outline the structure of fermenter and its types.

(OR)

b) Analyze the Industrial production of amino acids.

20. a) Outline the various defence mechanism exhibited by plants.

(OR)

b) Discuss the causal organisms, symptoms, disease cycle and control measures of any two fungal diseases you have studied.

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