| Reg. No. | | | | |
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G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI - 628 502.



UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2025.

(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.Sc., BOTANY

| SE | M CATEGORY | COMPONENT | COURSE CODE | COURSE TITLE |
|----|------------|-----------|-------------|--|
| II | PART-III | CORE | U21BO204 | MICROBIOLOGY, MYCOLOGY, LICHENOLOGY AND PLANT PATHOLOGY |

Date & Session: 04.11.2025/FN Time: 3 hours Maximum: 75 Marks

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|-------------------|--------------------|-----------|---|--|--|--|
| Course Outcome | Bloom's K-level | Q. No. | <u>SECTION - A (10 X 1 = 10 Marks)</u> Answer <u>ALL</u> Questions. | | | |
| CO1 | K1 | 1. | Scientist who disproved the | neory of spontaneous generation | | |
| | | | a) Koch | b) Pasteur | | |
| | | | c) Jenner | d) Hansen | | |
| CO1 | K2 | 2. | The bacterial culture prep | ared by pure culture method is | | |
| | | | a) Inoculum | b) Suspension | | |
| | | | c) Dilution | d) None of these | | |
| CO2 | K1 | 3. | Who is the father of virus | | | |
| | | | a) Martinus Beijerinck | b) Dmitri Ivanovsky | | |
| | | | c) John Ellerman | d) Frederick Twort | | |
| CO2 | K2 | 4. | Which of the following is a | helical virus | | |
| | | | a) TMV | b) T4 phage | | |
| | | | c) Pox virus | d) Herpes virus | | |
| CO3 | K1 | 5. | The network of hyphae forming the fungal body is known as | | | |
| | | | a) Thallus | b) Haustoria | | |
| | | | c) Mycelium | d) Septa | | |
| CO3 | K2 | 6. | After fusion of sexual gam | etes in <i>Mucor</i> the resultant structure is known as | | |
| | | | a) Oospore | b) Cleistothecium | | |
| | | | c) Zygospore | d) Zygote | | |
| CO4 | K1 | 7. | Yeast is important source | of | | |
| | | | a) Vitamin C | b) Riboflavin | | |
| | | | c) Sugar | d) Protein | | |
| CO4 | K2 | 8. | Lichen are best indicators | of | | |
| | | | a) Air pollution | b) Water pollution | | |
| | | | c) Soil pollution | d) None of these | | |
| CO5 | K1 | 9. | Plant disease which affect | the absorption and accumulation of water and | | |
| | | | minerals | | | |
| | | | a) Root rot | b) Wilts | | |
| | | | c) Damping off | d) Soft rot | | |
| | | | | | | |
| | <u> </u> | <u> </u> | | | | |

| CO5 | K2 | 10. | Which of these is a common disease of groundnut | | |
|-------------------|--------------------|-----------|---|--|--|
| | | | a) Tikka disease b) Bunchy Top | | |
| | | | c) Rice Tungro d) Panama Wilt | | |
| Course Outcome | Bloom's K-level | Q. No. | SECTION - B (5 X 5 = 25 Marks) Answer ALL Questions choosing either (a) or (b) | | |
| CO1 | КЗ | 11a. | What is the scope of microbiology? | | |
| 0.01 | | 4 4 4 | (OR) | | |
| CO1 | К3 | 11b. | Write a note on staining technique of bacteria? | | |
| CO2 | КЗ | 12a. | Describe the general characters of virus? | | |
| | | | (OR) | | |
| CO2 | К3 | 12b. | Comment on T4 bacteriophages? | | |
| CO3 | K4 | 13a. | Give the general characters of fungi? | | |
| | | | (OR) | | |
| CO3 | K4 | 13b. | Describe the sexual reproduction of mucor? | | |
| CO4 | K4 | 14a. | Discuss the economic importance of fungi? | | |
| | | | (OR) | | |
| CO4 | K4 | 14b. | Write a note on symbiotic association of lichens? | | |
| CO5 | K5 | 15a. | What are the causes and symptoms of citrus canker? | | |
| | | | (OR) | | |
| CO5 | K5 | 15b. | Briefly discuss the techniques followed in biological control of plant disease? | | |

| Course Outcome | Bloom's K-level | Q. No. | SECTION - C (5 X 8 = 40 Marks) Answer ALL Questions choosing either (a) or (b) |
|-------------------|--------------------|-----------|---|
| CO1 | КЗ | 16a. | Give briefly explain about the structure of bacterial cell and with neat diagram? (OR) |
| CO1 | КЗ | 16b. | Briefly explain the media preparation and pure culture techniques of Bacteria? |
| CO2 | K4 | 17a. | Briefly explain the structure and reproduction of TMV? (OR) |
| CO2 | K4 | 17b. | Give a brief note on mycoplasma? |
| CO3 | K4 | 18a. | Give an outline of Ainsworth's classification of fungi. Enumerate main features of different classes of fungi? |
| CO3 | K4 | 18b. | (OR) Describe the structure, reproduction and life cycle of Puccinia? |
| CO4 | K5 | 19a. | Describe the different types of thallus structure of lichen with examples? (OR) |
| CO4 | K5 | 19b. | Describe the economic and ecological significance of lichens? |
| CO5 | K5 | 20a. | Describe the causative organism, symptoms and control measures of bacterial blight of paddy? |
| CO5 | K5 | 20b. | (OR) Name the causal organism of tikka disease of groundnut. Describe the symptoms, disease cycle and control measures of the disease? |