

**Third Semester FYUGP Degree (Reg) Examination**  
**NOVEMBER 2025**  
**KU3DSCMBG201 - MICROBIAL HETEROGENEITY**  
2024 Admission onwards

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Time : 1.5 hours

Maximum Marks : 50

**Section A**

**Answer any 6 questions. Each carry 2 marks.**

1. List out microorganism which reproduce through budding and spore formation
2. What is binary fission? Which organism reproduces through binary fission?
3. Name a defining characteristic of protozoa that differentiates them from bacteria, fungi, and algae.
4. What is the defining characteristic of bacteria that classifies them as prokaryotes?
5. Write one example of a lysogenic bacteriophage.
6. Define facultative anaerobes with an example.
7. What is the difference between biovars and morphovars?
8. List two biochemical tests used to identify Enterobacteriaceae.

**Section B**

**Answer any 4 questions. Each carry 6 marks.**

9. Compare the taxonomy of geminiviruses and caulimoviruses.
10. Explain the taxonomy of retroviruses with examples.
11. Explain the different nutritional types of microorganisms with suitable examples.
12. Evaluate the significance and importance of taxonomy.
13. Outline briefly about ELISA test for the identification of microorganisms.
14. Determine the staining technique used to identify spore forming bacteria.

**Section C**

**Answer any 1 questions. Each carry 14 marks.**

15. Suggest various method to measure the growth of microbial population and explain the merits and demerits of each method while using it
16. Create a diagrammatic representation of fungal reproduction strategies.