

Semester -II- Microbiology

Paper Name: MICC-201- Basic Bacteriology

Paper Code: 20609

Time: 2:30 Hours

Total Marks: 70

**Instructions:** (a) Figure to the right indicates total marks of respective question.  
(b) Draw neat, clean and labeled diagram wherever necessary.

- Q.1 Explain:  
a) Size, shape and arrangement of bacterial cell 07  
b) Bacterial cell wall structure 07
- OR
- Q.1 Describe:  
a) Sporulation 07  
b) Structure, function and composition of capsule and sheath 07
- Q.2 Discuss:  
a) Nutritional requirement of bacteria 07  
b) Temperature, acidity and alkalinity as physical condition for cultivation of bacteria 07
- OR
- Q.2 Explain:  
a) Nutritional type of bacteria 07  
b) Types of culture media 07
- Q.3 Describe:  
a) Pure and axenic culture 07  
b) Method for isolation of pure culture 07
- OR
- Q.3 Discuss:  
a) Culture collection center 07  
b) Preservation of pure culture (any three method) 07
- Q.4 Explain:  
a) Whittaker's classification system 07  
b) Overview of Bergey's manual of systematic bacteriology 07
- OR
- Q.4 a) Explain any two volume of Bergey's manual of systematic bacteriology 07  
b) Principles of binomial system of classification 07
- Q.5 a) Explain: ideal characteristic of antimicrobial agent  
b) Describe chemical agent of microbial control (any three group) 07
- OR
- Q.5 a) General principles of microbial control 07  
b) Write note on Phenolic compound and alcohol as microbial control 07