

Seat No. \_\_\_\_\_

**MAY - 2017**  
**BSC0C205 (Sem - II)**  
**Microbiology**

**Time : 3 Hrs.**

**Total Marks : 70**

- Instruction : (1) All Questions are Compulsory.  
(2) Figures to the right indicate total marks of the Questions.

**Q-1 Answer any Two (14)**

- (a) Explain Whittaker's five kingdom concept.
- (b) Give a brief account of: Binomial Nomenclature
- (c) Write short note on: Molecular methods for classification of microbes.
- (d) Differentiate between Eubacteria and archaeobacteria.

**Q-2 Answer any Two (14)**

- (a) Draw a labeled diagram of bacterial cell.
- (b) Write a note on: Bacterial cell wall.
- (c) Give a brief account of: bacterial flagella.
- (d) Explain the terms: Capsule, glycocalyx and slime layer

**Q-3 Answer any Two (14)**

- (a) What are the major methods of microbial reproduction? Explain in brief with examples.
- (b) Write a note on: Type of culture media.
- (c) Explain nutritional types of microbes.
- (d) Write a note on: Normal growth curve of bacteria.

**Q-4 Answer any Two (14)**

- (a) Write in brief : Preservation of cultures
- (b) Explain: Filtration as physical method microbial control.
- (c) Write short note on: Use of Moist heat for microbial control.
- (d) Explain how alcohols and heavy metals inhibit micro organisms.

**Q-5 Answer in one or two lines.**

**(14)**

1. Who gave binomial nomenclature?
2. What are species?
3. What is the basis of Whittaker's classification?
4. Name two bacteria producing endospores.
5. What is the chemical nature of bacterial pilus?
6. Name two capsulated bacteria.
7. What is pure culture?
8. What is binary fission?
9. What is synchronous growth?
10. State relationship of growth rate and generation time.
11. Name two gaseous agents used for microbial control
12. Where U.V. radiations are used for microbial control?
13. What is sterilization?
14. Name two disinfectants commonly used at your home.