Roll No. Total No. of Pages: 02

Total No. of Questions: 18

B.Sc.(BT) (2014 to 2017) (Sem.-2) GENERAL MICROBIOLOGY

Subject Code: BSBT-104 M.Code: 47032

Time: 3 Hrs. Max. Marks: 60

## **INSTRUCTION TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## **SECTION-A**

# **Answer briefly:**

- 1. What is pasteurization?
- 2. Mention any one Gram positive and Grant negative bacterium.
- 3. What is the contribution of Joseph Lister?
- 4. What is a synchronous growth in bacteria?
- 5. What is the generation time of bacteria?
- 6. Name any fluorescent dye used for staining specimen for observing under fluorescent microscope.
- 7. Name any two microbes that form the part of normal microflora of humans.
- 8. Which sterilization technique will be used for :
  - a) Glass Petri plates
  - b) Inoculating loop
- 9. What are acidophiles? Name any one bacterium.
- 10. Who is known as the Father of Microbiology?

1 | M-47032 (S2)-650

### **SECTION-B**

- 11. Briefly describe about any one:
  - a) Dark field microscopy
  - b) Electron Microscopy
- 12. What is sterilization? Discuss about different physical methods used for sterilization.
- 13. Explain Koch's postulates.
- 14. Briefly describe the sporulation process in bacteria. What is its significance?
- 15. Describe about the process and significance of fermentation in microbes.

### **SECTION-C**

- 16. Give a detail account about the medically important pathogens and diseases related to them.
- 17. Write short note on any two:
  - a) Nutritional biodiversity
  - b) Nitrogen fixing bacteria
  - c) Heterologous protein production in *E.coli*
  - d) Cell wall structure of Gram negative bacteria
- 18. Explain the different phases of growth curve in bacteria.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

**2** | M-47032 (S2)-650