



**RB-0728**

**Second Year B. Sc. Examination**

**April / May – 2010**

**Medical Technology : Paper - III**

Time : Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दृष्टावेळ निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="S. Y. B. Sc."/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Medical Technology - 3"/>	<input type="text"/>
Subject Code No. : <input type="text" value="0"/> <input type="text" value="7"/> <input type="text" value="2"/> <input type="text" value="8"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(2) Figures to the right indicate full marks of the questions.

(3) Draw diagram wherever necessary.

1 Answer in brief : 14

- Describe some of the algae used as food for human consumption.
- What are the similarities and differences between protoplasts and spheroplasts?
- Distinguish between leading and lagging strands.
- What do the designations  $F^+$ ,  $F^-$ ,  $F'$  and  $HFr$  mean?
- Define chemotaxis, run and tumble.
- What enzymes do most obligate anaerobes lack? How does this cause them to die in the presence of oxygen.
- Distinguish between positive and negative sense RNA.

2 Explain/Comment on any **three** of the following : 15

- Fermentation is a less efficient process for obtaining energy than aerobic respiration.
- Bergey's manual describes the diverse group of bacteria.

- (iii) In the lag phase of growth the number of bacteria remains constant.
- (iv) Oncogenes
- 3** Answer any **two** of the following : **16**
- (i) Describe briefly endospore formation and germination. What is the importance of the endospore? What might account for its heat resistance?
- (ii) List in correct order the five steps in viral replication. How do these five stages differ between bacteriophages and animal viruses?
- (iii) Maintenance and preservation of microbial cultures.
- 4** Write an essay on : **10**  
"Mechanisms and significance of conjugation."
- 5** Write short notes on any **three** of the following : **15**
- (i) Bacteriological media
- (ii) Flagella
- (iii) Lysogeny
- (iv) Functions of the cell wall.
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