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B.Sc. RNLKWC-/GE4T/22

2022

**MICROBIOLOGY**

[Generic]

**B.Sc. Sixth Semester End Examination - 2022**

**PAPER - GE4T**

**Full Marks : 40**

**Time : 2 hours**

*The figures in the right-hand margin indicate marks.  
Candidates are required to give their answers in their own  
words as far as practicable.  
Illustrate the answers wherever necessary.*

**Answer any five :**

**5×2=10**

1. What is Viroids and prions? 1+1
2. Write down two name of animal virus culture techniques. 1+1
3. What is enveloped viruses? What are the example of enveloped and non enveloped viruses? 1+1

*(Turn Over)*

( 2 )

4. 70% alcohol is more effective than 90% for killing bacteria – Why? 2
5. Why endospores are highly resistant to heat and radiation? 2
6. What are plasmids? 2
7. Write down the role of interferons. 2
8. What is binary fission? 2

**Group-B**

**Answer any four. 4×5=20**

1. Describe the ultrastructure of gram<sup>(+)</sup>ve bacterial flagella with diagram. 5
2. Write the composition of gram<sup>(+)</sup>ve bacterial cell wall. 5
3. What is methanogenesis? Give example of methanogens. 4+1
4. Discuss in details about TMV. 5
5. Differentiate between protoplast and Spheroplast. What are the full forms of NAG and NAM. 3+2

( 3 )

6. Classify media – Differentiate between synthetic media and defined media. 3+2

**Group - C**

**Answer any one : 1×10=10**

1. Describe the growth curve of batch culture. How you cultivate anaerobic organism. 5+5
2. a) What are lytic and lysogenic cycles? Explain in details. Write down the differences between lytic and lysogenic cycles. 5  
b) Write down the features of halophiles. Name one cell wall free bacterium. Write down the positive impact of micro-organisms in agriculture. 2+1+2