



RAN - 2503000502028003

**RAN-2503000502028003**

**B. Sc. (NEP) (Sem. - II) Examination April - 2025**

**Bioscience (Microbiology) Major - 2**

**BM-MJ-202 : Microbial Biochemistry**

**Time: 1:30 Hours ]**

**[ Total Marks: 38**

**સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**B. Sc. (NEP) (Sem. - II)**

Name of the Subject :

**Bioscience (Microbiology) Major - 2 - BM-MJ-202 :  
Microbial Biochemistry**

Subject Code No.: **2503000502028003**

Seat No.:

□	□	□	□	□	□
---	---	---	---	---	---

Student's Signature

- (2) Draw neat and labelled diagrams wherever necessary.  
(3) Figures to the right indicate full marks of the question.

**Q. 1. Multiple choice questions. (Any Eight)**

**08**

- Two sugars which differ from one another only in configuration around a single carbon atom are termed
  - Epimers
  - Anomers
  - Optical isomers
  - Stereoisomers
- Functions of Carbohydrates include
  - Cell recognition
  - Cell to cell interaction
  - Imparting structure and store energy
  - All
- Most common monomer of Carbohydrate is \_\_\_\_\_
  - Glucose
  - Fructose
  - Sucrose
  - Maltose
- This is an example of derived lipids
  - Terpenes
  - Steroids
  - Carotenoids
  - All of the above

**RAN-2503000502028003 ]**

**[ 1 ]**

**[ P.T.O. ]**

**P0507**

5. \_\_\_\_\_ is not a classified form of conjugated proteins.
- Lipoproteins
  - Glycoproteins
  - Metalloproteins
  - Complete proteins
6. A disulphide bond can be formed between
- Two methionine residues
  - Two cysteine residues
  - A methionine and a cysteine residue
  - All of these
7. The sugar molecule present in nucleotide is
- Triose
  - Tetrose
  - Pentose
  - hexose
8. Which of the following are not the components of RNA?
- Thymine
  - Adenine
  - Guanine
  - Cytosine
9. A nucleotide is composed of
- A base + a sugar
  - A base + a phosphate
  - a sugar + phosphate
  - A base + a sugar + phosphate

**Q. 2. Answer the following questions. (Any two) 10**

- Write a note on heteropolysaccharide.
- Describe in brief about monosaccharides.
- Classification of carbohydrate with suitable example.

**Q. 3. Answer the following questions. (Any two) 10**

- Discuss in detail protein secondary structure.
- Describe in brief structure & functions of phospholipid.
- Describe in detail structural classification of amino acids.

**Q. 4. Answer the following questions. (Any two) 10**

- Write a note on polynucleotide.
- Write the differences between DNA and RNA.
- Write a note on types of RNA.