



RAN-2503000504048001

B. Sc. (Sem.-IV) Examination April - 2026

Bioscience-Microbiology (BM-MN-4 : Biochemistry)

Time: 1 Hour]
[Total Marks: 25
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) Draw neat and labelled diagrams wherever necessary
- (3) Figures to the right indicate full marks of the question.

Seat No.:

--	--	--	--	--	--

Student's Signature

Q.1. Multiple choice questions. (Any Five)
05

1. Carbohydrates are chemically defined as:
 - a. Polyhydroxy ketones only
 - b. Polyhydroxy aldehydes or ketones
 - c. Fatty acids
 - d. Amino acids
2. Saturated fatty acids contain:
 - a. Double bonds
 - b. Triple bonds
 - c. No double bonds
 - d. Peptide bonds
3. Lactose is a disaccharide of
 - a. Glucose and galactose
 - b. Glucose and glucose
 - c. Glucose and lactose
 - d. Fructose and lactose
4. _____ is not a classified form of conjugated proteins.
 - a. Lipoproteins
 - b. Glycoproteins
 - c. Metalloproteins
 - d. Complete proteins
5. Essential amino acids are those:
 - a. Synthesized in body
 - b. Not required by body
 - c. Not synthesized in body
 - d. Found only in plants
6. B-form DNA in vivo is a _____ handed helix, _____ Å^o in diameter, with a rise of _____ Å^o per base pair
 - a. left; 20; 3.9
 - b. right; 20; 3.4
 - c. right; 18; 3.4
 - d. right; 18; 3.6

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

1. Explain in detail Monosaccharides.
2. Define Carbohydrates. Classify them with suitable examples.
3. Describe in detail classification of lipids.

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

1. Write a note on essential amino acids and their importance.
 2. Explain in detail secondary structure of protein.
 3. Write a note on t - RNA.
-