



D-2971

First Year B. Sc. (Microbiology) (Sem. II) Examination

March / April - 2016

MB-04 : Chemistry of Microorganisms

Time : Hours]

[Total Marks : 50

Instruction :

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="FIRST YEAR B. Sc. (MICROBIOLOGY) (SEM. 2)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="MB-04 : CHEMISTRY OF MICROORGANISMS"/>	<input type="text"/>
Subject Code No. : <input type="text" value="2"/> <input type="text" value="9"/> <input type="text" value="7"/> <input type="text" value="1"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	

1 Answer the following questions : 8

- (1) What are enantiomers ?
- (2) Give the full form of RNA and DNA.
- (3) Explain the importance of PUFA.
- (4) What are epimers ?
- (5) Give the chemical composition of starch.

2 Attempt any two of the following : 14

- (1) Discuss the cyclic structure of glucose with the reference to Fischer projection formula.
- (2) Describe the structure of nitrogenous base and discuss the formation of phosphodiester bond in DNA.
- (3) Describe the bonds and the folding of proteins.

3 Answer any two of the following : **14**

- (1) Give an account of primary structure of protein and explain the characteristics of aminoacids.
- (2) Explain the double helix model of DNA in detail proposed by Watson and Crick.
- (3) Discuss the of saturated and unsaturated fatty acids with suitable examples.

4 Write short notes on any two of the following : **14**

- (1) Heteropolysaccharides.
- (2) Functions of lipids.
- (3) Parallel and anti-parallel β -pleated sheet.
- (4) Formation of Nucleoside tri-phosphates with suitable examples.
