



JB-3131
Second Year B. Sc. (Sem. III) Examination
March/April – 2013
Bioscience : Paper - I

Time : Hours]

[Total Marks : 50

Instructions :

(1)

<p>नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : ☛ Second Year B. Sc. (Sem. 3)</p> <p>Name of the Subject : ☛ Bioscience : Paper - 1</p> <p>☛ Subject Code No. : 3 1 3 1 ☛ Section No. (1, 2,.....): Nil</p>	<p>Seat No. : <table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td></tr></table></p> <div style="border: 1px solid black; border-radius: 15px; width: 100%; height: 80px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">Student's Signature</div>						

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

1 Answer the following question in brief : 12

- (a) Who has proposed the cyclic structure of sugars ?
Write chemical structure of β . D. Glucose and
 β . D. Galactose.
- (b) Give names of any two long chain unsaturated fatty acids.
- (c) Write the chemical structure and importance of ketotriose.
- (d) Explain : α and β glycosidic bond.
- (e) Which monosaccharides are produced upon hydrolysis of sucrose ?
- (f) Write chemical structure of triglyceride.

2 Describe in detail the structure and importance of polysaccharides. 14

OR

- 2** Describe : **14**
- (1) Saturated and unsaturated fatty acids.
 - (2) Primary, Secondary and Tertiary forms of protein.
- 3** Describe any **two** of the following : **14**
- (a) Effects of temperature and pH on enzyme - substrate reaction.
 - (b) Enzyme specificity.
 - (c) Co-enzymes.
- 4** Write short notes : (any **two**) **10**
- (a) Competitive inhibitors
 - (b) Pentose sugars
 - (c) Structure and importance of any two phospholipids.
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