



SB-2721

M. Sc. (Part - I) (Biosciences) (Sem. II)
Examination
March / April – 2011
Bio - 201 : Biophysics & Instrumentation

Time : 3 Hours]

[Total Marks :70

Instructions :

(1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. Sc. (Part - 1) (Biosciences) (Sem. 2)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Bio - 201 : Biophysics and Instrumentation"/>	<input type="text"/>
Subject Code No. : <input type="text" value="2"/> <input type="text" value="7"/> <input type="text" value="2"/> <input type="text" value="1"/>	Section No. (1, 2,.....): <input type="text" value="Nil"/>
Student's Signature	

- (2) Figures to the right indicate full marks of the question.
(3) Draw neat and labelled diagrams whenever necessary.
- 1 Write detailed note on : (any two) 18
(a) Give an electronic structure of carbon. Describe its various forms and comment upon its biological importance.
(b) Define chromatography. Explain ion exchange chromatography and its application.
(c) Describe autoradiographic technique and its application.
- 2 Explain in detail (any two) 18
(a) Radiation penetration and its effect.
(b) Construction and functioning of scintillation counter
(c) Atoms and subatomic particles.
- 3 Describe any two of the following : 18
(a) Design and working of GM counter
(b) Define isotope and isobar. Explain isotope in detail and summarised their similarities and differences
(c) Define cosmic rays. Explain their origin, detection and properties.
- 4 Write short notes (any three) 16
(a) Quantum number
(b) Dual nature of electron
(c) Linkage and bonds
(d) EM spectrum.

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[100]