



**RF-3715-16**

**M. Sc. (Bioinformatics) (Sem. II) Examination**

**April / May – 2010**

**BI-201 : Biochemistry**

Time : 3 Hours]

[Total Marks : 70

**RF-3715**

**Instructions :**

(1)

नीचे दशांशवेष निशानीवाणी विगतो उत्तरवडी 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="M. Sc. (Bioinformatics) (Sem. 2)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="BI-201 : Biochemistry"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="7"/> <input type="text" value="1"/> <input type="text" value="5"/>	Section No. (1, 2,.....) : <input type="text" value="1"/>
Student's Signature	

- (2) Answer to each section must be written in **separate** answer books.
- (3) Give reactions and neat diagrams as required.
- (4) Write clearly the no. of question and sub-question attempted.

1 Explain beta-oxidation of saturated fatty acid and show ATP calculation. **10**

**OR**

1 Glycolytic pathway and its regulation.

2 Explain oxidation of polyunsaturated fatty acid with linoleic acid as linoleoyl-CoA. **10**

**OR**

2 Explain the pathway showing formation of glucose from non-hexose precursor.

3 Write a short note on (any three):- **15**

(i) Importance of disaccharides

(ii) Non-Standard Amino-acids

(iii) Regulation of TCA Cycle.

(iv) Phosphoglycerides with Lecithin and Cephalic Structure.

## RF-3716

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Fillup strictly the details of signs on your answer book.

Seat No. :

Name of the Examination :  
M. Sc. (Bioinformatics) (Sem. 2)

Name of the Subject :  
BI-201 : Biochemistry

Subject Code No. :  3  7  1  6 Section No. (1, 2,.....) :  2

Student's Signature

- (2) Answer to each section must be written in **separate** answer books.
- (3) Give reactions and neat diagrams as required.
- (4) Write clearly the no. of question and sub-question attempted.

4 How DNA is packed into chromosomes in eukaryotes. **10**

**OR**

4 Structure of DNA.

5 Derive Michaelis equation and give its importance. **10**

**OR**

5 Structure and functions of RNA.

6 Write a short notes on (any **three**):- **15**

- (1) Nonmenclature of enzymes
- (2) Chromosomes of bacteria
- (3) Activators and Inhibitors
- (4) RNA Viruses.