

This question paper contains 3 printed pages]

**AG—16—2013**

**FACULTY OF SCIENCE**

**B.Sc. (BT) (First Year) (Second Semester) EXAMINATION**

**MARCH/APRIL, 2013**

**BIOTECHNOLOGY**

Paper BTT07

(Basic Biochemistry)

**(Tuesday, 26-03-2013)**

**Time : 10.00 a.m. to 1.00 p.m.**

---

*Time—Three Hours*

*Maximum Marks—80*

*N.B. :- (i) All questions are compulsory.*

*(ii) Draw structures if necessary.*

1. (a) Describe in detail about polysaccharides. 10

(b) What are carbohydrates. Describe in detail about  
Monosaccharides. 10

P.T.O.

2. (a) Define vitamins. Classify them. 7

*Or*

Describe in detail fat soluble vitamins.

- (b) Describe in detail biological significance of proteins. 8

*Or*

Describe in detail tertiary and quaternary structural level of proteins with examples.

3. (a) Describe in detail colour reaction of amino acids. 7

*Or*

Define peptides. Mention in detail about bioactive peptides.

- (b) Describe in detail Watson and Crick Model of DNA. 8

*Or*

Define Nucleic acid. Mention in detail different types of RNA.

4. (a) Describe and draw structures of starch and Glycogen. 7

*Or*

Describe in detail about A, B, Z type of DNA.

(b) What are proteins. Give classification.

8

*Or*

What are lipids ? Classify them.

5. Write short notes on (any *three*) :

3×5=15

(a) Enzyme applications;

(b) EC number;

(c) Vitamin C;

(d) *t*-RNA.