

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

II B.TECH I SEMESTER REGULAR EXAMINATIONS

BIO CHEMISTRY
(BIO-TECHNOLOGY)

APRI/MAY 2006

TIME : 3HOUR
MARK :100

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) What is a disaccharide ?
(b) Give two examples with structure?
(c) Discuss the role of any two disaccharides in nutritional metabolism?
2. Write short notes on the following:
(a) Lectins
(b) Glycosaminoglycans
(c) Glycoproteins
3. Describe how lovastatin inhibits cholesterol biosynthesis and write the importance of cholesterol as a biomembrance constituent.
4. What is an amino acid? Justify the statement that amino acids are building block of proteins?
5. Describe the pathways in the biosynthesis of aromatic amino acids.
6. Schematically trace the pathways involved in the synthesis of glucose from
(a) Glycerol
(b) Aspartate
7. Discuss the process of plant photosynthesis in detail. How is it different from the bacterial photosynthesis?
8. Describe the role of enzymes in the process of photosynthesis.
