

Exam. Code : 107701**Subject Code : 2405****BFST (Hons.) Ist Semester****INTRODUCTORY BIOCHEMISTRY****Paper—FST—105**

Time Allowed—3 Hours] [Maximum Marks—50

Note :— Attempt any **FIVE** questions. All questions carry equal marks.

1. What is HMP pathway ? Discuss this pathway. Give the significance of this pathway. 10
2. (a) Define fermentation. Discuss lactic acid and alcohol fermentation. 7
(b) Differentiate between starch and cellulose. 3
3. What are standard amino acids ? Give their classification and structure. 10
4. Define lipids. Discuss the structure and functions of various classes of lipids. 10
5. (a) What is β -oxidation ? Explain this pathway for the degradation of palmitic acid. 6
(b) Explain briefly the digestion and absorption of lipids. 4

6. Define vitamin. Enumerate water and fat soluble vitamins. Explain water soluble vitamins along with daily requirement, deficiency syndromes and sources. 10
7. What are minerals ? Enlist various major and minor elements. Discuss the minor elements along with deficiency syndromes, daily requirements and biochemical functions. 10
8. Write short notes on any **FIVE** of the following :
- (a) Sulphur containing amino acids
 - (b) Glycogen
 - (c) Thiamine
 - (d) Storage fat
 - (e) α -helix
 - (f) Epimers
 - (g) Maltose
 - (h) Linoleic acid. 5×2=10