

**Printing Page(s) : 1**

**Paper Code : DPN-102**

**Roll No.**

**PGDPPN-2, M.Sc.(DFSM)-2**

**1<sup>st</sup> Year Examination, Academic Batch 2017-18**

**Nutritional Biochemistry**

*Time : 3 Hours ]*

*[ Max. Marks : 100*

*Note. Attempt any **Five** questions. All questions carry equal marks.*

- Q.1** (a) Name the most important allosteric effector of glycolysis in the liver?  
(b) Explain the energy production in glycolysis.

- Q.2** (a) How are lipids transported in blood? List the four major groups of lipoproteins involved in lipid transport?  
(b) Match the following:-  
(A) (B)  
(i) Niacin (i) TDP  
(ii) Riboflavin (ii) NAD<sup>+</sup> and NADP<sup>+</sup>  
(iii) Thianine (iii) FAD and FMN  
(iv) Biotin (iv) Pyruvate Carboxylase

- Q.3** (a) Describe, how the following function in the body:-  
(i) Alanine Cycle  
(ii) The Coricycle  
(b) Discuss the role of NADPH in erythrocytes.

- Q.4** (a) Discuss the role of calcium in our body? Highlight significance of calcium as a signal transmitter.  
(b) Enumerate the physiological functions of phosphorous.

- Q.5** How are lipids classified? Given example. Differentiate between saturated and unsaturated fatty acids Give one examples each of saturated, Mono unsaturated and Poly unsaturated fatty acid.

- Q.6** What is Gluconeogenesis? Name the vitamins which function as anti –oxidants?

- Q.7** How are enzymes classified? Define the holo enzymes & Metabolism.

- Q.8** What are Simple Sugar .Give their general formula .What are poly-saccharides? What are its type explain given example