

PARUL UNIVERSITY
FACULTY OF MEDICAL SCIENCE & RESEARCH
M.B.B.S., Examination July - 2017

Year: 1**Subject Code: 19100105****Subject Name: Biochemistry-I****Date: 24/07/2017****Time: 10:00 am to 12:30 pm****Total Marks: 50****Instructions:**

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section-A, section-B on separate answer sheets.

SECTION – A

- Q.1** Describe Glycolysis (Glycolytic) pathway along with its significance, energetics & regulation. **(10)**
- Q.2 Discuss on: (any three) (15)**
- (a) Structure & functions of various phospholipids.
 - (b) Different factors affecting enzymatic activity.
 - (c) Biochemical role of vitamin A & its deficiency manifestations.
 - (d) Chemiosmotic theory & regulation of ATP synthesis.

SECTION – B

- Q.1 Write short notes on: (any two) (08)**
- (a) Fatty liver & lipotropic factors.
 - (b) Competitive inhibition of enzyme with 2 suitable examples.
 - (c) Mechanism of action of insulin on blood glucose regulation.
- Q.2 Write briefly on: (any four) (12)**
- (a) Role of Vit.C in collagen formation & its deficiency manifestations.
 - (b) Role of cytochrome P450 in xenobiotics.
 - (c) Mucopolysaccharides & their significance.
 - (d) Isoenzymes as cardiac biomarker.
 - (e) Function of NAD⁺ as coenzyme with one suitable example.
- Q.3 Answer in one word/MCQ: (05)**
1. Lysosomes are -

(a) Power house of the cell	(b) Bags of hydrolytic enzymes
(c) Protein synthesizing machine	(d) Related to Storage of genetic-information
 2. The enzyme belonging to class oxidoreductase is -

(a) Glycogen synthase	(b) Hexokinase
(c) Cytochrome Oxidase	(d) Aldolase
 3. In myocardial infarction of recent origin-

(a) Serum CK-MB shows a marked rise	(b) Rise in ALT is diagnostic
(c) Serum LDH 1 level is lower than LDH 2	(d) Rise in γ glutamyl transferase is-diagnostic
 4. The most potent natural anti-oxidant is-

(a) Vit.A	(b) Vit. C
(c) Vit. B3	(d) Vit. E
 5. The hormone acts through cAMP is -

(a) Glucocorticoids	(b) Estrogen
(c) Catecholamine	(d) Insulin