

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2008

Time: 3 Hours

[Max. Marks: 100]

BIOCHEMISTRY (Revised Scheme II)

QP Code: 1079 – Paper I (Max. Marks: 50)

Your answer shall be specific to question asked. Draw neat and labelled diagrams wherever necessary. **Use separate answer books for section A and section B.**

LONG ESSAY

1 X 10 = 10 Marks

1. Define Isoenzymes. Mention the principles used for separation of Isoenzymes. Write about the clinical importance of Isoenzymes

SHORT ESSAY

5 X 5 = 25 Marks

2. List the important products formed from Tyrosine and write the metabolic pathways leading to the formation of any two of them
3. Mechanisms of action of Glucagon
4. Single electron carrier components of respiratory chain
5. Mechanism of pyruvate dehydrogenase enzyme action and its biochemical importance
6. List various types of fatty acid oxidation. Write about activation of fatty acids for oxidation

SHORT ANSWERS

5 X 3 = 15 Marks

7. Functions of plasma membrane
8. Lipid peroxidation – clinical importance
9. Role of growth factors in carcinogenesis
10. Glucose 6 phosphate dehydrogenase deficiency
11. Functional classification of proteins

QP Code: 1080 – Paper II (Max. Marks: 50)

Use separate answer book

LONG ESSAY

1 X 10 = 10 Marks

1. What is the importance of maintaining acid-base balance in the body? Write in detail how kidney helps in maintaining acid-base balance

SHORT ESSAY

5 X 5 = 25 Marks

2. Replication of lagging strand
3. List metabolic functions of Ascorbic acid. How do you detect its deficiency? What is the daily requirement?
4. BMR (Basal Metabolic rate)
5. Degradation of Heme
6. Gene therapy

SHORT ANSWERS

5 X 3 = 15 Marks

7. Iodine metabolism
8. Importance of base pairing
9. Molecular defect in and consequences of sickle cell disease
10. Sources and beneficial effects of dietary fiber
11. What is reference range? How is it calculated?

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