

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

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. Explain in detail the β oxidation of palmitic acid with its energetics

SHORT ESSAY

5 X 5 = 25 Marks

2. Function of carbohydrates
3. Competitive inhibition and its importance in medicine
4. Metabolic changes in diabetes mellitus
5. Fatty liver and lipotropic factors
6. Disorders of sulphur containing aminoacids

SHORT ANSWERS

5 X 3 = 15 Marks

7. Mention two isotopes and mention their application in medicine
8. Mention four tumor markers with their significance
9. Role of cytochrome P₄₅₀ in detoxification reaction
10. Biologically important compounds derived from Tyrosine
11. What is Reactive oxygen species (ROS)? How are they formed?

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

Use separate answer book

LONG ESSAY

1 X 10 = 10 Marks

1. Describe in detail biosynthesis of protein and discuss its regulation

SHORT ESSAY

5 X 5 = 25 Marks

2. Name 5 Heme proteins and their functions
3. Unconjugated hyperbilirubinemia
4. Lesch-Nyhan syndrome
5. Tests based on metabolic and excretory function of liver
6. Applications of recombinant DNA technology

SHORT ANSWERS

5 X 3 = 15 Marks

7. What is the difference between endonuclease and restriction endonuclease? Give two examples of restriction endonuclease
8. Deficiency manifestation of Vit A
9. Role of dietary fibre in the body
10. Biochemical role of pyridoxine
11. Name the trace elements. Explain the biochemical role of any two trace elements