

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - December 2010

Time: 3 Hours

[Max. Marks: 100]

BIOCHEMISTRY (RS-2)

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

- Describe the metabolism of phenylalanine and tyrosine. Add a note on Tyrosinemia.

SHORT ESSAY

5 X 5 = 25 Marks

- Protooncogenes and oncogenes
- Explain substrate level Phosphorylation
- Rapaport lubering cycle
- Define K_m (Michaelis constant) Value of an enzyme. Write about its importance with a suitable example.
- Compounds derived from cholesterol

SHORT ANSWERS

5 X 3 = 15 Marks

- Enumerate reactive oxygen species and their characteristics
- What are Xenobiotics? What is the role of Glutathione in detoxication
- List metabolic functions and clinical significance of lysosomes
- Role of dietary fibre in Health and disease
- Write any six functions of Vitamin C

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

Use separate answer book

LONG ESSAY

1 X 10 = 10 Marks

- Explain the steps of activation, initiation, elongation and termination of protein bio synthesis.

SHORT ESSAY

5 X 5 = 25 Marks

- Explain the catabolism of purine
- What is Anion gap? Explain normal anion gap acidosis and high anion gap acidosis with examples.
- Radioactive isotopes of Iodine and their clinical application
- What is the normal range of serum potassium and write about hypokalemia.
- Mention five biochemical functions of pyridoxine in the body with examples.

SHORT ANSWERS

5 X 3 = 15 Marks

- What is Genetic code? Explain
- Renal threshold for glucose and its significance
- List Bio chemical changes in protein – Energy Malnutrition
- Absorption of iron in the body
- Structure of immunoglobulin