Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time: 3 Hours [Max. Marks: 100]

BIOCHEMISTRY (RS-2 & RS-3)

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. Describe in detail the sources, absorption, functions and factors regulating blood calcium level. Discuss about any clinical condition with abnormal blood calcium level.

SHORT ESSAY **5 X 5 = 25 Marks**

2. What are the biologically important compounds derived from cholesterol?
3. Prostaglandins
4. Give four examples of transmethylation reactions
5. Maple syrup urine disease
6. Energy releasing steps of citric acid cycle

SHORT ANSWERS **5 X 3 = 15 Marks**

7. Name the two endopeptidases with their specifications
8. What are functions of apolipoproteins?
9. Give the significance of uronic acid pathway
10. Clinical importance of transamination
11. Detoxification of alcohol

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

Use separate answer book

LONG ESSAY **1 X 10 = 10 Marks**

1. Describe in detail the sources, absorption, functions and factors regulating blood calcium level. Discuss about any clinical condition with abnormal blood calcium level.

SHORT ESSAY **5 X 5 = 25 Marks**

2. What are the sources, functions and daily requirement of vitamin A?
3. Transport proteins of blood
4. Formation and fate of bilirubin in the body
5. Basal metabolic rate
6. Bicarbonate buffer system of blood

SHORT ANSWERS **5 X 3 = 15 Marks**

7. Polymerase chain reaction
8. What is the daily requirement of Thiamine, Niacin and Pyridoxine?
9. Give enzyme defect in the following conditions
   a) Drug induced haemolytic anaemia b) Criggler-Najjar syndrome
10. Creatinine clearance test
11. Give the normal blood level of the following
    a) Fasting blood glucose b) Total protein c) Urea d) Bicarbonate e) Sodium f) Pottasium

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