Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. Nursing (PC) Degree Examination – Feb - 2010

Time: Three Hours

Max. Marks: 75 Mar

BIOCHEMISTRY & BIOPHYSICS (RS - 3)

Q.P. CODE: 1739 & 1740

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessar

Use separate answer books for section A and section B

Q.P. Code: 1739 – Section A – BIOCHEMISTRY (38 Marks)

LONG ESSAYS (Answer any One)   1 x 10 = 10 Mar

1. Explain the factors affecting the rate of enzyme catalyzed reactions
2. Describe the metabolism of ketone bodies. Add a note on ketoacidosis

SHORT ESSAYS (Answer any Four)   4 x 5 = 20 Mar

3. Digestion and absorption of carbohydrates
4. Hexose monophosphate shunt
5. Plasma proteins and their functions
6. Rennin-angiotensin mechanism
7. Sub cellular organelles of a cell and their functions

SHORT ANSWERS   4 x 2 = 8 Ma

8. Two clinically important enzymes
9. Essential amino acids
10. Fatty liver
11. Normal levels of   a) Urea   b) Calcium in blood

Q.P. Code: 1740 – Section B – BIOPHYSICS (37 Marks)

Use separate answer book

LONG ESSAYS (Answer any One)   1 x 9 = 9 Ma

1. What are X-rays? List the properties and uses of X-rays in various fields
2. State and explain Newton's laws of motion. List the clinical applications of gravity

SHORT ESSAYS (Answer any Four)   4 x 5 = 20 M

3. Distinguish between conduction convection and radiation
4. Explain how to determine density of urine using urinometer
5. List the applications of light in human body
6. Explain atmospheric pressure and hydrostatic pressure
7. Explain brain pace maker

SHORT ANSWERS   4 x 2 = 8 M

8. What is normal blood pressure?
9. Why woolen clothes are preferred in winter?
10. What is an inclined plane?
11. Convert $50°$ celsius to corresponding temperature in Kelvin

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