Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. Nursing (PC) Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 75 Marks**

BIOCHEMISTRY & BIOPHYSICS (RS–3 & RS-4)

Q.P. CODE: 1739& 1740

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

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 Marks**

1. Discuss the formation of Glucose form lactate
2. Name the ketone bodies. Discuss ketogenesis and ketolysis

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

3. Hormonal regulation of blood glucose levels
4. Diagnostically important enzymes
5. Digestion of fats
6. Discuss the regulatory mechanism of water balance
7. Discuss uric acid formation

SHORT ANSWERS **4 x 2 = 8 Marks**

8. Glycosuria
9. Functions of albumin
10. Ribosomes
11. Give the normal serum levels of (a) Sodium (b) Potassium

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

Use separate answer book

LONG ESSAYS (Answer any One) **1 x 9 = 9 Marks**

1. Discuss the application of pressure in nursing
2. What is the principle of ECG? Explain how ECG is taken and tracings are interpreted

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

3. What are the applications of gravity in nursing? Explain any two application
4. What is osmosis? Explain osmotic pressure
5. What is noise pollution? How it can be prevented
6. Define frequency and wavelength obtain the relation between energy, frequency and wave length of light
7. What is pacemaker? Explain its application

SHORT ANSWERS **4 x 2 = 8 Marks**

8. Define uniform velocity and acceleration
9. What are systolic and diastolic
10. Define electric current and election potential
11. What is defibrillation

*****