

# Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. Nursing (PC) Degree Examination – Sep 2012

Time: 3 Hours

Max. Marks: 37 Marks

## Biophysics

**Q.P. Code : 1740**

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary  
(Note : Both QP Codes 1739 and 1740 are to be answered within total duration of 3 hours)

### LONG ESSAYS (Answer any One)

1 x 9 = 9 Marks

1. State and explain pascal's law. How this law finds its applications in the measurements of blood pressure. Explain the construction and working of sphygmomanometer
2. State and explain Newton's laws of motion? List the clinical applications of gravity in nursing

### SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. What is lever? Mention different types of levers with examples
4. Explain the difference between stable isotope and radioactive isotope
5. Write a note on cardiac pacemaker
6. Distinguish between kinetic energy and potential energy with examples
7. What are the modes of transmission of heat give one example for each

### SHORT ANSWERS

4 x 2 = 8 Marks

8. Two uses of X – rays in medicine
9. Difference between systolic and diastolic pressure
10. Write a note on radiation
11. Why white clothes are preferred in summer

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