

# Rajiv Gandhi University of Health Sciences, Karnataka

I year B.Sc. Nursing (PC) Degree Examination – SEP-2017

**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 the laws of reflection. What is refraction of light and what is the refractive index of glass. Write a note on photo therapy in medial practice.
2. What are X-rays? How are they produced? What are the properties and uses of X-rays in medial practice?

### **SHORT ESSAYS (Answer any Four)**

**4 x 5 = 20 Marks**

3. Explain the principle, construction and working of an autoclave.
4. What are the applications of gravity in Nursing?
5. What are the defects of vision? How are they corrected?
6. Define Ohm's law and explain.
7. Name any 2 properties of radio isotope and their application in medical practice.

### **SHORT ANSWERS**

**4 x 2 = 8 Marks**

8. Write the units of force in CGS system and MKS system.
9. Explain Newton's second law of motion with example.
10. Give any two uses of ultrasound.
11. List different types of heat transfer mechanism.

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