



Rajiv Gandhi University of Health Sciences, Karnataka
I year B.Sc. Nursing (PC) Degree Examination – 27-Nov-2020

Time: 3 Hours**Max. Marks: 37 Marks****BIOPHYSICS – (RS-3 & RS-4)****Q.P. Code: 1740**

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

(Note: Both OP 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. What are X-rays? How are they produced? List the properties and uses of X-rays in medicine.
2. What is the normal audio frequency range of normal human ear? Explain the relation between frequency, velocity and wavelength. Write a note on audiometry?

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

3. Use of pacemakers and defibrillation.
4. Explain hydrostatic pressure and osmotic pressure.
5. Use of heat for sterilization.
6. Use of light in therapy.
7. Effect of principles of gravity in nursing.

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

8. Explain why steam burn is more injurious than burn due to boiling water?
9. What are isotopes and isobars?
10. Define electrical resistance and write its units.
11. Write a neat diagram of ECG and label.
