Atal Bihari Vajpayee Medical University, UP.

Batchelor in Radiodiagnosis & Imaging Technology (BRIT) - First year

Subject: BASIC RADIATION PHYSICS

Paper code 2111110504

Time: 3 hours Total marks: 80

General instructions:

- All questions are compulsory
- Explain with diagrams where required
- The number on the right indicates full marks
- Please write the correct paper code
- Be to the point. No extra copy shall be provided
- Q. 1. Write in detail about

 $(2 \times 20 = 40 \text{ marks})$

- a) Describe interaction of gamma rays with matter
- b) Radioactivity
- Q. 2. Write short answer on:

 $(2 \times 10 = 20 \text{ marks})$

- a) Properties of X-ray
- b) Thermo Luminescence Dosimetry (TLD)
- Q. 3. Write short notes on:

 $(5 \times 4 = 20 \text{ marks})$

- a) Kinetic Energy
- b) Transformer
- c) Radionuclides
- d) Characteristic X-rays
- e) Anode

Total time allotted 3 hours

22nd April 2022