

[AHS 0321]

MARCH 2021

Sub. Code: 1842

(AUGUST 2020 EXAM SESSION)

B.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY**FIRST YEAR (Regulation 2018-2019)****PAPER II – GENERAL PHYSICS, RADIATION PHYSICS AND PHYSICS OF
DIAGNOSTIC RADIOLOGY*****Q.P. Code : 801842*****Time: Three hours****Answer ALL Questions****Maximum: 100 Marks****I. Elaborate on:****(3 x 10 = 30)**

1. Interaction of X and Gamma radiation with matter
2. Explain Bremsstrahlung and Characteristic X ray Spectrum.
3. Discuss in detail about Beam limiting devices.

II. Write notes on:**(8 x 5 = 40)**

1. With diagram explain Atomic Structure.
2. Discuss the working principle of Thermo luminescence Dosimeter
3. Write short note about Transformer
4. Discuss the principle of Ionization Chamber
5. Heel effect of an X ray tube
6. Factors that affect the quality and intensity of X rays.
7. Explain about Radioactive disintegration
8. Full wave rectifier

III. Short answers on:**(10 x 3 = 30)**

1. What is the law of conservation of energy.
2. Isotope
3. Properties of target material
4. Mass Energy
5. What is the main advantage of rotating anode over Stationary anode
6. Relation between HVL AND LAC
7. Radioactive decay
8. Define Becquerel
9. Define Artificial radioactivity
10. Define Sievert
