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**B.Sc. IN MEDICAL IMAGING TECHNOLOGY
(BMIT)**

Term-End Examination

June, 2017

**BAHI-051 : PHYSICS OF RADIOLOGICAL
EQUIPMENT - I**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any six questions. Question No. 9 is compulsory.

1. Explain the Scatter Radiation. Describe in details the different devices for used to decrease them. 2+6=8
2. Describe in details about X-Ray Tube working with a neat diagram. 4+4=8
3. What is Fluoroscopy ? Describe the Different types of Fluoroscopy and their uses in X-Ray Department. 2+6=8
4. Describe in detail about Mammography Machine. Write the differences between X-Ray Tube and Mammography Tube. 4+4=8
5. Write the details of High Tension Circuit. Describe the H.T. Generator for X-Ray Machine. 4+4=8

6. Write the Function and Construction of PET CT. 3+5=8
7. Write in details about Exposure Timers and Meters. Describe the construction and working of Moving Coil Galvanometer. 5+3=8
8. Explain the Principle of Dual Energy X-Ray Absorptionmetry. How much Radiation a Patient receives during the Dexa ? 6+2=8
9. Write short notes on **any five** :
- (a) Advantages and Disadvantages of Grid. 6
 - (b) Rotating Anode. 6
 - (c) Grid frequency. 6
 - (d) Flat Panel Digital Fluoroscopy. 6
 - (e) Image Intensifier. 6
 - (f) Tomography. 6
 - (g) Noise and Resolution. 6
 - (h) Conventional Fluoroscopy. 6
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