

2. Discuss the different types of radioactive decays with example. **20**
3. Explain the following : **20**
 - (a) Characteristics of X-rays
 - (b) Generation and detection of X-rays.
4. Discuss about X-ray films and significance of mA and KV in X-rays systems. **20**
5. Explain the internal and external dosimetry with their significance. **20**
6. Explain the process of isotope generation and the equipments involved. **20**
7. Describe the physics of ultrasound imaging and its suitability in diagnosis. **20**
8. Elaborate the generation of ultrasound waves with the help of block diagram. **20**

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M. Tech. EXAMINATION, May 2018

(Third Semester)

(Re-appear Only)

(BME)

BME619

DIAGNOSTIC IMAGING AND RADIATION
BIOLOGY

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Explain the atomic structure along with the properties of atomic particles. **20**

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P.T.O.