[LI 0216] FEBRUARY 2016 **Sub.Code :2103**

B.Sc. NUCLEAR MEDICINE TECHNOLOGY

FIRST YEAR

PAPER III – BASIC PHYSICS AND NUCLEAR PHYSICS

Q.P. Code: 802103

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 =30)**

1. Explain different types of Radiation Interactions with matter and its important.
2. Explain Atomic Structure and it's Models.
3. Explain the Mechanisms of Radioactive Decay.

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

1. Electromagnetic Induction.
2. Ohms Law.
3. Biological Half Life.
4. Radiation Exposure.
5. Voltmeter and Ammeter.
6. State SI Unit for Radioactivity.
7. Radiation Intensity.
8. Photoelectric Effect.

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

1. Radiation Exposure Unit.
2. Electric Charge.
3. Mass Number.
4. Ionization.
5. Isomer.
6. Shielding Material for Beta particle.
7. Half life of Tc-99m.
8. Mass of Neutron.
9. Exponential Decay.
10. Unit for Radiation Absorption.

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