[LG 0215] **FEBRUARY 2015** **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. Electromagnetic Spectrum.
2. Photoelectric effect and Compton scattering.
3. Natural Radioactivity.

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

1. Exposure.
2. Artificial radioactivity.
3. Half Life.
4. Pair Production.
5. Joule 's law.
6. Properties of X rays.
7. Binding forces between nuclear particles.
8. Bohr's atom model.

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

1. Isobars.
2. Curie.
3. Becquerel.
4. Gray.
5. Ohm's law.
6. Linear attenuation coefficient.
7. Coulomb's law.
8. Decay factor.
9. Tc99m.
10. Electricity.

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