

[LF 0215]

FEBRUARY 2015

Sub. Code: 2121

B.Sc. NUCLEAR MEDICINE TECHNOLOGY

THIRD YEAR

**PAPER I – RECENT ADVANCE IN NUCLEAR MEDICINE
TECHNIQUES**

Q.P. Code : 802121

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain the sources of image degradation in SPECT.
2. Explain the principle and working of PET.
3. Explain the FBP reconstruction.

II. Write notes on:

(8 x 5 = 40)

1. TOF.
2. Sinogram.
3. FanBeam Collimator.
4. Beam Hardening artifact.
5. OSEM.
6. Tumour delineation for radiation therapy.
7. Angular sampling in SPECT.
8. Alpha blending technique.

III. Short answers on:

(10 x 3 = 30)

1. DICOM.
2. PACS.
3. F18 DOPA.
4. GTV.
5. LSO.
6. Nyquist frequency.
7. SUV.
8. LOR.
9. FWHM.
10. RAMP filter.
