B.Sc. NUCLEAR MEDICINE TECHNOLOGY
FIRST YEAR
PAPER II - IMAGE PROCESSING TECHNIQUES

Q.P. Code: 802102

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

Answer All Questions

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

1. The film processing systems used in nuclear medicine.
2. The different output devices used in computers in nuclear medicine.
3. The parameters related to optimum viewing of nuclear medicine images.

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

1. Dry processing of films.
2. Analog to digital converters.
3. Image contrast.
4. Flat panel monitors.
5. Voxel.
6. Windowing.
7. Grey scale and color display.
8. IP address.

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

1. Dry bench in a dark room.
2. Types of X-ray films.
3. List mode acquisition.
4. Hardware.
5. Read-only memory (ROM).
6. Data display
7. Random access memory (RAM).
8. Digital Imaging and Communications in Medicine (DICOM).
9. Key board.
10. Filtered back projection.

****