

[LJ 0816]

AUGUST 2016

Sub.Code :2102

**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. What are the image processing equipment's? Enumerate advantages and disadvantage of each?
2. Describe Back up and their importance. Briefly mention the various backup Systems.
3. What is telemedicine? Explain the role of networking in nuclear medicine.

II. Write Notes on:

(8 x 5 = 40)

1. PACS system.
2. Analog to digital converters.
3. Image filtering.
4. Flat panel monitors.
5. Pixel and Voxel.
6. Windowing.
7. Grey scale and colour display.
8. Matrix size and IP address.

III. Short Answers on:

(10 x 3 = 30)

1. Hardware.
2. Spatial resolution.
3. List mode acquisition.
4. Image fusion.
5. Read-only memory (ROM).
6. Line spread function.
7. Random access memory (RAM).
8. DRI (Digitally Reconstructed Image).
9. Storage devices, mouse and Key board.
10. Filtered back projection.
