

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. Explain various steps involved in the manual wet film processing.
2. Explain the working principle of a computer.
3. Describe the terms- Hardware, Software, Operating System, Folder and Internet.

II. Write Notes on:

(8 x 5 = 40)

1. Mention briefly about windowing in image processing.
2. Region of interest (ROI) and time activity curve.
3. Dynamic and Static acquisition.
4. Define Binary numeral system. Convert decimal number 256 into binary.
5. Different types of X-ray films.
6. Output devices of a computer.
7. Analogue to digital converter (ADC).
8. Dry and wet bench in a dark room.

III. Short Answers on:

(10 x 3 = 30)

1. Difference between Bit and Byte.
2. Pixel and Voxel.
3. Compact Disc-Read Only Memory (CD-ROM).
4. Operating system of a computer.
5. Day light processing.
6. Developer.
7. Optical Density.
8. Tele Nuclear Medicine.
9. Internet Protocol (IP) address.
10. Liquid Crystal Display (LCD).
