

[AHS 0321] **MARCH 2021 Sub. Code: 2102**

(AUGUST 2020 EXAM SESSION) **B.Sc. NUCLEAR MEDICINE TECHNOLOGY** FIRST YEAR (Regulations 2010-2011) PAPER II - IMAGE PROCESSING TECHNIQUES

Q.P. Code: 802102

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(3 \times 10 = 30)$

- 1. Various methods of storage and processing of digital images in Nuclear Medicine.
- 2. What is CPU in a computer, briefly write about its components?
- 3. Explain different software used in image processing.

II. Write Notes on: $(8 \times 5 = 40)$

- 1. Safe light.
- 2. Color images and its digital representation.
- 3. Computer network.
- TACS.
 What is the purpose of filtering the image?
 PIXEL.
 Day light processing.
 Flat panel monitors.
 Short Answers on:

III. Short Answers on: $(10 \times 3 = 30)$

- 1. Window levels in image display.
- 2. Bytes.
- 3. Teleradiology.
- 4. DICOM.
- 5. List mode.
- 6. Point spread function.
- 7. DICOM.
- 8. Colour scale.
- 9. Types of X-ray Films.
- 10. Frame mode acquisition.
