

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123]

NOVEMBER 2023

Sub. Code: 2102

**B.Sc. NUCLEAR MEDICINE TECHNOLOGY
FIRST YEAR (Regulations 2010-2011 & 2018-2019 onwards)
PAPER II – IMAGE PROCESSING TECHNIQUES**

Q.P. Code: 802102

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x10 = 30)

1. What is central processing unit in a computer? Briefly write about its components.
2. What are the image processing Equipments? Enumerate advantages and disadvantages of each.
3. What are backups and why are they important? What are the methods available for performing backup and which is the best?

II. Write Notes on:

(8 x 5 = 40)

1. Image sharpness.
2. Laser film.
3. Softwares for Myocardial Perfusion Imaging.
4. Digital signal processing.
5. Artificial Intelligence (AI) in Image processing.
6. Hard disc.
7. Image noise.
8. Optical density.

III. Write Short Notes on:

(10 x 3 = 30)

1. Differences between bit and byte.
2. Image Zooming.
3. Types of X-ray films.
4. Optical disc.
5. Storage device, mouse and key board.
6. Hard disc.
7. Automatic exposure control.
8. High pass filter.
9. Dry processing.
10. Laser prints.
