

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

**[AHS 0423]**

**APRIL 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. Explain Nuclear Medicine Image Acquisition Process.
2. Explain the X-ray film components and intensifying screen.
3. Describe the film processing systems used in Nuclear Medicine.

**II. Write Notes on:**

**(8 x 5 = 40)**

1. Image co registration.
2. Matrix size.
3. Describe briefly about image smoothening.
4. PACS.
5. Word processing.
6. Image noise.
7. Data base.
8. Safe light.

**III. Write Short Notes on:**

**(10 x 3 = 30)**

1. Point spread function.
2. Computer Peripherals.
3. List mode acquisition.
4. Automatic Exposure Control.
5. Advantages of Glossy prints.
6. Image zooming.
7. Liquid Crystal Display (LCD).
8. Composition of Photographic Emulsion.
9. Radioactive markers.
10. Day light processing.

\*\*\*\*\*