## B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY (New Syllabus 2018-2019)

## FIRST YEAR

## PAPER III – RADIOGRAPHY EQUIPMENTS, MAINTENANCE AND QUALITY CONTROL RELATED TO X-RAY ONLY

Q.P. Code: 801843

Time: Three Hours Maximum: 100 Marks

**Answer all questions** 

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

1. Describe in detail, principle of image formation in Computed Radiography.

2. Describe with neat diagram, construction of X-ray mammography equipment.

3. Describe with neat diagram, various generations of computed tomography.

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

1. Construction of stationary anode X-ray tube.

- 2. Battery operated X-ray unit.
- 3. Automatic Brightness Control.
- 4. PACS.
- 5. Mammographic cassette and film.
- 6. Intraoral Dental X-ray unit.
- 7. Theory of X-ray Tomography.
- 8. CT detectors.

## III. Short answers on:

 $(10 \times 3 = 30)$ 

Sub. Code: 1843

- 1. Inherent filtration.
- 2. Heat dissipation methods in X-ray tube.
- 3. Portable X-ray machine.
- 4. Disadvantages of direct fluoroscopy.
- 5. Fluoroscopic Table.
- 6. Charge coupled device.
- 7. Properties of tungsten.
- 8. OPG.
- 9. CT number.
- 10. Partial Volume artifact.