

[AHS 0321]

MARCH 2021

Sub. Code: 1843

(AUGUST 2020 EXAM SESSION)

B.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY**FIRST YEAR (Regulation 2018-2019)****PAPER III – RADIOGRAPHY EQUIPMENTS, MAINTENANCE AND
QUALITY CONTROL RELATED TO X-RAY ONLY*****Q.P. Code : 801843*****Time: Three hours****Answer ALL Questions****Maximum: 100 Marks****I. Elaborate on:****(3 x 10 = 30)**

1. Describe with neat diagram, the construction and working of rotating anode x-ray tube.
2. Describe with neat diagram, various types of flat panel detectors in digital radiography.
3. Describe in detail, various parts of CT equipment.

II. Write notes on:**(8 x 5 = 40)**

1. Grid controlled x-ray tube.
2. Capacitor discharge x-ray unit.
3. Direct fluoroscopy and its disadvantages.
4. CR image reader
5. Mammographic x-ray tube.
6. OPG x-ray unit.
7. Theory of conventional tomography.
8. Image reconstruction in CT.

III. Short answers on:**(10 x 3 = 30)**

1. Line focus principle.
2. Dual focus and choice of focus.
3. Battery operated x-ray unit.
4. Spot film device.
5. Cine fluoroscopy.
6. HTC gri
7. Multisection cassette.
8. Types of tomographic movement.
9. First Generation CT.
10. Beam Hardening Artifact.
