

SNS COLLEGE OF ALLIED HEALTH SCIENCES COIMBATORE –35
(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)
B. Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
2024 BATCH
INTERNAL EXAMINATION – II
(20.09.2025)



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

QP. Code : 801843

Year: First Year

Time: 3 hours

Maximum: 100 marks

Answer all the questions

I. Elaborate on

3 x 10 = 30

1. Basic principle of CT.
2. EMI Scanner.
3. Explain in Detail about the various Generations of CT Scan.

II. Write notes on

8 x 5 = 40

1. CT detectors.
2. CT Artifacts (any three).
3. Image reconstruction in CT.
4. Digital Subtraction Angiography.
5. Spiral CT.
6. Principle of Angiography.
7. Multisection Tomography.
8. Explain the generation of CT.

III. Short answers on

10 x 3 = 30

1. CT number.
2. Xenon gas detector.
3. Slip ring technology.
4. Beam Hardening Artifact.
5. Write any two points about the maintenance of cath lab equipments.
6. CT dose index.
7. Write down the advantages of DSA.
8. Pixel and Voxel.
9. MDCT.
10. Competitive Exam MCQ's :
i)(JIPMER Paramedical 2021) In MSCT, what type of algorithm can be used if the number of detector rows is small? a) Cone-beam reconstruction b) Fan-beam reconstruction c) X-axis reconstruction d) Z-axis reconstruction

3 x 1 = 3

- ii) (RRB Paramedical 2020) When the slice thickness is equal to the pixel size, the data acquired are said to be: a) Anisotropic b) Dystrophic c) Isotropic d) Unitropic
- iii) (NEET PG 2021) Cardiac computed tomography (CT) applications include all of the following except: a) Coronary angiography b) Assessment of pulmonary veins c) Gated stress imaging d) Ventricular function assessment