

B.Sc., RADIOGRAPHY AND IMAGING TECHNOLOGY**1851 – EQUIPMENTS OF ADVANCED IMAGING MODALITIES****UNIT 4****SUB TOPIC – 5 ANGIOGRAPHY & CINE STUDIES/DSA****I. Elaborate on 10 MARKS****Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper**

S.No	Question	Reference	Bloom's Taxonomy
1	Write in detail about angiography and cine studies/DSA as special radiography techniques, including angiography equipments history, conventional angiography X-ray equipment, equipment construction-principle, DSA system basics, digital techniques-subtraction process, procedures for subtraction, care, choice and installation of the equipment, equipment pitfalls and complications, pressure injectors, contrast media, accessories-catheters, guide wires, uses of serial imaging devices, cine camera, video-recorder, film processing, and radiation protection.	November 2026	Analyze

II. Write notes on 5 MARKS**Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper**

S.No	Question	Reference	Bloom's Taxonomy
1	Write notes on angiography equipments history, conventional angiography X-ray equipment, equipment construction-principle, DSA system basics, digital techniques-subtraction process, and procedures for subtraction, with focus on procedural steps and indications.	April 2027	Understand
2	Write notes on care, choice and installation of the equipment, equipment pitfalls and complications, pressure injectors, contrast media, accessories-catheters, guide wires, uses of serial imaging devices, cine camera, video-recorder, film processing, and radiation protection in angiography and cine studies/DSA.	March 2025	Understand

III. WRITE SHORT NOTES ON 3 MARKS**Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper**

S.No	Question	Reference	Bloom's Taxonomy
1	Radiation protection and equipment pitfalls in angiography and cine studies/DSA.	November 2026	Apply
2	Indications and complications for DSA subtraction process.	April 2025	Remember

SUB TOPIC – 6 NUCLEAR MEDICINE EQUIPMENTS**I. Elaborate on 10 MARKS****Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper**

S.No	Question	Reference	Bloom's Taxonomy
1	Write in detail about nuclear medicine equipments as special radiography techniques, including nuclear physics, basics in nuclear medicine, nuclear medicine equipments, gamma cameras, rectilinear scanners, radioisotope generators, SPECT-CT & PET CT, introduction, basic physics and principle involved, equipments basic structure, differences, fusion techniques, image formation, storage devices, advantages, and limitations.	November 2026	Analyze

II. Write notes on 5 MARKS**Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper**

S.No	Question	Reference	Bloom's Taxonomy
1	Write notes on nuclear physics, basics in nuclear medicine, nuclear medicine equipments, gamma cameras, rectilinear scanners, and radioisotope generators, including equipment and procedural steps.	April 2027	Understand
2	Write notes on SPECT-CT & PET CT, introduction, basic physics and principle involved, equipments basic structure, differences, fusion techniques, image formation, storage devices, advantages, and limitations in nuclear medicine equipments.	March 2025	Understand

III. WRITE SHORT NOTES ON 3 MARKS

Reference – The Tamilnadu Dr.M.G.R Medical University Question Paper

S.No	Question	Reference	Bloom's Taxonomy
1	Advantages and limitations in nuclear medicine equipments.	November 2026	Apply
2	Differences between SPECT-CT and PET CT in nuclear medicine.	April 2025	Remember