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

[AHS 0122] **JANUARY 2022** **Sub. Code: 2312**
(OCTOBER 2021 EXAM SESSION)

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR (From 2019-2020 onwards)
PAPER II – CLINICAL NUCLEAR MEDICINE TECHNIQUES - II
Q.P. Code : 282312

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Pre & Post ACEI Renogram.
2. Cardiac Imaging Using Tc^{99m}.

II. Write notes on: **(10 x 6 = 60)**

1. Thyroid uptake study.
2. Muga study.
3. Lung ventilation study.
4. Difference between G-I Bleed & Meckel's Diverticulum study.
5. Tc^{99m} labeled heat damaged RBC study.
6. Quantitative Bone Scintigraphy.
7. Cisternography.
8. Parathyroid Scintigraphy.
9. Gall Bladder Scintigraphy using IDA compounds.
10. DMSA Rena Cortical imaging.

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

[AHS 1022] **OCTOBER 2022** **Sub. Code: 2312**

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR
(Candidates admitted from 2019-2020 & 2020-2021 onwards)
PAPER II – CLINICAL NUCLEAR MEDICINE TECGNIQUES - II
Q. P. Code: 282312

Time: Three hours **Maximum : 100 Marks**

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Diuretic renogram.

2. Bone Scintigraphy.

II. Write notes on: **(10 x 6 = 60)**

1. DMSA Scan.
2. 3 phase Bone Scan.
3. GFR study.
4. Meckel Scan.
5. Salivary gland Scintigraphy.
6. Lung Perfusion Scan.
7. MUGA.
8. ECD Brain Scan.
9. Technetium Thyroid Scan.
10. ^{131}I-Scan.

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

[AHS 1023] **OCTOBER 2023** **Sub. Code: 2312**

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CLINICAL NUCLEAR MEDICINE TECGNIQUES – II

Q. P. Code: 282312

Time: Three hours **Maximum: 100 Marks**

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Describe I-131 high dose therapy indications, pre and post therapy instructions to patients.

2. Describe F-18 FDG PET CT imaging, indications and procedure for oncology imaging. Explain about cardiac viability preparation for FDG.

II. Write notes on: **(10 x 6 = 60)**

1. Explain Ga-68 DOTANOC imaging and indications.
2. Explain Ga-68 PSMA preparation.
3. TRODAT SPECT CT indications.
4. Explain parathyroid scintigraphy.
5. Explain lacrimal scintigraphy.
6. Explain gastric emptying scintigraphy.
7. Explain DMSA imaging.
8. Explain WBC imaging.
9. Explain 3-phase bone scintigraphy with indications.
10. Explain DTPA – GFR plasma clearance study.

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

[AHS 1024] **OCTOBER 2024** **Sub. Code: 2312**

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CLINICAL NUCLEAR MEDICINE TECHNIQUES - II

Q. P. Code: 282312

Time: Three hours **Maximum: 100 Marks**

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Describe Renal radiopharmaceuticals, explain diuretic renogram, indications, imaging and types of renogram curve.

2. Describe Myocardial perfusion scintigraphy, stress protocols and Imaging.

II. Write notes on: **(10 x 6 = 60)**

1. Explain ECD brain imaging.
2. Explain salivary scintigraphy.
3. I-131 whole body scan.
4. Explain MUGA.
5. Explain Lung ventilation imaging.
6. Explain meckels scintigraphy.
7. Explain colon transit scintigraphy.
8. Explain DRCG – reflux study.
9. Explain bone scintigraphy with indications.
10. Explain lower limb lymphoscintigraphy.

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

[AHS 1025] **OCTOBER 2025** **Sub. Code: 2312**

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER II – CLINICAL NUCLEAR MEDICINE TECHNIQUES - II

Q. P. Code: 282312

Time: Three hours **Maximum: 100 Marks**

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Role of radionuclide imaging in gastrointestinal bleeding – techniques and interpretation.

2. PET-CT in cardiac imaging – viability, perfusion and innervation studies.

II. Write notes on: **(10 x 6 = 60)**

1. Role of DTPA renography in renal transplant evaluation.
2. Radionuclide imaging of pulmonary embolism – protocols and interpretation.
3. Parathyroid imaging using dual-tracer technique.
4. PET tracers in prostate cancer (beyond PSMA).
5. WBC Labeling and infection imaging.
6. Quantitative functional brain SPECT.
7. PET-CT in lymphoma staging and response assessment.
8. Bone marrow scintigraphy.
9. Whole body PET in paediatric oncology.
10. Radionuclide cisternography in normal pressure hydrocephalus.

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