

[LS 122]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

Sub. Code: 3018

M.D. DEGREE EXAMINATION

BRANCH XXIV – NUCLEAR MEDICINE

PAPER III – CLINICAL NUCLEAR MEDICINE INCLUDING (IN VIVO AND INVITRO STUDIES), CARDIOVASCULAR, NEUROLOGY, ENDOCRINOLOGY, GASTROENTEROLOGY, ONCOLOGY, INFECTION AND INFLAMMATION, GENITOURINARY, MUSCULOSKELETAL AND RADIONUCLIDE THERAPY

Q.P. Code: 203018

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Theranostics and its benefit in molecular imaging.
2. Radiopharmaceuticals in movement disorders

II. Write notes on:

(10 x 7 = 70)

1. Metabolic bone disorders
2. Radiopharmaceuticals and imaging techniques in liver imaging
3. Role of nuclear medicine in renal transplant complications
4. Neuroendocrine tumours.
5. Management of a patient with Graves' disease
6. Pyrexia of unknown origin
7. Cardiac sarcoidosis
8. Amino acid PET imaging
9. Quantitative parameters in PET imaging
10. Staging of lung cancer

[MD 0721]

JULY 2021
(MAY 2021 SESSION)

Sub. Code: 3018

M.D. DEGREE EXAMINATION

BRANCH XXIV – NUCLEAR MEDICINE

PAPER III – CLINICAL NUCLEAR MEDICINE INCLUDING (IN VIVO AND INVITRO STUDIES), CARDIOVASCULAR, NEUROLOGY, ENDOCRINOLOGY, GASTROENTEROLOGY, ONCOLOGY, INFECTION AND INFLAMMATION, GENITOURINARY, MUSCULOSKELETAL AND RADIONUCLIDE THERAPY

Q.P. Code: 203018

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Current applications of PET imaging in treatment response evaluation in oncology.
2. Scintigraphy in lung carcinoma.

II. Write notes on:

(10 x 7 = 70)

1. Management of a patient with elevated thyroglobulin levels.
2. Principles of theranostic procedures.
3. Radionuclide therapy in prostate cancer.
4. Renal cortical scintigraphy.
5. ¹³¹I-MIBG for myeloablation.
6. Brain SPECT study in movement disorders.
7. Scintigraphy in myocardial viability evaluation.
8. Biliary scintigraphy.
9. Scintigraphy for sentinel lymph node.
10. PET imaging in chronic inflammation.

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

[MD 0522]

MAY 2022

Sub. Code: 3018

M.D. DEGREE EXAMINATION

BRANCH XXIV – NUCLEAR MEDICINE

PAPER III – CLINICAL NUCLEAR MEDICINE INCLUDING (IN VIVO AND INVITRO STUDIES), CARDIOVASCULAR, NEUROLOGY, ENDOCRINOLOGY, GASTROENTEROLOGY, ONCOLOGY, INFECTION AND INFLAMMATION, GENITOURINARY, MUSCULOSKELETAL AND RADIONUCLIDE THERAPY

Q.P. Code: 203018

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Gastro intestinal bleed Scintigraphy.
2. Imaging in Pulmonary embolism.

II. Write notes on:

(10 x 7 = 70)

1. Radionuclide cisternography.
2. Salivary Scintigraphy.
3. Gallium-68 Citrate imaging.
4. Cardiac inflammation.
5. Calculation of Red cell Volume.
6. PETCT -Role in Head and Neck malignancy.
7. Staging of Medullary cancer thyroid.
8. Imaging in adrenocortical tumours.
9. Management of TENIS.
10. Response assessment criteria in Lymphoma after immunotherapy.

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

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 3018

M.D. DEGREE EXAMINATION

BRANCH XXIV – NUCLEAR MEDICINE

**PAPER III – CLINICAL NUCLEAR MEDICINE INCLUDING (IN VIVO AND
INVITRO STUDIES), CARDIOVASCULAR, NEUROLOGY,
ENDOCRINOLOGY, GASTROENTEROLOGY, ONCOLOGY, INFECTION
AND INFLAMMATION, GENITOURINARY, MUSCULOSKELETAL AND
RADIONUCLIDE THERAPY**

Q.P. Code: 203018

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. What are the indications for myocardial perfusion scintigraphy?
Explain the techniques of stress myocardial perfusion scintigraphy.
2. The pathology of bone disease with indications for bone scan, patient preparation and radiotracer dosage with their administration for bone scan.

II. Write notes on:

(10 x 7 = 70)

1. a) Thyroxin after total thyroidectomy in cancer thyroid patients.
b) Radiosynovectomy.
2. a) Low dose I-131 scan and the imaging and processing protocol.
b) Inter and intraictal scan in epilepsy.
3. a) Perchlorate discharge test.
b) Radio aerosol in ventilation scan.
4. a) Vesicoureteric reflex.
b) Infarct avid imaging.
5. a) In vitro nuclear medicine test used to estimate T3, T4,TSH.
b) Au198 application.
6. a) Interventional drugs in scintigraphic procedures.
b) Nuclear medicine procedure for biliary atresia.
7. a) Leucocyte labelling study.
b) Scrotal scintigraphy.
8. a) Hepatic artery perfusion test.
b) Heat damaged RBC study.
9. a) Lingual thyroid study.
b) Sentinel node detection.
10. a) Venography.
b) 51 Cr applications in nuclear medicine procedures.
