

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

[AHS 0122]

**JANUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2019-2020 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES
*Q.P. Code : 282511***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Hysterosalpingogram. What are the indications and contraindications. Describe patient preparation, premedication and techniques used. Mention common complications of the procedure.
2. Define Barium swallow. What are the indications and contraindications. How will you prepare Barium solution/paste in the procedure room. Explain single and double contrast techniques in Barium swallow. What are the complications.

II. Write notes on:

(10 x 6 = 60)

1. MRI contrast media.
2. Micturating Cystourethrogram.
3. Sialography.
4. CT virtual Colonoscopy.
5. Lymphangiogram.
6. CT Cisternogram.
7. CT – Cerebral Angiography.
8. Enteroclysis (Small bowel enema).
9. Catheter angiography.
10. Phlebography.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2019-2020 & 2020-2021 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES**

Q.P. Code : 282511

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Mention the properties of ideal Barium preparation. How will you prepare Barium solution/suspension in the procedure room? What are indications, Contra indications for Barium enema? Describe double contrast barium enema procedure.
2. Define Micturating Cystourethrogram (MCU). Indications in adult and pediatric patients. Explain procedure and exposure technique in adult and pediatric patients. What are the complications of the procedure?

II. Write notes on:

(10 x 6 = 60)

1. Patient preparation and procedure of Intravenous urogram.
2. Ascending urethrogram.
3. Contrast agents for gastrointestinal tract in CT and MRI.
4. Barium swallow.
5. Lymphangiogram.
6. Percutaneous trans hepatic cholangiography.
7. Adverse reactions of iodinated contrast media.
8. CT – Pulmonary angiography.
9. Catheters used in interventional radiology.
10. Dacryocystography.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES**

Q. P. Code: 282511

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. What is hysterosalpingogram? Indications and contraindications. Complications of procedure. How will you prepare the patient?
2. What is barium enema? Indications and contraindications. Complications of the procedure. Single and double contrast technique.

II. Write notes on:

(10 x 6 = 60)

1. CT guided biopsy.
2. Ascending urethrogram.
3. Cerebral angiogram.
4. Sialogram.
5. Pulmonary angiogram.
6. Virtual colonoscopy.
7. CT cisternogram.
8. Image guided pain interventions (any 5).
9. Endoscopic ultrasound and guided procedures.
10. Angiographic ablation / embolic procedures.

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

[AHS 0524]

MAY 2024

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES**

Q. P. Code: 282511

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Mention the various steps in intravenous pyelogram. How will you prepare the patient and contrast? Indications and contraindications.
2. What is enteroclysis? Indications and contraindications. How will you prepare the patients? Explain CT enteroclysis and MR enteroclysis. Explain about various contrast agents used in enteroclysis.

II. Write notes on:

(10 x 6 = 60)

1. Ascending urogram.
2. T-tube cholangiogram.
3. Pulmonary angiogram.
4. Barium Meal follow through.
5. MRI contrast agents used in various procedures.
6. MRI focused high frequency ultrasound procedures.
7. Mammogram guided biopsy.
8. Thyroid ablation.
9. CT cerebral angiogram.
10. Vertebroplasty.

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES**

Q.P. Code: 282511

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify contrast media. Describe the types of iodinated contrast media and physiology of its administration. Explain the types of iodinated contrast media adverse reactions and their management in radiology suite.
2. Define Barium meal follow through. What are the indications and contra indications? How will you prepare patient and Barium for the procedure? Explain single contrast technique and filming. What are disadvantages and complications of the procedure?

II. Write notes on:

(10 x 6 = 60)

1. CE and MR urography.
2. CT enteroclysis.
3. Hysterosalpingography.
4. T-tube cholangiography.
5. Double contrast Barium enema.
6. CT myelography.
7. Patient preparation and imaging technique of Magnetic Resonance Cholangio Pancreatogram (MRCP).
8. CT – Coronary angiography.
9. Vertebroplasty.
10. Percutaneous angioplasty.

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 2511

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – RADIOLOGICAL AND IMAGING PROCEDURES**

Q. P. Code: 282511

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail about fluoroscopy and responsibility of radiographers in fluoroscopic imaging.
2. Explain the principle, procedure of mammography imaging and clinical importance of mammography imaging. Write note on contrast X-ray mammography.

II. Write notes on:

(10 x 6 = 60)

1. Explain about MRI contrast media and its types.
2. Hypotonic duodenography.
3. Embolization materials.
4. CT perfusion imaging and its uses.
5. Explain about preventing infection in interventional radiology.
6. Dural venous sinuses anatomy and describe the role of CT and MR venography.
7. CT and MR arthrography.
8. CSF flow study.
9. Cartilage imaging.
10. Paediatric barium procedures.
