

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

**[LR 1220]**

**DECEMBER 2020  
(AUGUST 2020 EXAM SESSION)**

**Sub. Code: 1433**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY  
SECOND YEAR – (Regulation from 2018-2019)  
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES  
Q.P. Code: 841433**

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Barium Meal Follow through : Indications/ Contra indications, Preparation, Procedure, Contrast Media, routine & additional views, complications and after care.
2. MCU : Indications/ Contra indications, Preparation, Procedure, contrast media, routine & additional views, complications and after care.
3. HSG : Indications/ Contra indications, Preparation of patient, 10 day rule, Procedure, contrast media, routine & additional views, complications and after care.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Contrast used in X-Ray procedures.
2. Image Intensifier.
3. Basics of Tomography and applications.
4. Enteroclysis.
5. T.Tube Cholangiogram.
6. Preparations and precautions to be observed prior to injection of Iodine Contrast medium.
7. Fluoroscopy and its advantages.
8. AUG.
9. Fistulogram.
10. Arteriogram.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Positive contrast medium.
2. 10 day Rule.
3. Contra indications for IVU.
4. Nephrogram.
5. Tomography.
6. mA and KV range used in Fluoroscopy.
7. Anatomy demonstrated in Barium Meal.
8. Abbreviation of ERCP & MRCP.
9. Indications and Contra indications for HSG.
10. Parotid Sialogram.

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

**[AHS 0122]**

**JANUARY 2022**

**Sub. Code: 1433**

**(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY  
SECOND YEAR – (Regulation from 2018-2019)  
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES  
Q.P. Code: 841433**

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Construction of Image Intensifier, applications and advantages.
2. Barium Enema : Indications/ Contra indications, Preparation of patient, Procedure, contrast media, routine & additional views, complications and after care.
3. Write a notes on a) Sinogram and b) Sialography.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Duodenography.
2. Double contrast study in Barium procedures.
3. Gastrografin swallow – Indications and advantages.
4. Distal Loopogram.
5. Voiding Urethrogram.
6. Radiation safety accessories used while doing Fluoroscopy.
7. Tomographic principles.
8. Purpose of Ureteric compression in IVU.
9. Adverse reactions of Contrast medium.
10. Lumbar Myelogram.

**III. Short answers on:**

**(10 x 2 = 20)**

1. OPG X-Ray.
2. Routine views taken in Barium Meal study.
3. Routine Views taken in Barium Enema procedure.
4. Hypotonic Duodenography.
5. Cervical Myelogram.
6. RGP.
7. Advantages of Image intensifier.
8. DSA.
9. Renal Angiogram.
10. Common Contrast Reactions.

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

**[AHS 0922]**

**SEPTEMBER 2022**

**Sub. Code: 1433**

**(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY  
SECOND YEAR – (Regulation from 2018-2019)  
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES  
Q.P. Code: 841433**

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Intra Venous Urogram - indications, contraindications, patient preparation, procedure and radiographic views commonly used and special considerations on performing in Paediatric patients.
2. Barium Swallow - indications, contraindications, patient preparation, procedure and radiographic views commonly used and special considerations on performing in recent post operative upper GI Tract cases.
3. Different types of Contrast media used in different modalities of Radiology.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Dacryocystogram.
2. Seldinger Technique.
3. Guide wires and Catheters.
4. Views to demonstrate Hepatic and Splenic flexures in Barium Enema.
5. Lateral Decubitus views.
6. Emergency drugs used in the event of Contrast reactions.
7. Bilbao – dotter Tube.
8. Basic Trolley setting for HSG.
9. ERCP.
10. Sailogram.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Trendelenburg position.
2. Advantages of Image intensifier.
3. IVU film sequence.
4. Routine and additional views of Barium Swallow.
5. Methyl Cellulose.
6. Non Ionic Contrast Medium.
7. Ionic Contrast Medium.
8. Purpose of taking Scout films in special procedures.
9. After care in Angiography.
10. C-arm and its advantages.

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

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 1433**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY  
SECOND YEAR – (Regulation 2018-2019 onwards)  
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES  
Q.P. Code: 841433**

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Explain in detail about T-tube Cholangiography.
2. Lumbar Myelography –Indications, contra-indications, patient preparation, procedure along with Radiographic views and after care.
3. Barium Swallow – indications, contra-indications, patient preparation, procedure along with film sequences and after care.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Explain the Sialography procedure.
2. Explain the Cystogram technique and radiographic views.
3. Write a note on contrast agents used in MRI.
4. Explain percutaneous Trans Hepatic Biliary Drainage.
5. Write a note on high risk factors of ionic contrast media.
6. Write a note on functions of fluoroscopy and how does it is useful in radiology?
7. Write note on GIT contrast in CT.
8. Discuss in detail about the Enteroclysis procedure.
9. Write note on Retrograde Pyelogram.
10. Write a note on complications of Hypotonic Duodenography.

**III. Short answers on:**

**(10 x 2 = 20)**

1. What is the purpose of Slow administration of Contrast medium in IV Cholangiogram?
2. Define Fluoroscopy and its uses in contrast procedure.
3. Write the bowel washing techniques for Barium Enema.
4. Post procedural care for Barium Studies.
5. Linear and Circular Tomography.
6. What are the advantages on Non-ionic IV Contrast?
7. What are the indications and contra-indications for MCU?
8. What is Ten day rule?
9. Write two examples of Double Contrast Study.
10. Give a note on – Opposing Urethrogram.

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

[AHS 1123]

**NOVEMBER 2023**

**Sub. Code: 1433**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY**  
**SECOND YEAR – (Regulation 2018-2019 onwards)**  
**PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES**  
*Q.P. Code: 841433*

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Explain Small Bowel Enema: Indication, contra-indication, patient preparation, preparation of Barium, procedure and after care.
2. Describe in detail about various type of Cholangiograms.
3. Describe about Classification of Contrast Media with examples.

**II. Write Notes on:**

**(10 x 5 = 50)**

1. Patient care during Paediatric Radiography Imaging.
2. How do you prepare a patient for Angiogram?
3. Barium Swallow for Infant.
4. Describe about Dacryocystogram.
5. Voiding Cystourethrogram.
6. Describe about Sialogram for Submandibular Gland.
7. Describe about Colostomy Enema.
8. Emergency drugs and their role in Contrast Allergy Reactions.
9. Write about Deferoigraphy.
10. Ascending Urethrogram.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. What is Gauge and French?
2. Uses of Non-ionic contrast media.
3. What is Higginson pump?
4. Invertogram.
5. Indication for Ductogram.
6. How do you calculate volume of contrast media for IVU?
7. Indication for Gastrografin study.
8. Contrast medium. Precautions and after care in Hysterosalpingography.
9. What are all the tests to be done before IV contrast administration?
10. Carboxymethyl cellulose.

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

**[AHS 0424]**

**APRIL 2024**

**Sub. Code: 1433**

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY**  
**SECOND YEAR – (Regulation 2018-2019 onwards)**  
**PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES**  
***Q.P. Code: 841433***

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Explain the methods, indications, contra-indications, patient preparation, contrast and radiographic technique for Barium enema – Single and Double contrast.
2. Intravenous Urethrogram – indications, contra-indications, patient preparation, procedure along with film sequences and after care.
3. Explain in brief about the contrast media used in Radiology. Classify contraindications, precautions for usage of each.

**II. Write notes on:** **(10 x 5 = 50)**

1. Explain the adverse reactions for contrast medium.
2. Explain the T-tube cholangiogram.
3. Complications of HSG.
4. Dacrocystography.
5. Fistulogram.
6. List of emergency equipments and drugs kept in Radiology Department.
7. Retrograde Pyelogram.
8. Discuss in detail about the role of Radiographer during mild and severe contrast reaction.
9. Discuss in detail about the Entero lysis procedure.
10. Nephrostogram.

**III. Short answers on:** **(10 x 2 = 20)**

1. What is the difference between ionic and non-ionic contrast medium?
2. Define fluoroscopy and its uses in contrast procedure.
3. Write the use of effervescent powder.
4. Loopogram.
5. Renal angiogram.
6. Pre operative Cholangiogram.
7. What is the difference between Single and Double Contrast Study?
8. What is Invertogram?
9. What is Sinogram?
10. Complications of Hypotonic Duodenography.

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

[AHS 1125]

NOVEMBER 2025

Sub. Code: 1433

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY  
SECOND YEAR – (Regulation 2018-2019 onwards)  
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES**

*Q.P. Code: 841433*

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Single and Double Contrast Barium study of Large Intestine.
2. Intra Venous Urogram – Indications, Contra indications, Preparation, Procedure, contrast media, routine and additional views, complications and after care.
3. Functions and principles of Image Intensifier equipment and its advantages.

**II. Write notes on:** **(10 x 5 = 50)**

1. Retro grade pyelogram.
2. Renal Angiogram.
3. Opposing Urethrogram.
4. Common Contrast Reactions.
5. Cholecystogram.
6. Distal Loopogram.
7. Lumbar myelogram.
8. Percutaneous Transhepatic Biliary Drainage.
9. Small bowel enema.
10. Direct Fluoroscopy.

**III. Short answers on:** **(10 x 2 = 20)**

1. Hypotonic Duodenography.
2. Sialogram.
3. Micturating Cysto Urethrogram.
4. Dacryocystogram.
5. 28-day rule.
6. Bilbao – dotter Tube.
7. Contraindications of Barium contrast.
8. Invertogram.
9. Fistulogram.
10. Seldinger's Technique.

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