

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

[AHS 0321]

MARCH 2021

Sub. Code: 1848

(AUGUST 2020 EXAM SESSION)

B.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

SECOND YEAR (Regulation 2018-2019)

PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES

Q.P. Code : 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain Barium Enema: Indication, contra-indication, patient preparation, preparation of barium, procedure and after care.
2. Describe about Contrast media induced adverse reactions & management methods
3. Describe in detail about Hysterosalpingogram: Indication, contra-indication, patient preparation, procedure and after care

II. Write notes on:

(8 x 5 = 40)

1. Patient care and radiation protection in Pediatric Radiography.
2. Operation theatre Radiography.
3. Hypotonic duodenography.
4. Sinogram.
5. Ascending Urethrogram.
6. Modified IVU Methods.
7. Defecography.
8. T-tube cholangiogram.

III. Short answers on:

(10 x 3 = 30)

1. Advantages of non-ionic over ionic contrast media.
2. Define Consent.
3. Oil base contrast media.
4. What is Sialography?
5. Indications for barium swallow.
6. Contrast medium, precautions and after care in myelography.
7. Atomic number of iodine & barium and Gadolinium.
8. Define compartment syndrome.
9. Contraindication for MCU.
10. Bilbao dotter tube.

B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY
SECOND YEAR (Regulation 2018-2019)
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES
Q.P. Code : 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe in brief, the Indications, Contraindications, Procedure and Precautions with radiation protection for Hysterosalpingography (HSG).
2. Describe in brief, the Indications, Contraindications, Procedure and Precautions with radiation protection for T.T.C. (T.Tube Cholangiography).
3. Describe in brief, Equipment and accessories – exposure factor considerations in special care – Elderly patients profile – difficulties during radiography – technical considerations, projections with unconventional special positioning for geriatric imaging.

II. Write notes on:

(8 x 5 = 40)

1. Bronchography.
2. Lower limb Venography.
3. What are the indications and contra-indications of Barium Meal studies?
4. Vasography.
5. What are the filming techniques of IVU?
6. Duties of technologist during contrast reaction.
7. Write notes on MCU.
8. How are contrast media classified?

III. Short answers on:

(10 x 3 = 30)

1. Percutaneous transhepatic cholangiography – Indications and contraindications.
2. Contrast medium, precautions and after care in myelography.
3. Indications of digital subtraction angiography.
4. Sialogogue, where is it used.
5. Cystography.
6. What is Sinogram?
7. What are the contra indications of Barium swallow?
8. Discography.
9. What are the indications of retrograde Pyelography?
10. What are the advantages of non ionic IV contrast?

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code:1848

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY

SECOND YEAR (Regulation from 2018-2019)

PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES

Q.P. Code : 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Classification of contrast media – Write in detail about ultrasound contrast media.
2. Discuss in detail about Micturating cystourethrography.
3. Describe in brief for T –Tube cholangiography.

II. Write notes on:

(8 x 5 = 40)

1. Explain Enteroclysis procedure and contrast used.
2. Explain the procedure for ERCP.
3. Explain briefly about fistulogram.
4. Lumbar myelography.
5. Hypotonic Duodenography.
6. Percutaneous nephrostomy.
7. What are the advantages of double contrast study?
8. Filming techniques of IVU.

III. Short answers on:

(10 x 3 = 30)

1. Sinogram.
2. Digital subtraction Angiography.
3. Retrograde pyelourethrography.
4. MR Colonography.
5. Difference between single and double contrast study.
6. Advantage of non ionic IV contrast.
7. Effervescent powder.
8. Bilbao – Dotter tube.
9. Nephrogenic systemic fibrosis.
10. 10 day rule.

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

[AHS 0423]

APRIL 2023

Sub. Code: 1848

**B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY
SECOND YEAR (Regulation 2018-2019 onwards)
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES
Q.P. Code: 801848**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

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

1. Define Intravenous Urography. What are the Indications, Contraindications and Preparation required for IVP?
2. Discuss in detail about Barium Meal Follow through.
3. Discuss in detail about Hysterosalpingography.

II. Write notes on: (8 x 5 = 40)

1. Discuss in detail about Micturating Cystourethrography.
2. Explain about Image Intensifier.
3. Duties of a Technologist during a Contrast Reaction.
4. Barium Swallow.
5. Lumbar Myelography.
6. Single Contrast Barium Enema.
7. Radiation protection principles.
8. ERCP vs MRCP.

III. Short answers on: (10 x 3 = 30)

1. MR contrast media.
2. Virtual Colonoscopy.
3. 10 day rule.
4. Sinogram.
5. Advantage of non – ionic IV contrast.
6. ALARA.
7. Catheters used in Angiography.
8. Retrograde Pyelourethrography.
9. Ultrasound Contrast Media.
10. MR Colonography.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1848

B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY

SECOND YEAR (Regulation 2018-2019 onwards)

PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES

Q.P. Code: 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. What is Radiological Contrast Medium and enumerate the different types of Contrast Medium used in Radiological Special Procedure.
2. What is Barium Swallow and explain about the procedure of Barium Swallow?
3. What is Coronary Angiography? Explain about the procedure of Coronary Angiography.

II. Write notes on:

(8 x 5 = 40)

1. What is Cystogram? How will you do the procedure Cystogram?
2. What are the general preparation for Intravenous Pyelography patient?
3. Describe about the procedure of percutaneous Transhepatic cholangiography.
4. What are the Emergency drugs and Equipments to be kept in X-ray Department?
5. What is Enteroclysis?
6. Explain about the procedure of peripheral Venography.
7. Describe the procedure of Lymphography.
8. How will you do the procedure of Ascending Urethrography?

III. Short answers on:

(10 x 3 = 30)

1. Indications and Contraindications for Barium Enema.
2. What is Discography?
3. Define Angioplasty.
4. What is the type of contrast medium used for Myelography producer?
5. What are the differences between Ionic and Non ionic Contrast medium?
6. What is Vesiculography?
7. How will you give care for Paediatric patient while attending bed side X-ray?
8. Define Sinogram.
9. What are the routes of Administrations of Contrast medium?
10. What is the Pre- Film for intravenous Urogram procedure?

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

[AHS 0424]

APRIL 2024

Sub. Code: 1848

B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY
SECOND YEAR (Regulation 2018-2019 onwards)
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES
Q.P. Code: 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

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

1. Describe in detail about the indications, contraindications, patient preparation, positioning and after care in Barium enema examination.
2. Write about the classification of contrast media and explain briefly about the Ultrasound contrast media and MRI contrast media.
3. Describe briefly the indications, contraindications patient preparation and procedure for Achalasia cardia.

II. Write notes on: **(8 x 5 = 40)**

1. Hysterosalpingography.
2. Adverse effects of Intravenous contrast media.
3. Micturating cysto urethrogram.
4. Indication, contraindication and positioning in IVP (Intra venous Pyelogram).
5. Lumbar myelography.
6. Ductogram.
7. T-Tube cholangiography.
8. Percutaneous transhepatic cholangiography.

III. Short answers on: **(10 x 3 = 30)**

1. Fistulogram.
2. Differentiate Sinus and Fistula.
3. Cystogram.
4. What is Extravasation?
5. Sialogram.
6. MR contrast.
7. Enteroclysis.
8. Modifications or Technical considerations for paediatric patients.
9. Lymphography.
10. Ascending Urethrography.

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

[AHS 1125]

NOVEMBER 2025

Sub. Code: 1848

B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY
SECOND YEAR (Regulation 2018-2019 onwards)
PAPER III – CONTRAST & SPECIAL RADIOGRAPHY PROCEDURES
Q.P. Code: 801848

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

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

1. Write about the indications, technique and views taken in Hysterosalpingography.
2. Discuss in detail about Barium meal and follow through techniques.
3. Describe briefly the indications, contraindications, procedure for T–Tube cholangiography.

II. Write notes on: **(8 x 5 = 40)**

1. Sinogram.
2. Myelogram.
3. ERCP (Endoscopic Retrograde Cholangiopancreatography) procedure.
4. Venography.
5. Retrograde pyelography.
6. Right flank approach in PTC (Percutaneous Transhepatic Cholangiography).
7. AUG (Ascending Urethrogram).
8. Barium sulphate preparations in Barium swallow, Barium meal and follow through.

III. Short answers on: **(10 x 3 = 30)**

1. Indications of MCU (Micturating Cysto-Urethrogram).
2. Advantages of Enteroclysis over Barium meal.
3. Ductogram.
4. MR contrast media.
5. Siphon test.
6. Discography.
7. Films / views taken for IVP.
8. Adverse reactions of contrast media.
9. Negative contrast media.
10. ALARA.
