

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

[AHS 0122]

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

Sub. Code: 2514

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2019-2020 onwards)
PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT
CARE
Q.P. Code : 282514**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is embolization? Write in detail about bronchial artery embolization & uterine artery embolization?
2. Explain about catheters, guide wire, pressure injectors, accessories.

II. Write Short Notes on:

(10x6 = 60)

1. Explain about sterilization.
2. T-tube cholangiography
3. CT - myelography
4. CT cerebral angiography.
5. Use of microscope in the study of bacteria and types
6. Knee arthrography
7. Intervention Biliary drainage procedures.
8. Antibiotic sensitivity testing.
9. What are the test should done for patient prior to intervention procedures?why?
10. Patient care during drainage and biopsies procedures?

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2514

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
SECOND YEAR (From 2019-2020 & 2020-2021 onwards)
PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT
CARE**

Q.P. Code : 282514

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain Arthrography. What are the Modalities available for Arthrography? Detail about MR Arthrography techniques.
2. Uses of microscope in the study of bacteria and types and uses of culture media in diagnostic bacteriology.

II. Write Short Notes on:

(10x6 = 60)

1. Explain about Myelography.
2. PTCA.
3. What are the Classification of microorganisms?
4. Write in detail about PTBD.
5. Explain about pulmonary angiography.
6. Explain about FNAC.
7. Brief note on various catheters in an intervention room.
8. Antimicrobial Sensitivity Test.
9. Explain trolley settings during intervention procedures.
10. Responsibilities of imaging technologist.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 2514

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

SECOND YEAR (From 2020-2021 onwards)

PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT CARE

Q.P. Code: 282514

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What are the safe radiation dose limits and radiation hazards in Interventional Radiology? What are the measures you will take to reduce the dose to the patient and the operator?
2. What is embolisation? Explain in detail about the clinical uses of this procedure, and classify the embolising agents used in Interventional Radiology.

II. Write Short Notes on:

(10x6 = 60)

1. FNAC and biopsy - indications, imaging modalities for guidance and patient preparation.
2. Percutaneous nephrostomy - indication, technique and patient preparation.
3. How will you prevent a procedure related infection in the cath lab?
4. Briefly explain the types of anesthesia for different Interventional Radiology procedures.
5. Discuss in detail the tools for revascularization of blocked blood vessels.
6. Pulmonary angiography - indications and technique.
7. Discuss the different types of vascular sheaths and compare their uses and advantages.
8. What are the different types of cath labs and their uses?
9. Principles and techniques of sterilization.
10. Discuss the classification of microorganisms causing human infection.

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

[AHS 0524]

MAY 2024

Sub. Code: 2514

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

SECOND YEAR (From 2020-2021 onwards)

PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT CARE

Q.P. Code: 282514

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What are the different culture media and their uses? What is antibiotic sensitivity testing? Describe in detail the various methods of disinfection and sterilisation.
2. How will you prepare a patient prior to a percutaneous biopsy procedure? What are the imaging modalities for guidance and their specific uses in different parts of the body? Mention the complications that can happen in a percutaneous biopsy procedure and how will you be prepared to manage them.

II. Write Short Notes on:

(10x6 = 60)

1. Discuss about the indications, technique and complications of Percutaneous biliary drainage.
2. Indications and technique of coronary angiography.
3. Principles of digital subtraction angiography.
4. How will you manage a patient who has collapsed in the cath lab just after a vascular procedure?
5. What are the responsibilities of an Imaging technologist in the cath lab?
6. Cerebral 4 vessel angiography - technique and indications.
7. What are the measures to reduce radiation dose to the patient and operator in a cath lab procedure?
8. Discuss about the routes of drug administration to the patient.
9. Discuss the indications and technique of myelography.
10. What are the indications of embolisation? Classify embolising agents.

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 2514

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

SECOND YEAR (From 2020-2021 onwards)

PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT CARE

Q.P. Code: 282514

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2x20=40)

1. Explain about Bi plane DSA and embolization procedures.
2. Write in detail about infection control and sterile techniques in Intervention Radiology.

II. Write Short Notes on:

(10x6=60)

1. DSA - Cerebral Angiography Techniques and Projections.
2. Handling the emergencies in radiology.
3. Explain about CT renal angiography.
4. Add a note on bronchial artery embolization.
5. Brief note on guide wires in an intervention room.
6. Antimicrobial Sensitivity Test.
7. What are the patient preparations for intervention procedures?
8. Radiation Safety aspects during intervention procedures.
9. Explain about culture media and types.
10. CT guided RF ablation.

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 2514

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

SECOND YEAR (From 2020-2021 onwards)

PAPER IV – INTERVENTION RADIOLOGICAL TECHNIQUES AND PATIENT CARE

Q.P. Code: 282514

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain Arthrography. What are the Modalities available for Arthrography? Detail about MR Arthrography techniques.
2. What is embolization? Explain in detail about the clinical uses of this procedure and classify the embolising agents used in Interventional Radiology.

II. Write Short Notes on:

(10x6 = 60)

1. What are the different types of cath labs and their uses?
2. Antimicrobial Sensitivity Test.
3. Explain about culture media and types.
4. Radiation Safety aspects during intervention procedures.
5. Handling the emergencies in radiology.
6. Discuss about the routes of drug administration to the patient.
7. Use of microscope in the study of bacteria and types.
8. Intervention Biliary drainage procedures.
9. Explain about Myelography.
10. What are the classification of microorganisms?
