## BLDE (DEEMED TO BE UNIVERSITY)

## **B.Sc. Medical Imaging Technology**

[Time: 3 Hours]

[Max. Marks: 80]

#### **V SEMESTER**

# PAPER - I (Advanced Radiographic Techniques) QP CODE: 8525

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. Briefly explain in detail about the various Radiographic Techniques and views for airway foreign body.

Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Various views of skull.
- 3. Discuss about barium procedures in brief.
- 4. HSG.
- 5. Radiographic techniques to image Femur.
- 6. Routine abdomen radiography positioning.
- 7. Radiographic imaging to demonstrate Chance fracture.
- 8. Explain about the IVP.
- 9. Write notes on frontal view of skull.
- 10. Basic views for knee joint.

Short Answers: (Any - 10)

- 11. RGU.
- 12. Radiographic demonstration of vertebral body fractures.
- 13. Self-rectification circuit
- 14. Elbow joint views.
- 15. Radiographic views for sternum.
- 16. Water's view.
- 17. Radiographic demonstration of calcaneal fractures.
- 18. Transformers.
- 19. X ray Abdomen techniques and positioning.
- 20. Radiography techniques of Mammography.
- 21. Radiographic techniques for carpal bone fractures.

June - 2023

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## **B.Sc. Medical Imaging Technology**

[Time: 3 Hours]

[Max. Marks: 80]

#### **V SEMESTER**

## PAPER - II (Equipment for Medical Imaging) OP CODE: 8526

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

### Long Questions

10X1 = 10 Marks

1. Write about historical developments, principle, applications and role in medicine of MRI.

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. TOF MR Angiography.
- 3. MRI coils.
- 4. Gradient echo sequences.
- 5. Harmonic imaging.
- 6. Write about CT tube and draw it neatly and label the parts.
- 7. What is Doppler Effect and its clinical application?
- 8. Write about T1w, T2w & STIR images.
- 9. CT angiography vs DSA angiography.
- 10. Radiation protection in CT imaging.

Short Answers: (Any - 10)

- 11. Transducer frequency.
- 12. Piezoelectric effect.
- 13. Fusion imaging in PET-CT.
- 14. C-arm uses.
- 15. Dose reduction in CT.
- 16. T2 decay,
- 17. Common PET radioisotopes.
- 18. Half-life of radioactive substance.
- 19. Tissues which are bright on T1W images.
- 20. Types CT contrast agents.
- 21. Precession frequency.

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## **B.Sc. Medical Imaging Technology**

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#### **V SEMESTER**

# PAPER - III (Special Procedure in Medical Imaging) OP CODE: 8527

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

## Long Questions

10X1 = 10 Marks

- 1. Explain The Radiographic Procedure Of Retrograde Urethrogram. Under The Following Headings
  - a) Definition b) Patient Preparation c) Indication d) Contraindication e) Contrast Used
  - f) Equipment Used g) Patient Position h) Exposure Factor i) Procedure In Brief

Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. What are the indications for the IVU procedure
- 3. Difference between RGU and MCU
- 4. What is Bronchography? Write patient preparation for the Bronchography procedure
- 5. Explain hystero salpangiography procedure
- 6. Explain cerebral angiography
- 7. Explain barium enema
- 8. What are the contraindications for the ERCP procedure
- 9. Indication for the abdominal angiography

10. TLD

Short Answers: (Any – 10)

- 11. DICOM
- 12. Write the patient preparation for the PTBD procedure
- 13. Definition of barium swallow, barium meal, barium enema
- 14. What type of contrast used in the x-ray procedure name them
- 15. PACS
- 16. What is cardiac angiography and write two indication
- 17. What are the radiation protection used in the fluroscopy
- 18. What are the equipment used in the IVU procedure
- 19. What is percutaneous Tran's hepatic cholangiogram? And how much exposure should give during the procedure
- 20. What are the contraindication for the percutaneous trans hepatic cholangiogram procedure
- 21. Background Radiation

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## **B.Sc. Medical Imaging Technology**

[Time: 3 Hours]

[Max. Marks: 80]

#### **V SEMESTER**

# PAPER – IV (MRIT Directed Clinical Education III) OP CODE: 8528

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. Write about preparation of patients and core of patients in ultrasonic scan

Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Prepartion of hands for aspetic procedures
- 3. Care for epilepsy
- 4. Handling of geriatric patients
- 5. Procedure in the event of an accident in radiology department
- 6. Importance of records maintenance
- 7. Radiography of pregnant patients
- 8. Radiography of children
- 9. Uses of pressure injector in ct scan?
- 10. What is MRI safety?

## Short Answers: (Any -10)

- 11. Correct method of putting sterile gloves
- 12. Importance of measuring weight of patients before radiography scan
- 13. Thyroid scan
- 14. Handling of infections of patients
- 15. Shifting of patients
- 16. Methods of measuring temperatures
- 17. Define blood pressure and normal value
- 18. Angiography
- 19. Handling of RTA patients
- 20. Application of asepsis
- 21. Patients vital signs