

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY**  
(New Syllabus 2014-2015)

**THIRD YEAR**

**PAPER II – MODERN IMAGING TECHNIQUES AND  
RECENT TRENDS IN IMAGING**

*Q.P. Code: 801837*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Peripheral angioplasty and stenting for a patient reported with lower limb ischemia-indications, preparation, procedure and post care.
2. How to perform HRCT of the SI joint? Write in detail about the various post processing options available in CT for reconstructing HRCT of SI joint.
3. How to plan and perform a brain MRI scan for an unconscious and for non cooperative patient.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Selection of probe for abdominal ultrasound. Write details of sterilizing ultrasound probes.
2. Preparation of a patient before performing MR scan. Discuss about the safety measures that should be taken before entering a MR scanner room.
3. Discuss about the trolley setting and views used during a cerebral angiography performed using angiography machine.
4. List the advantages in MDCT compared to conventional CT.
5. Preparation of the patient for a PET scan – pre and post care.
6. Stroke protocol in CT.
7. Pituitary adenoma – MRI protocol.
8. MR angiography – TOF circle of willis.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Paramagnetic agents.
2. Stereotactic biopsy.
3. Aneurysm.
4. Contrast media.
5. TACE.
6. Mammo tomogram.
7. Tube potentials and tube current used in chest CT. What is the radiation dose from chest CT?
8. Image display in CT.
9. Angina pectoris.
10. Towne's view.

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