

[LJ 0816]

AUGUST 2016

Sub.Code :2113

**B.Sc. NUCLEAR MEDICINE TECHNOLOGY**

**SECOND YEAR**

**PAPER III – NUCLEAR MEDICINE TECHNIQUES AND  
SPECIAL PROCEDURES**

*Q.P. Code: 802113*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer All questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Indications for high dose radioiodine therapy. Describe the procedure and precautions followed during high dose radioiodine therapy? Are there any special instructions for the patients after the therapy?
2. Mention the radionuclide studies for renal transplant evaluation. Describe the Technique of renal transplant scintigraphy using Tc99m DTPA.
3. A patient has been referred to nuclear medicine department to evaluate left renal PUJ Obstruction. Discuss the patient preparation, radiopharmaceutical, acquisition, Processing protocol. Comment on the global renogram curve patterns.

**II. Write Notes on:**

**(8 x 5 = 40)**

1. Gates' method of GFR estimation.
2. Parathyroid scintigraphy.
3. Precautions to be followed during radioiodine administration.
4. Sentinel node detection.
5. Inter and intra ictal scans in epilepsy.
6. Antigen – antibody reaction.
7. Emergency trolley and medications to be maintained.
8. Drugs to be avoided prior to <sup>131</sup>Iodine scintigraphy.

**III. Short Answers on:**

**(10 x 3 = 30)**

1. Location and function of gall bladder.
2. What is MUGA and where it is used?
3. Nephrostomy.
4. Why do we wait three hour after injection before bone scan?
5. Indications for renal cortical imaging.
6. <sup>89</sup>Strontium.
7. Radiation Synovectomy.
8. Pharmacological stress.
9. Gross anatomy of liver.
10. Principle of lung perfusion study.

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