

# National Board of Examinations

**Question Paper Name :** DNB Nuclear Medicine Paper2

**Is this Group for Examiner? :** No

**Enable Mark as Answered Mark for Review and Clear Response :** Yes

**Question Number : 1 Question Type : SUBJECTIVE**

A young female is clinically and biochemically diagnosed as having Cushing's Syndrome. All conventional radiological tests were negative. Enumerate various PET radiopharmaceuticals used for localisation of Ectopic Cushing's Syndromes. [10]

**Question Number : 2 Question Type : SUBJECTIVE**

- a) What is rhTSH? Discuss the approved indications of its use. [3+2]
- b) What is Perchlorate discharge test? Why its use has been drastically reduced in current time? [3+2]

**Question Number : 3 Question Type : SUBJECTIVE**

What are paragangliomas? How will you diagnose it using Nuclear Medicine techniques? [4+6]

**Question Number : 4 Question Type : SUBJECTIVE**

- a) <sup>99m</sup>Tc-TRODAT imaging- Patient preparation, acquisition protocol and interpretation. [7]
- c) Molybdenum Breakthrough tests. [3]

**Question Number : 5 Question Type : SUBJECTIVE**

- a) Radiopharmaceuticals in detection of recurrent brain tumours using SPECT/CT. [5]

b) Fibroblast activation protein inhibitor imaging - Principles and applications. [5]

**Question Number : 6 Question Type : SUBJECTIVE**

Personnel monitoring devices:

a) TLD versus Optically Stimulated Luminiscence (OSL) dosimeters. [8]

b) Pocket Dosimeter. [2]

**Question Number : 7 Question Type : SUBJECTIVE**

Discuss the radiopharmaceuticals used in Nuclear Cardiology. [10]

**Question Number : 8 Question Type : SUBJECTIVE**

Describe Bateman's equation and define the principles of various radionuclide generators. Discuss in detail the  $^{82}\text{Sr}/^{82}\text{Rb}$  generator. [3+3+4]

**Question Number : 9 Question Type : SUBJECTIVE**

a) Angiogenesis Imaging. [3]

b) Hypoxia Imaging. [3]

c) Testicular Imaging. [4]

**Question Number : 10 Question Type : SUBJECTIVE**

Enumerate various lymph node mapping techniques, advantages and disadvantages of each technique. [10]