

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Nuclear Medicine Paper2
<b>Subject Name :</b>	DNB Nuclear Medicine Paper2
<b>Creation Date :</b>	2022-06-25 17:20:00
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<b>Actual Answer Key :</b>	No

## DNB Nuclear Medicine Paper2

<b>Group Number :</b>	1
<b>Group Id :</b>	3271871143
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	180
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## DNB Nuclear Medicine Paper2

<b>Section Id :</b>	3271871146
<b>Section Number :</b>	1

<b>Section type :</b>	Offline
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	3271871150
<b>Question Shuffling Allowed :</b>	No

**Question Number : 1 Question Id : 32718710482 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Please write your answers in the answer booklet within the allotted pages as follows:-**

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. Discuss various PET radiopharmaceuticals being used in recurrent carcinoma prostate? Is there scope/role for SPECT based radiopharmaceuticals in this scenario? How would it likely benefit such patients? [3+3+4]

**Question Number : 2 Question Id : 32718710483 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

a) What is the principle behind use of radiolabelled colloids for detection of sentinel lymph node/s? [3]

b) Which radiolabelled colloids are approved for sentinel lymph node imaging in humans? [3]

c) What are various quality control parameters required before use of radiocolloids? [4]

**Question Number : 3 Question Id : 32718710484 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

a) Enumerate various Nuclear Medicine imaging modalities to assess young hypertensive. [4]

b) Describe in detail various PET radiopharmaceuticals being used in these patients. [6]

**Question Number : 4 Question Id : 32718710485 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

a) Radionuclide Cysternography. [5]

b) Salivary gland scintigraphy. [5]

**Question Number : 5 Question Id : 32718710486 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Describe various Nuclear Medicine imaging modalities in children with recurrent UTI. [10]

**Question Number : 6 Question Id : 32718710487 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

a) Stunning versus hibernating myocardium. [4]

b) Describe various Radiopharmaceuticals used to assess myocardial viability. [6]

**Question Number : 7 Question Id : 32718710488 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

a) Radiopharmaceuticals being used in epilepsy. [5]

b) Radiopharmaceuticals being used in dementia. [5]

**Question Number : 8 Question Id : 32718710489 Question Type : SUBJECTIVE Consider As**

**Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) Adrenocortical imaging. [5]
- b) Quality control tests for FDG. [5]

**Question Number : 9 Question Id : 32718710490 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) Describe the principle of generator systems? [3]
- b) What is the concept behind use of hydrochloric acid of different strengths in  $^{68}\text{Ge}$ - $^{68}\text{Ga}$  generators of various vendors? [4]
- c) What factors contribute to the life of such a generator system? [3]

**Question Number : 10 Question Id : 32718710491 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Quality control parameters of Radiopharmaceuticals. [10]