National Board of Examinations

Question Paper Name :	DNB Nuclear Medicine Paper
Subject Name :	DNB Nuclear Medicine Paper
Creation Date :	2021-08-25 22:34:49
Duration :	180
Total Marks :	100
Display Marks:	No

DNB Nuclear Medicine Paper2

Group Number :	I
Group Id:	327187270
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner?	No

DNB Nuclear Medicine Paper2

Section Id :	327187273
Section Number :	1

Section type: Offline

Mandatory or Optional: Mandatory

Number of Questions: 10

Number of Questions to be attempted: 10

Section Marks: 100

Enable Mark as Answered Mark for Review and

Clear Response:

Yes

Sub-Section Number: 1

Sub-Section Id: 327187277

Question Shuffling Allowed: No

Question Number: 1 Question Id: 3271871220 Question Type: SUBJECTIVE

Correct Marks: 10

Enumerate the steps in production of 18F-FDG and describe EMA and FDA approved QC protocols for 18F-FDG. [10]

Question Number: 2 Question Id: 3271871221 Question Type: SUBJECTIVE

Correct Marks: 10

What is the difference between radiochemical and radiopharmaceutical? Explain with example the mechanism of localization of radiopharmaceuticals. [10]

Question Number: 3 Question Id: 3271871222 Question Type: SUBJECTIVE

Correct Marks: 10

- a) Various types of packages. [2.5]
- b) Transport Index. [2.5]
- c) International Nuclear Event Scale (INES). [2.5]
- d) Auger Electron-based therapy. [2.5]

Question Number: 4 Question Id: 3271871223 Question Type: SUBJECTIVE

Correct Marks: 10

Write briefly about various radioisotope generators. Describe rhenium generator in detail. [10]

Question Number: 5 Question Id: 3271871224 Question Type: SUBJECTIVE

Correct Marks: 10

Non-FDG radiopharmaceuticals for imaging of Cancer Associated Fibroblasts - current status and utility with examples. [10]

Question Number: 6 Question Id: 3271871225 Question Type: SUBJECTIVE

Correct Marks: 10

a) List various isotopes and techniques used in emergency situation. [5]

b) 4D CECT versus Nuclear Techniques in parathyroid localisations. [5]

Question Number: 7 Question Id: 3271871226 Question Type: SUBJECTIVE

Correct Marks: 10

a) Enumerate and classify radiopharmaceuticals used for tumor imaging. [5]

b) Describe the role of 18F-FDOPA imaging as a clinical problem solving tool. [5]

Question Number: 8 Question Id: 3271871227 Question Type: SUBJECTIVE

Correct Marks: 10

Recent advances in nuclear cardiology techniques. [10]

Question Number: 9 Question Id: 3271871228 Question Type: SUBJECTIVE

Correct Marks: 10

a) Production methods of radionuclides. [5]

b) What do you mean by carrier free radionuclides? Discuss the importance of no carrier added

(n.c.a.) radionuclides. [5]

Question Number: 10 Question Id: 3271871229 Question Type: SUBJECTIVE

Correct Marks: 10

Enumerate different isotopes of Iodine. Describe method of production of ¹³¹I. Describe the decay scheme of ¹³¹I. [10]