## **National Board of Examinations**

Question Paper Name :	DNB Radio Diagnosis Paper
Subject Name :	DNB Radio Diagnosis Paper
Creation Date :	2021-08-27 20:13:10
Duration :	180
Total Marks :	100
Display Marks:	No

## **DNB Radio Diagnosis Paper4**

Group Number :	1
Group Id :	327187192
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 Radio Diagnosis Paper4**

Section Id :	327187195
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:** 327187199

**Question Shuffling Allowed:** No

Question Number: 1 Question Id: 327187440 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) Discuss in brief the principle of diffusion imaging in MRI. [4]

b) Enumerate any four pathologies which lead to restricted diffusion in the brain. [2]

c) Describe the non neurological applications of diffusion imaging. [4]

Question Number: 2 Question Id: 327187441 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe the principle and techniques of ultrasound elastography. What are its applications in diffuse liver disease? [6+4]

Question Number: 3 Question Id: 327187442 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe stochastic and nonstochastic effects of radiation. What are the AERB radiation dose limits for occupational workers and general public? [6+4]

Question Number: 4 Question Id: 327187443 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe the structure and types of radiographic grids. What is grid ratio? What are the advantages and disadvantages of using them? [4+2+4]

Question Number: 5 Question Id: 327187444 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe the composition of first and second generation ultrasound contrast agents. What are the advantages of using these contrast media over CT and MRI contrast agents? Enumerate the applications of US contrast agents. [4+2+4]

Question Number: 6 Question Id: 327187445 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) Describe the principle behind Radio Frequency Ablation(RFA). [5]

b) Discuss its applications in benign and malignant lesions. [5]

Question Number: 7 Question Id: 327187446 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe motion artefacts on MRI. What are the various ways of reduction of these artefacts? [5+5]

Question Number: 8 Question Id: 327187447 Question Type: SUBJECTIVE

**Correct Marks: 10** 

What is nephrogenic systemic fibrosis? What are the risk factors for developing NSF? What should be done to minimize its risk? [2+4+4]

Question Number: 9 Question Id: 327187448 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) Cone beam CT. [5]

b) Zoning of MRI facility. [5]

Question Number: 10 Question Id: 327187449 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Describe the technique of hysterosalpingography. What are the indications, contraindications and complications of this procedure? [3+7]