

# National Board of Examinations

<b>Question Paper Name :</b>	Diploma Radio Diagnosis Paper1
<b>Subject Name :</b>	Diploma Radio Diagnosis Paper1
<b>Creation Date :</b>	2024-12-16 09:27:08
<b>Duration :</b>	180
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<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## Diploma Radio Diagnosis Paper1

<b>Group Number :</b>	1
<b>Group Id :</b>	3271873263
<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

## Diploma Radio Diagnosis Paper1

<b>Section Id :</b>	3271873266
<b>Section Number :</b>	1
<b>Section type :</b>	Offline
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	10
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	3271873270
<b>Question Shuffling Allowed :</b>	No

**Question Number : 1 Question Id : 32718734574 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

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. a) What are the different types of MR angiography? [1]
- b) Describe the principle of time of flight (TOF) MR angiography, its advantages & disadvantages and any four clinical applications. [3+2+4]

**Question Number : 2 Question Id : 32718734575 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss the harmful effects of radiation in humans. [4]
- b) What are the radiation protection measures that can be undertaken in a fluoroscopy unit? [6]

**Question Number : 3 Question Id : 32718734576 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Enumerate the various MRI artefacts and discuss any four of them in brief. [2+8]

**Question Number : 4 Question Id : 32718734577 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What are ultrasound contrast agents? Discuss any four clinical applications of ultrasound contrast agents. [6+4]

**Question Number : 5 Question Id : 32718734578 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss the anatomy of rotator cuff of shoulder with well-labelled diagrams. [5]
- b) Discuss briefly the imaging features of various labral tears that can be seen in the shoulder joint. [5]

**Question Number : 6 Question Id : 32718734579 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Discuss the following radiological procedures briefly:

- a) Barium enema. [5]
- b) Sonosalpingography. [5]

**Question Number : 7 Question Id : 32718734580 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Discuss the imaging anatomy of nose and paranasal sinuses on NCCT with well-labelled diagrams. Also discuss the common anatomical variations that may be seen on NCCT PNS. [7+3]

**Question Number : 8 Question Id : 32718734581 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What is X-ray spectrum of an X-ray tube/target and how is it produced? What are the factors that affect the X-ray spectrum? [5+5]

**Question Number : 9 Question Id : 32718734582 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What does AERB stand for? What are the major roles of AERB? Discuss the AERB guidelines that need to be followed for installation of a new digital radiography (DR) X-ray machine in your department. [1+(4+5)]

**Question Number : 10 Question Id : 32718734583 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Briefly discussed the following:

- a) "F form" in PC-PNDT Act. [5]
- b) "Characteristic curve" of a photographic film. [5]