

# National Board of Examinations

<b>Question Paper Name :</b>	DrNB INTERVENTIONAL RADIOLOGY Paper2
<b>Subject Name :</b>	DrNB INTERVENTIONAL RADIOLOGY Paper2
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## DrNB INTERVENTIONAL RADIOLOGY Paper2

<b>Group Number :</b>	1
<b>Group Id :</b>	3271872792
<b>Group Maximum Duration :</b>	0
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<b>Group Marks :</b>	100

## DrNB INTERVENTIONAL RADIOLOGY Paper2

<b>Section Id :</b>	3271872795
<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>	3271872799
<b>Question Shuffling Allowed :</b>	No

**Question Number : 1 Question Id : 32718729204 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) Draw a flow chart to delineate the treatment options in hepatocellular carcinoma in a patient with cirrhosis based upon the clinico-radiological profile of the patient. [3]
- b) Compare radiofrequency ablation and microwave ablation as modalities of treatment for hepatocellular carcinoma. [4]
- c) Discuss the principles of histotripsy as an alternative ablative modality. [3]

**Question Number : 2 Question Id : 32718729205 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss pre-procedure patient counselling and patient selection for uterine fibroid embolization. [4]
- b) Discuss techniques of intra and post procedural analgesia in patients undergoing uterine fibroid embolization. [3]
- c) Discuss the role of uterine artery embolization in patients with adenomyosis. [3]

**Question Number : 3 Question Id : 32718729206 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Classify peripheral arteriovenous malformations based upon angiographic findings. [3]
- b) Discuss endovascular management of peripheral arteriovenous malformations based upon the angiographic classification. [4]
- c) Discuss precautions to be observed during cyanoacrylate (Glue) injection for the treatment of arteriovenous malformations. [3]

**Question Number : 4 Question Id : 32718729207 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss different devices and techniques available for endovascular removal of foreign bodies. [6]
- b) Discuss the different strategies to deal with "stuck" catheter during use of liquid embolic agents. [4]

**Question Number : 5 Question Id : 32718729208 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss the role of platelet rich plasma injection in musculoskeletal pathologies. [3]
- b) Describe the technique of ultrasound guided platelet rich plasma injection in supraspinatous tendinopathy. [4]
- c) Enumerate other musculoskeletal pathologies which can be treated by image guided platelet rich plasma injection. [3]

**Question Number : 6 Question Id : 32718729209 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

A 60-year-old male, known case of hepatic cirrhosis, is brought to the emergency room with massive hematemesis. Upper GI endoscopy after initial resuscitation shows bleeding gastric varices.

- a) Delineate a diagnostic and endovascular management plan for the patient. [4]
- b) Describe in detail the optimal endovascular treatment modality for the patient along with its variations and possible adverse events. [6]

**Question Number : 7 Question Id : 32718729210 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss different types of available intra-vascular ultrasound catheters used in Interventional Radiology. [4]
- b) Describe the role of intra-vascular ultrasound in venous interventions. [6]

**Question Number : 8 Question Id : 32718729211 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Draw a labelled diagram of the chyle pathway. [3]
- b) Describe the technique of inguinal lymphangiography. [3]
- c) Discuss techniques of thoracic duct embolization in patients with massive chylothorax. [4]

**Question Number : 9 Question Id : 32718729212 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Describe the indications and technique of hydrodissection for image guided biopsy. [3]
- b) Discuss the advantages and disadvantages of transjugular liver biopsy versus percutaneous liver biopsy. [4]
- c) Discuss sampling technique of malignant common bile duct stricture during percutaneous transhepatic biliary drainage. [3]

**Question Number : 10 Question Id : 32718729213 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Discuss patient selection criteria for catheter directed thrombolysis in pulmonary thromboembolism. [3]
- b) Discuss technique of catheter directed thrombolysis in pulmonary thromboembolism. [3]
- c) Discuss contraindications and complications of catheter directed thrombolysis in pulmonary thromboembolism. [4]