

# National Board of Examinations

**Question Paper Name :** DrNB INTERVENTIONAL RADIOLOGY Paper2  
**Subject Name :** DrNB INTERVENTIONAL RADIOLOGY Paper2  
**Duration :** 180  
**Total Marks :** 100  
**Display Marks:** No

**Maximum Instruction Time :** 0

**Question Number : 1 Question Id : 32718740994 Consider As Subjective : Yes**

**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) Clinical indications for performing osteoplasty. [3]
- b) Types of image guidance in osteoplasty. [3]
- c) Complications of vertebroplasty done for vertebral collapse at D4 level. [4]

**Question Number : 2 Question Id : 32718740995 Consider As Subjective : Yes**

- a) Describe the various vascular complications of liver transplant and describe the role of interventional radiology in their treatment. [4]
- b) Briefly describe the role of IR in managing biliary complications following liver transplant. [3]
- c) What is the role of image-guided biopsy in the monitoring and management of liver transplant rejection or disease recurrence? [3]

**Question Number : 3 Question Id : 32718740996 Consider As Subjective : Yes**

- a) What are the indications and patient selection criteria for renal ablation? [4]
- b) What is the role and technique of biopsy before ablation? [3]
- c) Compare the various ablative techniques available for renal tumor ablation. [3]

**Question Number : 4 Question Id : 32718740997 Consider As Subjective : Yes**

- a) What are the current IR techniques available for managing pancreatic fluid collections, and how would you decide between percutaneous drainage, endoscopic, and surgical options? [3]
- b) What is the role of irreversible electroporation (IRE) in managing pancreatic tumors? [3]
- c) What are the most common vascular complications encountered during pancreatic interventions and their management by Interventional radiology? [4]

**Question Number : 5 Question Id : 32718740998 Consider As Subjective : Yes**

- a) Describe the imaging work up for a suspected case of hepatic venous outflow obstruction. [3]
- b) What are the indications of various endovascular procedures in the management of hepatic venous outflow obstruction? [3]
- c) What are the complications which may occur during endovascular management of hepatic venous outflow obstruction and how to manage them? [4]

**Question Number : 6 Question Id : 32718740999 Consider As Subjective : Yes**

- a) What is the principle behind genicular artery embolization (GAE) in knee osteoarthritis, and how does it differ from other non-surgical interventions? [4]
- b) What are the patient selection criteria, procedural technique, and embolic agents most commonly used in IR-based management of knee OA? [3]
- c) What evidence exists regarding the efficacy and safety profile of genicular artery embolization for pain relief and functional improvement in knee osteoarthritis? [3]

**Question Number : 7 Question Id : 32718741000 Consider As Subjective : Yes**

- a) Describe the types of aortic aneurysms. [2]
- b) Describe endovascular treatment options for thoracic aortic aneurysm. [3]
- c) What are short term and long term complications of aortic stenting and management strategies for treating complications? [5]

**Question Number : 8 Question Id : 32718741001 Consider As Subjective : Yes**

- a) Describe the role of diagnostic imaging in diagnosis and evaluation of abernethy malformations. [4]
- b) What are the interventional radiology options for managing Type II abernethy malformation? [3]
- c) What are the complications of endovascular shunt occlusion in abernethy malformation? [3]

**Question Number : 9 Question Id : 32718741002 Consider As Subjective : Yes**

Trans arterial radio embolisation (TARE):

- a) What are the indications of TARE in management of liver tumors? [3]
- b) What pre-procedural work up and planning is required before TARE? [3]
- c) Compare in tabular form the difference between results of TACE, systemic therapy, SBRT and TARE. [4]

**Question Number : 10 Question Id : 32718741003 Consider As Subjective : Yes**

Pulmonary embolism (PE):

- a) Describe the imaging and laboratory investigations in a suspected case of pulmonary embolism. [3]
- b) What interventional radiology (IR) techniques are available for PE management? [3]
- c) What is the current evidence to compare IR guided interventions vs anticoagulation in management of PE? [4]