

# National Board of Examinations

<b>Question Paper Name :</b>	DrNB Medical Oncology Paper1
<b>Subject Name :</b>	DrNB Medical Oncology Paper1
<b>Creation Date :</b>	2023-04-25 11:44:47
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<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## DrNB Medical Oncology Paper1

<b>Group Number :</b>	1
<b>Group Id :</b>	327187738
<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>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## DrNB Medical Oncology Paper1

<b>Section Id :</b>	327187741
<b>Section Number :</b>	1
<b>Section type :</b>	Offline

<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	327187745
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 32718720712 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

1. a) Discuss the fundamental principles of radiobiology. [4]
- b) Principles of combining anticancer agents with radiation therapy. [3]
- c) Drugs that affect radiation sensitivity. [3]

**Question Number : 2 Question Id : 32718720713 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Major types of somatic mutations in malignant tumours. [2]
- b) Knudson's two-hit hypothesis. [4]
- c) Testing for germ line and somatic mutations. [4]

**Question Number : 3 Question Id : 32718720714 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Autophagy and its role in carcinogenesis. [3]
- b) Constituent cell types of tumor microenvironment. [3]
- c) Explain impact of tumour microenvironment for therapy of multiple myeloma. [4]

**Question Number : 4 Question Id : 32718720715 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) List chemotherapeutic agents known to cause pulmonary toxicity. [3]
- b) Mechanism of bleomycin induced pulmonary toxicity. [3]
- c) Imaging features, and management of bleomycin induced pulmonary toxicity. [4]

**Question Number : 5 Question Id : 32718720716 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Mechanism of action, indications, and adverse effects of:

- a) Inotuzumab ozogamicin. [5]
- b) Polatuzumab vedotin. [5]

**Question Number : 6 Question Id : 32718720717 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Enumerate epigenetic abnormalities in cancer and explain with examples. [5]
- b) Name 2 drugs (based on epigenetic mechanism), their efficacy and side effects in the treatment of hematological malignancies. [5]

**Question Number : 7 Question Id : 32718720718 Question Type : SUBJECTIVE Consider As**

**Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Risk factors for prostate cancer. [3]
- b) Prostate specific antigen (PSA). [3]
- c) List investigations in a case of metastatic prostate cancer with rationale. [4]

**Question Number : 8 Question Id : 32718720719 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) List the drugs used during induction therapy of acute lymphoblastic leukemia (ALL), and explain their mechanism of actions. [4]
- b) CNS prophylaxis in ALL. [3]
- c) Discuss briefly the pharmacogenomics of 6-MP (6-mercaptopurine) and 5-FU. [3]

**Question Number : 9 Question Id : 32718720720 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Discuss Phase II clinical trials. [4]
- b) Cohort studies and their importance. [3]
- c) Seamless Phase II/III designs. [3]

**Question Number : 10 Question Id : 32718720721 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

- a) Name common performance scores used in oncology both for adults and children, and describe one in each category. [4]
- b) Dose dense anticancer therapy with examples where it is useful and where it has failed. [3]
- c) How do you adjust drug dosing of anticancer drugs for obese patients and those with

amputation? [3]