

National Board of Examinations

Question Paper Name :	DrNB Medical Oncology Paper1
Subject Name :	DrNB Medical Oncology Paper1
Creation Date :	2023-10-15 14:11:58
Duration :	180
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DrNB Medical Oncology Paper1

Group Number :	1
Group Id :	3271872521
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

DrNB Medical Oncology Paper1

Section Id :	3271872524
Section Number :	1
Section type :	Offline

Mandatory or Optional :	Mandatory
Number of Questions to be attempted :	10
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872528
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718725443 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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) Discuss tumor microenvironment in cancer. [5]
- b) Describe the clinical implications of hallmarks of cancer in current therapeutic strategies. [5]

Question Number : 2 Question Id : 32718725444 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Discuss basic principles, technical considerations and clinical application of minimal residual disease in hematological malignancies. [3+3+4]

Question Number : 3 Question Id : 32718725445 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) Hypofractionation of radiotherapy: Concept and clinical application. [4]
- b) Proton therapy. [3]
- c) Radio-sensitizers. [3]

Question Number : 4 Question Id : 32718725446 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) Microbiome and cancer including its clinical implications on treatment. [4]
- b) Cellular plasticity in cancer including few examples from clinical setting. [3]
- c) Role of autophagy in carcinogenesis. [3]

Question Number : 5 Question Id : 32718725447 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 about statistical considerations in analysis of a randomized controlled trial. [3]
- b) Write briefly about conventional 3+3 design used in phase 1 trials of anticancer drugs and challenges of its applications in targeted drugs. [3]
- c) What are basket and umbrella trial designs? Write with some examples of known clinical trials using these designs. [4]

Question Number : 6 Question Id : 32718725448 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) Modalities of chemo-mobilization in autologous HSCT. [3]
- b) Explain the concept of synthetic lethality and its successful clinical application in oncology. [4]

c) Discuss tissue agnostic treatment approach in oncology with some examples. [3]

Question Number : 7 Question Id : 32718725449 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Discuss mechanism of action, recommended dose, indications and common side effects of the following drugs:

- a) Trastuzumab dreuxetan. [2]
- b) Amivantamab. [2]
- c) Brentuximab vedotin. [2]
- d) Selpercatinib. [2]
- e) Lorlatinib. [2]

Question Number : 8 Question Id : 32718725450 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) Hospital based cancer registries in India. [4]
- b) Cervical cancer screening in India. [3]
- c) Hospice care. [3]

Question Number : 9 Question Id : 32718725451 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) Bispecific T cell engagers (BiTES). [4]
- b) CAR T cell therapy with clinical applications. [6]

Question Number : 10 Question Id : 32718725452 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 40-year-old female with breast cancer comes to your clinic. Her mother had ovarian cancer and died at the age of 60 years and maternal uncle had prostate cancer at the age of 65 and alive. She has 2 younger sisters and 1 daughter:

- a) Draw a three-generation pedigree chart with appropriate symbols. [3]
- b) Discuss the genetic risks in the family in terms of possible hereditary syndromes. [3]
- c) Discuss your strategy of genetic testing and feasibility of risk reduction advice for the healthy family members. [4]