

National Board of Examinations

Question Paper Name :	DNB Radiation Oncology Paper4
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Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Radiation Oncology Paper4

Group Number :	1
Group Id :	3271871400
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

DNB Radiation Oncology Paper4

Section Id :	3271871403
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 : 3271871407

Question Shuffling Allowed : No

Is Section Default? : null

Question Number : 1 Question Id : 32718713082 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) Why motion management strategy is important in radiation therapy? [4]
- b) Write briefly three techniques used for it. [6]

Question Number : 2 Question Id : 32718713083 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) Therapeutic ratio & Therapeutic window. [3]
- b) Describe the chemical means of modifying the Therapeutic ratio and Therapeutic window. [3]
- c) Describe the physical means of modifying the Therapeutic ratio & Therapeutic window. [4]

Question Number : 3 Question Id : 32718713084 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 various techniques used for imaging of bone metastasis. [6]
- b) RECIST vs PERCIST criteria. [4]

Question Number : 4 Question Id : 32718713085 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 currently used isotopes for high dose rate brachytherapy. Write advantages and disadvantages of each. [4]
- b) Describe role of brachytherapy in:
 - i) Carcinoma oral cavity. [3]
 - ii) Carcinoma anal canal. [3]

Question Number : 5 Question Id : 32718713086 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) Role and application of surface mould therapy in skin cancer. [5]
- b) GEC-ESTRO recommendations of ICRT of cervix. [5]

Question Number : 6 Question Id : 32718713087 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

What is genetic counseling? Mention five cancers associated genetically. What will be your policy for a lady with strong family history and having BRCA 1 and BRCA 2 mutations? [2+3+5]

Question Number : 7 Question Id : 32718713088 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) QUANTEC vs HyTEC. [5]

b) Mention the organ at risk along with their dose constraints in IMRT planning of a case of Ca Rectum. [5]

Question Number : 8 Question Id : 32718713089 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Write short note on sentinel lymph node biopsy. Evidence based recent changes in practice in a patient of Carcinoma breast after sentinel lymph node biopsy. [5+5]

Question Number : 9 Question Id : 32718713090 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) Hyperthermia and Radiation. [7]

b) What is thermal dose equivalent? [3]

Question Number : 10 Question Id : 32718713091 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Define relevance of liquid biopsy in malignant tumours. Enumerate indications and discuss its role in monitoring disease. [3+3+4]