

National Board of Examinations

Question Paper Name : DNB Radiation Oncology Paper1
Subject Name : DNB Radiation Oncology Paper1
Duration : 182
Total Marks : 100
Display Marks: No

Maximum Instruction Time : 0
Is Section Default? : No

Question Number : 1 Question Id : 32718744349 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) Anatomy and lymphatic drainage of breast. [5]
- b) Anatomy and lymphatic drainage of prostate. [5]

Question Number : 2 Question Id : 32718744350 Consider As Subjective : Yes

- a) Explain depth dose curve. [3]
- b) Depth dose curve of electron, proton, Co60 gamma rays, 6 MV photon, 10 MV photon, and 15 MV photon energies. [3]
- c) Rationale and clinical application of Wedge. [4]

Question Number : 3 Question Id : 32718744351 Consider As Subjective : Yes

- a) PDD (percentage depth dose) curve. [3]
- b) Characteristics of electron PDD curves. [3]
- c) Clinical uses of electron beam. [4]

Question Number : 4 Question Id : 32718744352 Consider As Subjective : Yes

- a) Principles of hyperthermia. [3]
- b) Photodynamic therapy. [4]
- c) Integral dose. [3]

Question Number : 5 Question Id : 32718744353 Consider As Subjective : Yes

- a) Biodosimetry. [3]
- b) Survey meter and its uses. [3]
- c) Ion chamber and its types. [4]

Question Number : 6 Question Id : 32718744354 Consider As Subjective : Yes

- a) Cross sectional study. [3]
- b) Forest plot. [3]
- c) Phase II clinical trial. [4]

Question Number : 7 Question Id : 32718744355 Consider As Subjective : Yes

- a) Various types of cancer registries in India and the benefits. [5]
- b) Etiological factors for common cancers in India. [5]

Question Number : 8 Question Id : 32718744356 Consider As Subjective : Yes

- a) ALARA and its principle, with special reference to current scenario. [3]
- b) Dose limits for public and radiation workers. [4]
- c) Write a short note on half value thickness, with examples. [3]

Question Number : 9 Question Id : 32718744357 Consider As Subjective : Yes

- a) Tissue air ratio. [3]
- b) Tumor angiogenesis. [3]
- c) Follow-up of a treated case of locoregionally advanced carcinoma cervix. [4]

Question Number : 10 Question Id : 32718744358 Consider As Subjective : Yes

- a) Observational vs experimental study. [4]
- b) Cost-benefit analysis of cancer vaccines. [3]
- c) CAR T-cell therapy. [3]