

MNJ INSTITUTE OF ONCOLOGY AND REGIONAL CANCER CENTRE

DEPARTMENT OF RADIATION ONCOLOGY

INTERNAL EXAMINATIONS

2024 batch

TIME: 3 Hours

MAX MARKS: 100

Note: Answer All Questions

Give diagrammatic representation whenever necessary.

(25-07-2026)

Write a short essay on the following:

10 X10 = 100

- 1) Describe in detail the hormonal therapy in prostate cancer?
- 2) What are the different anti-microbial agents which are used in cancer treatment?
- 3) Write the mechanism of action of SERM's & Aromatase inhibitors?
- 4) Describe the HER-2 targeted therapies in breast and other cancers?
- 5) What is the mechanism of action of EGFR Tyrosine kinase Inhibitors for lung cancer? (draw suitable diagrams)
- 6) What are the molecular mechanisms of Hyperthermia & write in brief about Thermal enhancement ratio & HIPEC?
- 7) Describe in detail about BNCT (Boron Neutron Capture Therapy)?
- 8) Describe the radiobiology of Reirradiation & its effect on early and late responding tissues?
- 9) Carbon ion therapy- Mechanisms, Uses & implications?
- 10) Describe in detail about Hydroxyurea & Thalidomide?