

# Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Radiotherapy Technology Examination - OCT-2019

Time: Three Hours Max. Marks: 60 Marks

## Principles & Practice of radiotherapy (RS2) O.P. CODE: 2916

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

## Section - A

# LONG ESSAYS (Answer any One)

1 x 10 = 10 Marks

- Describe in detail the process involved in radiotherapy planning of a patient with oral cancer. Elaborate on the mould room techniques used and simulation techniques used.
- Outline the staging for carcinoma of the rectum. What is the usual prescription for radiotherapy for pT3 No disease? Describe how you will position, plan simulate and calculate the dose for one technique for External Beam Radiotherapy.

# SHORT ESSAYS (Answer any Two)

2 x 5 = 10 Marks

- Describe in brief an intracavitory brachytherapy procedure and its simulation procedure
- Tomotherapy
- Pediatric radiotherapy

# SHORT ANSWERS (Answer any Five)

5 x 2 = 10 Marks

- Mould
- Normal tissue shielding methods
- G2-M phase of cell cycle
- Skin cancers
- Boost in Radiotherapy
- 11. Breast cone

#### Section - B

## LONG ESSAYS (Answer any One)

1 x 10 = 10 Marks

- Describe the emergency procedure to be followed by the technologist in Telecobalt machine when the source get stuck during treatment of a patient.
- Describe in detail the procedures involved in radiotherapy planning of a patient with carcinoma bladder, elaborate on the mould room techniques used and simulation techniques used.

# SHORT ESSAYS (Answer any Two)

2 x 5 = 10 Marks

- Personal monitoring devices used during radiotherapy
- IGRT
- Wedges

## SHORT ANSWERS (Answer any Five)

5 x 2 = 10 Marks

- Cyber knife
- 18. OER
- Inward planning
- 20. MLC
- 21. Iodine 131
- 22. SRS

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