Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Diploma Examination – 02-Jan-2025

Time: Three Hours | Max. Marks: 100 Marks

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)
PAPER- I (RS-2/RS-3)
Q. P. CODE: 7151

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

Answer All The Questions | 10 x 10 = 100 Marks

1. Compare and Contrast LINAC from a cobalt unit.
2. What are isodose charts? Demonstrate how it changes with use of a shield and a wedge.
3. Gamma knife.
4. Multi leaf collimator.
5. Tissue Air Ratio (TAR).
6. T.L.D
7. Neutron beam therapy.
8. Gamma zone monitor.
9. Radiation induced lung disease.
10. Discuss the anatomy and lymphatic drainage of Parotid gland and its application for a radiation oncologist.

Post Graduate Diploma Examination – 04-Jan-2025

Time: Three Hours | Max. Marks: 100 Marks

Diploma in Medical Radiotherapy (D.M.R.T)
PAPER - II (RS-2/RS-3)
Q. P. CODE: 7152

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

Answer All The Questions | 10 x 10 = 100 Marks

1. What are the Para neoplastic syndromes associated with Lung Cancer? What is the Role of prophylactic cranial irradiation in small cell carcinoma of Lung and explain the technique and Dose.
2. Explain the Rationale of Neo Adjuvant, Adjuvant and Concomitant Chemotherapy.
3. Write about craniospinal irradiation, indications, simulation, techniques and dose schedules.
4. Write about – a) Morphine b) Molecular classification of Breast Cancer.
5. Write about – a) Capacitabine b) Bleomycin.
6. Role of Brachytherapy in Naso pharyngeal Cancer
7. Hormonal treatment for prostate cancer
8. Oncological emergencies in Radiotherapy
9. Electron beam irradiation
10. a) Lobular Carcinoma of the Breast b) Osteo Radio Necrosis

Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Diploma Examination – 06-Jan-2025

Time: Three Hours | Max. Marks: 100 Marks

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)
PAPER - III (RS-2/RS-3)
Q. P. CODE: 7153

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

Answer All The Questions | 10 x 10 = 100 Marks

1. Radiotherapy technique in carcinoma tongue and their complication.
2. Management of anaplastic thyroid cancer.
3. Management of triple negative breast cancer.
4. Compare and contrast IMRT with Brachytherapy.
5. ICRU 38
6. Retinoblastoma.
7. Management of High-grade endometrial cancer stage-II
8. Brachytherapy technique in cancer cervix.
9. Staging evaluation in carcinoma ovary.
10. Management of Bone secondaries.

Post Graduate Diploma Examination – 26-May-2025

Time: Three Hours | Max. Marks: 100 Marks

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)
PAPER- I (RS-2/RS-3)
Q. P. CODE: 7151

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

Answer All The Questions | 10 x 10 = 100 Marks

1. Enumerate Radioactive Isotopes used in interstitial Brachytherapy.
2. Describe Anatomy and Lymphatic drainage of Naso Pharynx.
3. Basic principles in Radiation protection
4. Write short notes on a) Cone Beam CT b) Hybrid IMRT.
5. Total skin electron irradiation
6. Describe about the Cell Cycle and its relevance in Radiotherapy and Chemotherapy.
7. Write short notes on a) Early and Late effects of Radiation b) Apoptosis.
8. Explain about – a) α / β Ratio b) Effects of Radiation on CNS and Kidney.
9. Discuss about the Radiation effects on Lung and Discuss the management of Radiation Pneumonitis.
10. Write short notes on a) Multi leaf Collimeter b) Radio Sensitivity and Radio Curability.

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Diploma Examination – 28-May-2025

Time: Three Hours | Max. Marks: 100 Marks

Diploma in Medical Radiotherapy (D.M.R.T)
PAPER- II (RS-2/RS-3)
Q. P. CODE: 7152

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

Answer All The Questions | 10 x 10 = 100 Marks

1. What is meant by Organ preservation in Oncology? Explain the technique of Radiotherapy in Bladder Cancer management.
2. Write about methods of Palliation for Dysphagia in Metastatic Esophageal Cancer.
3. Write about WHO classification of CNS Tumors. Explain the role, technique and dose of SRS in CNS Tumors.
4. HPV infection and Vaccination
5. Describe SBRT in Lung Cancer.
6. Role of Radiotherapy in Benign Tumors
7. How do you prevent and manage Radiation proctitis?
8. Write about – a) Paclitaxel b) Adriamycin.
9. Write about – a) Cysto Sarcoma Phylloides b) Gastro Intestinal Stromal Tumor.
10. Short notes on a) Metronomic chemotherapy b) Second Malignancy

Post Graduate Diploma Examination – 30-May-2025

Time: Three Hours | Max. Marks: 100 Marks

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)
PAPER- III (RS-2/RS-3)
Q. P. CODE: 7153

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

Answer All The Questions | 10 x 10 = 100 Marks

1. Describe the clinical features and diagnosis of acute lymphatic leukaemia in a 10 yr old boy.
2. How do you plan adjuvant radiation after BCS?
3. Plasmacytoma.
4. Osteosarcoma.
5. Radiotherapy for Ca prostate.
6. Management of mucositis
7. Intraoperative radiotherapy.
8. Malignant pleural effusion.
9. Discuss the advantages and disadvantages of IMRT with examples.
10. Image guided radiotherapy.

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Diploma Examination – 24/Sep/2025

Time: Three Hours | Max. Marks: 100 Marks

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)

PAPER- I (RS-2/RS-3)

Q. P. CODE: 7151

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

Answer All The Questions | 10 x 10 = 100 Marks

1. Discuss the interaction of photon with matter.
2. Time, dose fractionation.
3. Explain PDD and the factors on which it depends.
4. Hypoxia in tumours.
5. Anatomy and lymphatic drainage of rectum and anal canal.
6. Functional imaging of Oncology.
7. Radiation carcinogenesis.
8. QA of LINAC machine.
9. Pathological and molecular classification Breast Cancer.
10. Radiation protection in radiation worker.

Post Graduate Diploma Examination – 26/Sep/2025

Time: Three Hours | Max. Marks: 100

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)

PAPER – II (RS-2/RS-3)

Q.P. CODE: 7152

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary.

Answer All The Questions | 10 x 10 = 100 Marks

1. Clinical trials relevant to hypofractionation in Breast Cancer.
2. Role of SBRT in treatment of NSCLC.
3. Prophylactic cranial irradiation in malignancy.
4. Wilm’s tumour.
5. Role of brachytherapy in endometrial cancer.
6. Classify CNS tumours and discuss radiation technique in GBM.
7. Classify testicular tumour and discuss the treatment of stage II seminoma.
8. Treatment of stage I, Diffuse large B cell lymphoma of tonsil.
9. Hippocampal sparing conformal radiation.
10. Proton beam therapy.

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Diploma Examination – 29/Sep/2025

Time: Three Hours | Max. Marks: 100

DIPLOMA IN MEDICAL RADIOTHERAPY (D.M.R.T)
PAPER- III
Q. P. CODE: 7153

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

Answer All The Questions | 10 x 10 = 100 Marks

1. What is SRS and how do you treat a patient with AV malformation with SRS?
2. Role of radiotherapy for thyroid cancers
3. Hormonal therapy in Prostate cancer.
4. Chondrosarcoma.
5. Glioblastoma multiforme.
6. Cancer cachexia.
7. Management of Febrile neutropenia.
8. Intraluminal brachytherapy.
9. Squamous Carcinoma of Skin.
10. Basics of Intracavitary application for cervical cancer.