Rajiv Gandhi University of Health Sciences, Karnataka

Post-Graduate Degree Examination – OCTOBER 2015

Time: Three Hours **Max. Marks: 100 Marks**

MD RADIOTHERAPY
PAPER – I (Revised Scheme)
Applied Anatomy, Pathology, Radiation Physics, Radio Biology
Q. P. CODE: 7481

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

LONG ESSAYS **2 x 20 = 40 Marks**

1. Enumerate the differences between Kilovoltage and Supervoltage X-rays. Discuss their interaction with bone.
2. Describe lymphatic drainage of the female breast. Discuss the importance of "Sentinel lymph node" and various modes to outline it for histopathological evaluation.

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Enumerate various causes of anaemia in cancer. Discuss its relavence to radiotherapy.
4. Define cell death. What are differences between necrosis and apoptosis
5. Write a note on "Serum LDH" and its importance in tumours staging.
6. Describe the steps in detail you, adopt for reduction of radiation doses to your patients.
7. "Afterloading in Brachy therapy" is it really useful?
8. "Tumour boards" and their significance in comprehensive cancer care.

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Rajiv Gandhi University of Health Sciences

M.D. Degree Examination - OCTOBER 2015

[Time: 3 Hours] [Max. Marks: 100]

RADIOTHERAPY

PRINCIPLES AND PRACTICE OF RADIOTHERAPY

PAPER – III (Revised Scheme)

Q.P. CODE : 7483

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

LONG ESSAY **2 X 20 = 40 Marks**

1. Describe signs, symptoms and diagnostic characteristics of intracranial tumors and management of high grade glio mas.
2. Describe management of neck in unknown primary

SHORT ESSAY **6 X 10 = 60 Marks**

3. Kaposis's sarcoma
4. TPN (Total Parentral Nutrition)
5. Extramedullary tumors of spinal cord
6. Primary Lymphoma of CNS
7. Cutaneous T – cell lymphomas
8. Maligant melanoma skin

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Degree Examination – OCTOBER 2015

Time: Three Hours **Max. Marks: 100 Marks**

MD RADIOTHERAPY

PAPER- IV (Revised Scheme)

Principle and Practice of Radiatherapy of thoracic region, including breast, genito urinary system, lymphoretichlar system, musculo-skeletal system and paediatric tumors

Q. P. CODE: 7484

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

LONG ESSAYS **2 x 20 = 40 Marks**

1. Medical treatment of Metastatic Breast cancer
2. Discuss the management of stage I non seminomatous Germ cell tumor (NSGCT) of Testis in a 30 year old man.

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Management of (CLL) chronic Lymphocytic leukemia
4. Accelerated fractionation
5. Mediastinal Tumors
6. Ewing's sarcoma
7. Medulloblastoma - role of radiotherapy
8. Treatment strategy for Endometrial carcinoma stage III

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Degree Examination – MAY 2015

Time: Three Hours **Max. Marks: 100 Marks**

Diploma in MEDICAL RADIOTHERAPY (D.M.R.T)

PAPER- II

(Revised Scheme)

Q. P. CODE: 7152

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

LONG ESSAYS **2 x 20 = 40 Marks**

1. Write the FIGO staging of cervical cancer. What are the necessary evaluations required for the staging? How will you treat a patient with stage IIB cancer cervix?
2. What is the role of Neoadjuvant chemo-radiotherapy in rectal cancer? How do you plan the patient for radiotherapy? Write on the common acute side effects of the treatment.

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Krukenburg tumors
4. Malignant pleural effusion
5. What are the prognostic factors in Ewing's sarcoma? Write briefly on the role of radiotherapy in the management of Ewing's sarcoma.
6. Permanent interstitial implants
7. Techniques of Total body Irradiation (TBI)
8. Screening mammography

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Degree Examination – MAY 2015

Time: Three Hours **Max. Marks: 100 Marks**

Diploma in MEDICAL RADIOTHERAPY (D.M.R.T)

PAPER- II

(Revised Scheme)

Q. P. CODE: 7152

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAYS **2 x 20 = 40 Marks**

1. Describe the cell cycle in detail. Discuss how radiation acts on malignant cells.
2. Describe in detail about the acute reactions seen in skin and mucosa during normal course of radiation treatment. Discuss pathophysiology.

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Cervical cancer screening
4. Radio sensitivity
5. Dose fractionation in radiotherapy
6. Multiple field treatment
7. Therapeutic ratio
8. Radiation induced xerostoma and its management

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Rajiv Gandhi University of Health Sciences

Post-Graduate Diploma Examination – MAY 2015

[Time: 3 Hours] [Max. Marks: 100]

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

PAPER – III (Revised Scheme)

Q.P. CODE : 7153

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

LONG ESSAY **2 X 20 = 40 Marks**

1. Discuss the management of T1a N0 M0 glottic cancer
2. Discuss the management of squamous cell carcinoma of the anal canal

SHORT ESSAY **6 X 10 = 60 Marks**

3. Discuss the role of prophylactic cranial irradiation
4. Write a summary of radiotherapy in non-small cell lung cancer
5. Discuss the role of intra-operative brachytherapy in extremity soft tissue sarcoma
6. Give a summary of radioiodine therapy in cancer thyroid
7. Describe the radiotherapy techniques for irradiation of Ewing's sarcoma of the bone
8. Role of radiotherapy in Retinoblastoma

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Rajiv Gandhi University of Health Sciences, Karnataka

Post-Graduate Degree Examination – APRIL/MAY 2015

Time: Three Hours **Max. Marks: 100**

Marks

MD RADIOTHERAPY
PAPER – I (Revised Scheme)
Applied Anatomy, Pathology, Radiation Physics, Radio Biology
Q. P. CODE: 7481

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

LONG ESSAYS **2 x 20 = 40 Marks**

1. Describe with suitable diagrams a linear accelerator. Enumerate its advantages and disadvantages over cobalt–60 teletherapy unit
2. Describe radiotherapy planning of pituitary adenoma. What are the side effects?

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Classify mediastinal tumours according to their anatomical location.
4. Describe various steps taken as precaution that you will adopt to reduce radiation accidents in your department.
5. What are tumour markers? Describe their utility in testicular cancer.
6. How will you plan "Iridium-192 Implant" in carcinoma of "Buccal mucosa"
7. Describe various histopathological prognostic criteria.
8. Trismus – its causes and prevention in cancer

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Rajiv Gandhi University of Health Sciences

M.D. Degree Examination – MAY 2015

[Time: 3 Hours] [Max. Marks: 100]

RADIOTHERAPY
CHEMOTHERAPY-PREVENTION AND PALLIATION

PAPER – II (Revised Scheme)

Q.P. CODE : 7482

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

LONG ESSAY **2 X 20 = 40 Marks**

1. Describe the chemotherapy induced complications and the precautions and their management
2. Describe how do you manage a case presented with mediastinal mass.

SHORT ESSAY **6 X 10 = 60 Marks**

3. Pet – CT
4. Cell kinetics in chemotherapy
5. Targetted molecules in cancer management
6. Screening of breast cancer
7. Hypercalcaemia
8. Pain- management in incurable cancer

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Rajiv Gandhi University of Health Sciences, Karnataka

Post Graduate Degree Examination – MAY 2015

Time: Three Hours **Max. Marks: 100 Marks**

MD RADIOTHERAPY

PAPER- III (Revised Scheme)

General Principles of Radiotherapy and Oncology. Principles and Practice of Radiotherapy of skin, head & neck, central and peripheral nervous system and GI tract tumors.

Q. P. CODE: 7483

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

LONG ESSAYS **2 x 20 = 40 Marks**

1. Describe the staging of carcinoma of Maxillary antrum. How do you manage Stage T3 No Mo carcinoma of the maxillary antrum?

2. Describe the clinical presentation, staging and role of adjuvant therapy in Gastric Cancer

SHORT ESSAYS **6 x 10 = 60 Marks**

3. Ependymoma

4. Basal cell carcinoma management

5. Amifostine

6. Organ conservation treatment in head and Neck cancer

7. Radiotherapy in Benign conditions

8. Hepatocellular carcinoma (HCC) management

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Rajiv Gandhi University of Health Sciences

M.D. Degree Examination – MAY 2015

[Time: 3 Hours] [Max. Marks: 100]

RADIOTHERAPY

PAPER – IV (Revised Scheme)

Q.P. CODE : 7484

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

LONG ESSAY **2 X 20 = 40 Marks**

1. Describe the staging of carcinoma cervix and discuss the management of carcinoma of cervix stage II in detail
2. Describe how will you manage a patient presented with hematuria in both male & female

SHORT ESSAY **6 X 10 = 60 Marks**

3. Ewing's sarcoma
4. Abdominal lymphoma – management
5. Colony stimulating factors
6. Radiotherapy techniques in seminoma testis
7. Medulloblastoma – role of radiotherapy
8. IMRT Vs IGRT in solitary lung mass

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