Rajiv Gandhi University of Health Sciences, Karnataka

MD Degree Examination – MAY-2019

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

Radiotherapy - PAPER – I
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 The Questions **10 x 10 = 100 Marks**

1. Discuss in detail DNA strand breaks and chromosomal aberrations.
2. Discuss the role of radiotherapy in the management of carcinoma of the head of pancreas.
3. Dose equivalent limits.
4. Pathologic classification of Lung Cancer and mention the prognostic factors.
5. ICRU 62.
6. Pathologic classification of soft tissue Sarcoma. Mention the Prognostic factors.
7. Robotic radiotherapy.
8. HER2 neu.
9. Beam modifying devices.
10. Radioprotectors.

Rajiv Gandhi University of Health Sciences, Karnataka

.MD. Degree Examination - MAY-2019

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

RADIOTHERAPY - PAPER- II
Principles & Practice of Chemotherapy in Malignant Diseases, Preventive Oncology, Palliative Care
Q. P. CODE: 7482

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 pain management in oncology.
2. Describe emergenices in radiotherapy and describe any one in detail.
3. Principles of concurrent chemoradiation.
4. Targeted therapy.
5. Lifestyle and cancer.
6. Use of (18F) FDG – PET in clinical oncology.
7. Tumor Lysis syndrome.
8. RT in Benign tumors.
9. Cisplatin.
10. Chemotherapy for anal cancer.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – MAY-2019

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

RADIOTHERAPY - PAPER- III

General Principles of Radiotherapy and Oncology,
Principles and Practice of Radiotherapy of skin, Head & neck,
Central and Peripheral Nervous System, GI Tract Tumors.

Q. P. CODE: 7483

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. Classify CNS tumors and management of low grade gliomas.
2. Basal cell carcinoma.
3. Management of neck secondaries of unknown primary.
4. Total parenteral nutrition.
5. Inverse planning in IMRT.
6. Management of Mucoepidermoid carcinoma of parotid gland.
7. Post operative radiotherapy in carcinoma anterior two third of tongue.
8. Vestibular schwannoma.
9. Post cricoids carcinoma in 35 years old female-management.
10. Oligometastatic brain secondaries-partial or whole brain Radiotherapy: Discuss in detail.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – MAY-2019

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

RADIOTHERAPY - PAPER- IV

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.

Answer All The Questions **10 X 10 = 100 Marks**

1. What are the common causes of Post menopausal bleeding? Discuss its workup.
2. How will you manage T1N0M0 triple receptor negative lesion in 35 year old female?
3. Management of Giant cell tumor of Sacrum.
4. Management of Carcinoma vagina.
5. Management of metastatic non small cell lung cancer.
6. Role of radiotherapy in rectal cancer.
7. Discuss management of Urothelial carcinoma of Renal Pelvis.
8. Describe management of Osteosarcoma of lower end of Femur.
9. Radiotherapy for NHL.
10. Radiotherapy for Ewings sarcoma

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 12-Nov-2019

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

RADIOTHERAPY - PAPER – I
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 The Questions **10 x 10 = 100 Marks**

1. Hypoxic cell sensitizers.
2. Anatomy and Lympthatic drainage of the stomach.
3. Classify central nervous system and describe the pathology of ependymoma.
4. Radiation damage and repair.
5. Wedges and wedge filters.
6. Sentinel node biopsy in carcinoma breast.
7. Proton beam characteristic.
8. Dose volume histogram
9. Hyperthermia.
10. Tumor Cure Assay (TCD 50)

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 14-Nov-2019

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

RADIOTHERAPY - PAPER- II
Principles & Practice of Chemotherapy in Malignant Diseases, Preventive Oncology, Palliative Care
Q. P. CODE: 7482

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. Chemotherapy administration precautions to be taken and management of extravasation reactions.
2. Discuss cell cycle and the classification of chemotherapy based of cell cycle specificity.
3. What are monoclonal antibodies? Discuss in detail the mechanism of action, indications and toxicity monoclonal antibodies.
4. Rationale of concurrent chemo radiation and role in clinical practice.
5. What is tumour lysis syndrome and explain the Prophylaxis of it, based on risk stratification.
6. WHO pain step ladder.
7. With a suitable diagram explain the mechanism of action of Tyrosine Kinase Inhibitors and the role in treatment of lung cancers.
8. Novel check point inhibitors and the role in oncology.
9. Screening in Breast cancer.
10. National Cancer Control Programme.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 16-Nov-2019

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

RADIOTHERAPY - PAPER- III

General Principles of Radiotherapy and Oncology,
Principles and Practice of Radiotherapy of skin, Head & neck,
Central and Peripheral Nervous System, GI Tract Tumors.

Q. P. CODE: 7483

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 anatomy of Anal Canal. Briefly explain the treatment overview and radiotherapy technique of an inoperable anal canal malignancy.
2. Role and rationale of Hypofractionation in Cutaneous malignancy.
3. Molecular biology and its clinical relevance of colon cancer.
4. Preoperative treatment of advanced rectal cancer.
5. Discuss the treatment of non-metastic node positive oesophageal cancer.
6. Role of radiation in gastric cancer.
7. Discuss molecular biology of Gliomas. In detail discuss the RT indication and technique of GBM.
8. Treatment of Carcinoma T1N0M0 larynx.
9. Conformal radiation in Nasopharyngeal cancer.
10. HPV related head and neck cancers.

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination - 18-Nov-2019

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

RADIOTHERAPY - PAPER- IV

Principle and Practice of Radiotherapy of Thoracic Region, Including Breast, Genito Urinary System, Lymphoreticular 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.

Answer All The Questions **10 X 10 = 100 Marks**

1. Describe management of Ca Breast T2NOMO in rural India.
2. Describe the role of palliative chemo in metastatic Ca Colon.
3. Rhabdomyosarcoma.
4. Invasive thymoma.
5. Discuss the management of SVC obstruction syndrome.
6. Organ preservation in cancer.
7. Radiotherapy for small cell lung cancer.
8. Management of stage II endometrial cancer.
9. Total skin Electron Therapy.
10. Prophylactic cranial Radiation.

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