THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0524] **MAY 2024** **Sub. Code: 4080**

M.D. DEGREE EXAMINATION

BRANCH XXVI - RADIATION ONCOLOGY

PAPER IV – RECENT DEVELOPMENTS IN ONCOLOGY, CANCER CONTROL PROGRAMMES, RESEARCH METHODOLOGIES IN ONCOLOGY

Q.P. Code: 204080

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the potential mechanisms of action of Immunotherapy and How could this be used in combination with Chemotherapy and Radiotherapy in Cancer Treatment.

2. Radiotherapy management of Benign Malignancies.

II. Write notes on: **(10 x 7 = 70)**

1. Carcinoma Post Cricoid.
2. Retinoblastoma.
3. Basal cell carcinoma.
4. Radiomics in Cancer treatment.
5. Brentuximab Vedotin.
6. HPV malignancy.
7. Tumor suppressor genes.
8. Geftinib.
9. High Precision Radiotherapy.
10. Cyclotron.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1224] **DECEMBER 2024** **Sub. Code: 4080**
(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

RADIO THERAPY

RADIATION ONCOLOGY

PAPER IV – RECENT DEVELOPMENTS IN ONCOLOGY, CANCER CONTROL PROGRAMMES, RESEARCH METHODOLOGIES IN ONCOLOGY

Q.P. Code: 204080

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the role of radiation in the management of lymphomas.

2. Describe the rationale, basis, clinical applications and its outcome of multimodality management of cancer.

II. Write notes on: **(10 x 7 = 70)**

1. Choroidal and leptomeningeal metastasis.
2. Bortezomib and the schedules.
3. Stem cell therapy in various cancers.
4. Triple negative breast cancer.
5. Performance status.
6. Cancer genetics.
7. Quality of life.
8. Cancer vaccines.
9. Fertility preservation in oncology.
10. Infectious etiology for cancer.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MD 1025] **OCTOBER 2025** **Sub. Code: 4080**

M.D. DEGREE EXAMINATION

RADIO THERAPY

RADIATION ONCOLOGY

PAPER IV – RECENT DEVELOPMENTS IN ONCOLOGY, CANCER CONTROL PROGRAMMES, RESEARCH METHODOLOGIES IN ONCOLOGY

Q.P. Code: 204080

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the role of chemotherapy and targeted therapy in the management of cancer breast.

2. Give an account of predisposing factors and diagnostic evaluation of hepatocellular carcinoma. Discuss in detail treatment modalities available for hepatocellular carcinoma.

II. Write notes on: **(10 x 7 = 70)**

1. Bone marrow transplantation.

2. PET scan in treatment planning.

3. Bevacizumab.

4. Fertility preservation in Oncology.

5. QANTEC – Clinical application.

6. Meta-analysis.

7. Clinical Research Phases.

8. Mean, Mode and Median.

9. Erlotinib in lung cancer.

10. Accelerated Hypo fractionated Radiation Therapy.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MD 0526] **MAY 2026** **Sub. Code: 4080**

M.D. DEGREE EXAMINATION

RADIO THERAPY

RADIATION ONCOLOGY

PAPER IV – RECENT DEVELOPMENTS IN ONCOLOGY, CANCER CONTROL PROGRAMMES, RESEARCH METHODOLOGIES IN ONCOLOGY

Q.P. Code: 204080

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the role of chemotherapy and recent advances in the management of locally advanced breast cancer.

2. Describe Motion management in radiotherapy planning.

II. Write notes on: **(10 x 7 = 70)**

1. Molecular classification of Medulloblastoma.

2. Nivolumab.

3. Tyrosine Kinase Inhibitors.

4. Image Guided Radiation Therapy.

5. Tomotherapy.

6. Event free survival.

7. National Cancer Control Programme.

8. Clinical trials.

9. Retrospective studies.

10. Carbon ion therapy.

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