

Tanta University
Faculty of Medicine
Clinical Oncology Department

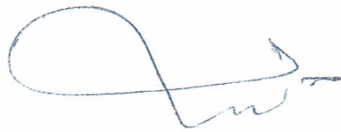
12/6/2021

Time allowed: 2 Hours

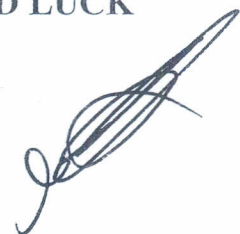
M.Sc. Exam 2nd Part
Clinical Oncology & Nuclear Medicine
Radiation Technology & Isotopes

All Questions should be answered:

- | | Marks |
|--|-------|
| 1. In cranial irradiation, define the tolerances of Organ at Risk? | 35 |
| 2. As regard the techniques for implant therapy | |
| a. Explain four categories in techniques for implant therapy? | 15 |
| b. Write about the safety of storage of the brachytherapy sources? | 15 |
| 3. What are the types of radiosurgery and its usage in clinical applications, and their side effects? | 35 |
| 4. Treatment gap can affect radiotherapy outcome explain this statement and describe strategies to deal with treatment gaps? | 35 |



GOOD LUCK



Tanta University
Faculty of Medicine
Clinical Oncology Department

17/5/2021

Time allowed : 3 Hours

M.Sc. Exam 2nd Part
Clinical Oncology & Nuclear Medicine
1st paper

All Questions should be answered:

- | | Marks |
|--|-------|
| 1- Dose fractionation radiotherapy schedules in head and neck carcinoma? | 25 |
| 2- Different treatment modalities of brain metastases in favorable versus poor prognosis patients? | 25 |
| 3- Enumerate the main conditions to consider in the differential diagnosis of MM, and explain 3 of them? | 25 |
| 4- What are the types and clinical pictures of mediastinal tumors? | 25 |

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19/5/2021

Time allowed : 3 Hours

M.Sc. Exam 2nd Part

Clinical Oncology & Nuclear Medicine

2nd paper

All Questions should be answered:

Marks

- 1- A 5 year old child is to receive craniospinal radiation therapy for a subtotally-resected medulloblastoma of the posterior fossa. There is no evidence of spread beyond the posterior fossa on MRI.
- a) Describe a suitable technique for craniospinal radiation therapy. 10
- b) Discuss the challenges in ensuring that the dose distribution is adequate for this treatment. Give examples of how the dose distribution may be optimised. 15
- 2- Enumerate the most common side effect of pelvic radiotherapy and:- 10
- a) Discuss one of the most common hematological and one of the nonhematological side effect and how to correct. 6
- b) Describe technical methods to reduce the occurrence of the pelvic side effect of radiotherapy. 9
- 3- Flare phenom in hormone dependent cancer patient? 25
- 4- What are the most negative prognostic and predictive biomarkers in a patient diagnosed with lung adenocarcinoma? And what are the recent advances in management? 25

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29/5/2021

Time allowed : 90 minutes

M.Sc. Exam 2nd Part

Clinical Oncology & Nuclear Medicine

Optional Determinant

All Questions should be answered:

- | | Marks |
|--|-------|
| 1- The rational of organ preservation in anal canal carcinoma? | 25 |
| 2- Concurrent chemo-radiotherapy in esophageal carcinoma? | 25 |

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Tanta University
Faculty of Medicine
Clinical Oncology Department

2/6/2021

Time allowed : 3 Hours

M.Sc. Exam 2nd Part

Clinical Oncology & Nuclear Medicine

Radiation Technology & Isotopes

All Questions should be answered:

Marks

- 1- Dose constraints for organ at risk (OAR) in treating locally advanced pancreatic adenocarcinoma. Discuss in brief your treatment techniques? 25
- 2- Explain the role of radiopharmaceuticals agents in management of bone metastases? 25
- 3- Adjuvant radiotherapy delineation in locally advanced cancer vulva? 25
- 4- Indications and contraindications of radioactive I¹³¹ in treatment of thyroid carcinoma and how to use it if indicated? 25

GOOD LUCK

Time allowed : 2 Hours

M.Sc. Exam 2nd Part
Clinical Oncology & Nuclear Medicine
Radiation therapy

All Questions should be answered:

- | | Marks |
|--|-------|
| 1- How to minimize treatment induced radiation induced cardiac toxicity in breast cancer patients? | 30 |
| 2- Comorbidity assessment with radiotherapy in elderly cancer patients? | 30 |
| 3- Proton therapy therapeutic ratio, the impact of dose distribution on the therapeutic ratio, potential proton therapy applications, efficacy and toxicity? | 40 |
| 4- Explain in detail the role of SBRT in NSCLC? | 35 |

GOOD LUCK



Dr. Mohamed El-Dars

