

**The West Bengal University of Health Sciences**  
**M.D. (Radiotherapy) March-April, 2020 Examination**

Paper: IV

Full Marks: 100

Time : 3 Hours

*Answer all questions*

1. A 20 year old female attending with the history of unilateral salpingo-oophorectomy for an ovarian mass and histopathology report of germ cell tumor. How do you investigate to come at a final diagnosis and further manage the case? 10
2. Define brachytherapy. What are the different forms of brachytherapy ? What is the role of brachytherapy in early cancer of the prostate ? 2+3+5
3. What is craniospinal irradiation ? Describe its indications, techniques and field matching. 2+2+3+3
4. What is oncological emergency ? How do you manage a case of superior vena caval obstruction ? 3+7
5. Define hereditary malignancies. How do you diagnose risk factors and what are the prophylactic surgical managements ? 2+5+3
6. Clonogen number at presentation and inherent radiosensitivity are the determinants of radiotherapeutic cure of malignancy: Discuss. 10
7. What is metronomic chemotherapy and its role in palliative care ? 3+7
8. What are the indications of total body irradiation ? What are the indications of hemibody irradiation ? Describe the dose and techniques of hemibody irradiation. 2+2+6
9. Define HIPEC. What are its indications and techniques ? 2+2+6
10. Describe the role of chemotherapy in multimodality management of head and neck squamous cell cancer with evidence. 10