

**B. Sc. MEDICAL TECHNOLOGY (RADIOTHERAPY) (BRT)
SEMESTER -IV EXAMINATION, JUNE-2026**

(BRT402) PRINCIPLES OF CANCER CONTROL AND ONCOLOGY CARE-II

[Time allotted: Three Hours]

[Max Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order. Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All) **(10 x 02 = 20)**

(Very short/ short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

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| <p>a. Nicotine is a chemical that can reduce the growth of cancer (True or False) (CO1)</p> <p>b. Shielding block can be used as a compensator in Carcinoma Breast (True or False) (CO1, 4)</p> <p>c. Cobalt-60 is used in Brachytherapy (True or False) (CO4)</p> <p>d. Shielding Blocks are made up of Titanium (True or False) (CO4)</p> <p>e. Wedge can be used as a compensator in Carcinoma Breast (True or False) (CO1, 4)</p> <p>f. Doxorubicin is a _____. (CO3, CO6)</p> <p style="margin-left: 20px;">i. Chemotherapy drug</p> <p style="margin-left: 20px;">ii. Immunotherapy drug</p> <p style="margin-left: 20px;">iii. Targeted Therapy drug</p> <p style="margin-left: 20px;">iv. None of the above</p> <p>g. MUPIT stands for? (CO1, CO4)</p> <p style="margin-left: 20px;">i. Multiple Universal Penile Interstitial Treatment</p> <p style="margin-left: 20px;">ii. Multipurpose Universal Perineal Interstitial Template</p> <p style="margin-left: 20px;">iii. Martinez Universal Perineal Interstitial Template</p> <p style="margin-left: 20px;">iv. None of the Above</p> | <p>h. In nutritional counseling for cancer patients, what role does a registered dietitian play? (CO2)</p> <p style="margin-left: 20px;">i. Providing surgical interventions</p> <p style="margin-left: 20px;">ii. Administering chemotherapy</p> <p style="margin-left: 20px;">iii. Offering personalized dietary guidance</p> <p style="margin-left: 20px;">iv. Focusing solely on caloric restriction</p> <p>i. How is brachytherapy typically administered in breast cancer? (CO1, 2, 3)</p> <p style="margin-left: 20px;">i. External beam radiation</p> <p style="margin-left: 20px;">ii. Oral medication</p> <p style="margin-left: 20px;">iii. Placement of radioactive sources directly into or near the tumor cavity</p> <p style="margin-left: 20px;">iv. Intravenous chemotherapy</p> <p>j. APBI is done in? (CO1, CO6)</p> <p style="margin-left: 20px;">i. Prostate cancer</p> <p style="margin-left: 20px;">ii. Carcinoma Breast</p> <p style="margin-left: 20px;">iii. Cervical Cancer</p> <p style="margin-left: 20px;">iv. None of the above</p> |
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Q. 2. Short notes/ Short answer type questions (Attempt any Five) **(05 x 04 = 20)**

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| a. Why is early diagnosis crucial in cancer, and how does it impact health outcomes? | (CO1, 2, 3) |
| b. Does Family counselling play any role in cancer management | (CO2, 7) |
| c. What all history will you take from a patient with breast cancer | (CO1, 2, 3) |
| d. Name few oncogenic viruses. Give a brief overview on cancer vaccines | (CO1, 3, 7) |
| e. What is the significance of multi-disciplinary tumor board discussions in the context of cancer treatment? | (CO1, 2, 5) |
| f. Discuss the role of Ryles tube feeding in the management of esophageal cancers. | (CO2, 7) |
| g. Describe the symptoms of head and neck cancers | (CO1, 3) |

Q. 3. Structured questions (Attempt any Three) **(03 x 10 = 30)**

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| a. Explain the concept of Infection Control. Elaborate on NABH guidelines concerning Hospital Infection Control. | (CO4, 2, 3) |
| b. Describe methods of cancer spread and also explain cancer staging | (CO1, 2, 7) |
| c. Define Best Supportive Care. Explain its significance in the treatment of cancer patients. | (CO1, 2, 7) |
| d. Write a short note on the Role of Concurrent chemotherapy in patients undergoing Radiotherapy with examples | (CO1, 2, 3) |

Q. 4. Long Answer/ Essay type questions (Attempt any Two) **(02 x 15 = 30)**

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| a. What do you mean by a healthy life style? How does it help in cancer prevention | (CO1,4) |
| b. List the types of Oncological Emergencies. How would you provide assistance to a patient with a Feeding Jejunostomy undergoing radiotherapy? | (CO1, 2, 6) |
| c. Describe etiology, symptoms, signs and management of oral cavity cancer. | (CO1, 3, 7) |