

**B.Sc. IN RADIATION THERAPY TECHNOLOGY
(BRTT)**

00104

Term-End Examination

June, 2015

**BAHI-042 : RADIOTHERAPY PROCESS - II AND
ADVANCED TECHNIQUES**

Time : 3 hours

Maximum Marks : 70

PART - A

Answer any five. Each carries 8 marks : **5x8=40**

1. Explain the following procedures for treatment of Ca. Breast : **3+3+2=8**
 - (a) Immobilisation Techniques
 - (b) Positioning with reason
 - (c) To avoid the dose to lung

2. (a) What are the instructions to be given to head and neck cancers ? **4**
(b) What are side effects for head and treatment ? **4**

3. What are the treatment modalities available for Ca. Cervix ? What are the side effects that can be expected during radiotherapy ? **4+4=8**

4. What are the radiation treatment modalities available for Ca. Oesophagus ? What are the critical structures to be spared ? Explain about beam arrangements for upper, middle and lower third oesophagus treatment. **3+2+3=8**

5. What is ImRT ? How the ImRT delivery is taken place ? What are the advantages over 3DCRT ? $3+3+2=8$
6. What are the imaging techniques available to verify the position of the patient on board ? What are the advantages of on board position verification ? $4+4=8$
7. What is brachytherapy ? What are the advantages of HDR brachytherapy ? What cases can be treated in brachytherapy ? $3+3+2=8$
8. Explain about planning and treatment procedures of Ca. Prostate. 8

PART - B

9. Write short notes on any five of the following : $6 \times 5 = 30$
- (a) Wedge filter
 - (b) Simulator
 - (c) Xerostomia
 - (d) VMAT technique
 - (e) Compensators
 - (f) Mantle field technique
 - (g) German helmet technique
 - (h) Bolus and its use
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