RADIOTHERAPY

PAPER – III

RTH/D/16/41/III

Time : 3 hours
Max. Marks : 100

Important instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1. a) Name four situations which require modification of doses of anti-neoplastic chemotherapy. 2+(4+4)
   b) Indications, mechanism of action & side affects of:
      i) Carboplatin
      ii) Sorafenib

2. a) What is EGFR? 2+2+6
   b) Name the malignancies that are associated with the over-expression of EGFR.
   c) Explain the role of EGFR targeting in three common cancers.

3. a) Name the tumours arising from metaphysis and diaphysis. 2+(2+2+2)+2
   b) Role of the following imaging in Ewing's sarcoma:
      i) Plain X-ray,
      ii) MRI scan
      iii) PET-CT scan
   c) Immunohistochemistry tests in histopathologic diagnosis of Ewing's sarcoma.

4. a) Name the features associated with a known genetic predisposition to breast carcinoma. 2+3+5
   b) Enumerate the components of risk/benefit assessment and counseling in breast cancer risk reduction.
   c) Define cancer related fatigue, its evaluation and management.

5. a) What are the viral infections associated with CNS lymphoma? 2+4+4
   b) Staging work up of CNS lymphoma
   c) Evidence for multimodality treatment and its benefit over radiotherapy alone.

P.T.O.

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6.	a)	What are the non-malignant intracranial lesions treated with radiotherapy?	5+5
	b)	Radiotherapy technique and dose of thyroid ophthalmopathy.	
7.	a)	A 50 year old lady has a newly diagnosed esophageal cancer extending from 30 to 35cm (GE junction at 40 cm).What is the role of endoscopic ultrasound and PET-CT Scan in this patient?	4+6
	b)	Treatment algorithm in the management of the patient.	
8.		Transarterial chemo-embolisation: Selection criteria, indications, contraindications & side effects.	2.5x4
9.	a)	Role of radiotherapy in small cell carcinoma lung,	4+4+2
	b)	Technique of radiotherapy and doses in small cell carcinoma lung, and	
	c)	Tolerance doses of organs at risk.	
10.	a)	Partial breast irradiation: Rationale, Techniques & results.	6+4
	b)	Molecular and genetic characteristics of Glioblastoma Multiforme with regards to: i) Prognosis ii) Management	

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