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) Diagnostic work up and staging system for multiple myeloma.
   b) Management of a clinical solitary lesion involving the sphenoid bone, labeled as plasmacytoma.

2. a) General principles of cancer pain management.
   b) Management & interventions for:
      i. Bone pain syndrome
      ii. Nerve pain syndrome

3. Diagnostic evaluation, staging and the role of multimodality therapy of osteosarcoma of the femur.

4. Total skin electron therapy with regard to indications, radiotherapeutic technique and complications.

5. Compare the role of preoperative versus postoperative chemoradiotherapy in locally advanced carcinoma rectum with regard to rationale, advantages & disadvantages, and evidence from important trials.

6. a) Mention the various predictive and prognostic molecular biomarkers for non small cell carcinoma.
   b) Role of targeted therapies in the management of locally advanced and metastatic non small cell carcinoma.

7. Role of chemotherapy in the management of carcinoma anal canal with regard to indications, chemotherapeutic agents, mechanism of action, side effects and evidence from important trials.

P.T.O.
8. a) Radiation induced lung injury with regards to clinical features, investigations and management.
   b) Normal tissue dose-volume constraints for conventionally fractionated radiotherapy.

9. Indications, dose schedule, mechanism of action, side effects and clinical results of pertuzumab.

10. a) Rationale and basis of chemoradiotherapy in Head & Neck cancers with regard to advantages & disadvantages.
    b) Principles of nutrition management and supportive care post chemoradiotherapy.