### FEBRUARY 2018

Sub. Code: 1931

# B.Sc. RADIOTHERAPHY TECHNOLOGY

(New Syllabus 2014-2015)

## SECOND YEAR

## PAPER I – TUMOR PATHOLOGY AND RADIOTHERAPY APPLICATIONS

# Q.P. Code: 801931

**Answer All Questions** 

Maximum : 100 Marks

## I. Elaborate on:

**Time: Three Hours** 

- 1. Discuss the role of radiotherapy for carcinoma prostate with special mention of brachytherapy methods.
- 2. Classify Lymphomas. What is Involved Field Radio Therapy (IFRT)? Discuss the methods of delivering IFRT.
- 3. List the indications of Cranio Spinal Irradiation (CSI). Discuss the precautions to be taken prior to planning a child of 8 years for CSI. Discuss in detail the technique and the radiotherapy prescription.

### II. Write Notes on:

- 1. Write short notes on precancerous lesions.
- 2. Classify neoplasms based on cell of origin.
- 3. What are the histological types of thyroid malignancy? Mention the best prognostic histological type.
- 4. Explain the radiotherapy planning for palliation of painful vertebral metastases.
- 5. Discuss the radiotherapy techniques used for treating craniopharyngioma.
- 6. List the benign conditions which benefit with treatment with radiotherapy? Discuss the dose, fractionation and technique of one of the benign conditions.
- 7. What the side effects of cytotoxic chemotherapy?
- 8. Carcinogenesis.

## **III. Short Answers on:**

- 1. List the side effects of radiotherapy to chest wall of a patient with carcinoma of left breast.
- 2. What is extended field of radiotherapy? Where is it used?
- 3. Define neoplasia.
- 4. Name the major and minor salivary glands. What is the commonest histology of malignancy of salivary glands?
- 5. Effect of radiotherapy on reproductive organs.
- 6. Mention two drugs used concurrently with radiation. Explain how it influences Treatment.
- 7. Anatomy, lymphatic drainage and pathology of carcinoma of oesophagus.
- 8. Hormonal management of breast cancer.
- 9. Discuss the pathology of skin cancers.
- 10. Discuss the boost techniques of carcinoma breast after breast conservation surgery and completion of whole breast irradiation.

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$ 

 $(3 \times 10 = 30)$