

[LB 0212]

AUGUST 2012

Sub. Code: 1901

B.Sc - RADIOTHERAPY TECHNOLOGY

FIRST YEAR

PAPER – HUMAN ANATOMY & PHYSIOLOGY

Q.P. Code : 801901

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.)(Max.)(Max.)**

1. Describe the structure and functions of the lymphatic system. Name the main lymphatic groups and the extra lymphatic lymphoid tissues. Write 4 sentences about two diseases affecting the lymphatic system. 7 20 10
2. What is a nutrient? Name the main types of nutrients. Describe the food guide pyramid and give examples of foods from each group. Give examples and explain the fat soluble, water soluble and antioxidant vitamins. 7 20 10
3. List the structure of the nervous system and explain in detail with appropriate diagrams. Describe the three basic functions of the nervous system. 7 20 10

II. Write Notes on:

1. Explain the anatomy of the respiratory system with diagram. Mention one etiology for bronchogenic carcinoma and mention one cancer caused by asbestos exposure. 4 10 5
2. Describe the types of epithelial tissue with diagrams. 4 10 5
3. Describe the functions of blood. Describe also the physical characteristics and principal components of blood. 4 10 5
4. Describe the phases of digestion and explain the major hormones that regulate digestive activities. 4 10 5
5. Explain the task of nephrons in urine formation. 4 10 5
6. Define endocrine system and hormones. Mention 6 endocrine glands present in the body. 4 10 5
7. What are the parts of the female reproductive system? Where are they located in relation to each other? Describe the histology of uterus and cervix. 4 10 5
8. Describe the structure and function of nucleus. 4 10 5

III. Short Answers on:

1. Mention four structures that are present in

the mediastinum.	2	4	3
2. Name the types of muscles.	2	4	3
3. What is diaphysis and epiphysis and name the cancers arising from them.	2	4	3
4. Function of large intestine.	2	4	3
5. Surface anatomy of oesophagus.	2	4	3
6. Define: Embryology, surface anatomy and radiographic anatomy.	2	4	3
7. Define: Hypertrophy, Hyperplasia and Metaplasia.	2	4	3
8. Mention three functions of the skin.	2	4	3
9. Briefly explain the locations and functions of the seminal vesicles and the prostate.	2	4	3
10. List the three main parts of a cell and explain their functions.	2	4	3
