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18C52

B. Tech. EXAMINATION, 2021

(Third Semester)

(C Scheme) (Main Only)

(BME)

BME203C

Human Anatomy & Physiology

Time : 2½ Hours] [*Maximum Marks : 75*

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Four* questions in all. All questions carry equal marks. Draw neat diagrams wherever applicable.

1. (a) Define the term Muscular Tissues and write the functions.

(b) Draw a well labelled Diagram of Skin and write its functions.

2. (a) Write the functions and properties of RBC and WBC.

(b) Explain process of blood transfusion.

3. (a) Explain the role of lymphatic system in the human body.

(b) Illustrate the working of the Human Heart. Write about systemic and pulmonary circulation.

4. (a) Define Blood pressure and explain its regulation.

(b) Give description of circulatory shock and its treatment.

5. (a) With the help of flowchart discuss the anatomical parts of the respiratory system with its functions.

   (b) Give the description of the following :

   (i) Acclimatization

   (ii) Asthma

   (ii) Voice Box

   (iv) Right lung and Left lung

6. (a) Emphasize the role of respiratory adjustments during exercise and at high altitude.

   (b) Explain the process of Gas transport between the lungs and tissues.

7. (a) Illustrate Gastrointestinal absorption of nutrients with diagram.

   (b) Differentiate between the digestion of carbohydrates, proteins and fats.

8. (a) Describe different parts of stomach and small intestine.

   (b) Explain the secretions of Pancreas and Liver.

9. (a) Explain the structure and function of Human Heart.

   (b) Write the functions of digestive system.

   (c) Explain about the basic anatomical planes and sections of the body.

   (d) Write note on dynamics of lymph flow.

   (e) Illustrate the working of central chemoreceptors.