

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Winter 2022-23 Examination

Semester: 3
Subject Code: 203111201
Subject Name: Human Anatomy & Physiology

Date: 15-10-2022
Time: 02:00 to 04:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions (All are compulsory) (Each carry one mark) (15)

1. Which of the following is NOT a function of skin?
 (a) Respiration (b) Excretion
 (c) Sensation (d) Thermoregulation
2. Which of the following is not an accessory male reproductive gland?
 (a) Prostate (b) Bulbourethral gland
 (c) Glans penis (d) Seminal vesicle
3. Your lungs are to _____ your spinal column.
 (a) superior (b) inferior
 (c) posterior (d) anterior
4. Match the following:
 (A) 1st heart sound – (1) Beginning of systole
 (B) 2nd heart sound – (2) Beginning of diastole
 (C) 3rd heart sound – (3) Rapid villing of ventricles
 (a) A-1, B-2, C-3 (b) A-2,B-3,C-1
 (c) A-3,B-1,C-2 (d) A-2,B-1,C-3
5. The ovary is part of which of the following two systems?
 (a) Digestive and endocrine (b) Reproductive and endocrine
 (c) Reproductive and respiratory (d) Digestive and respiratory
6. Blood is composed of Connective tissue. True/ False?
7. Which bone contains the mastoid process?
8. Anatomy is the study of _____.
9. Which blood group is the universal recipient and why?
10. In heart, Which area receives blood directly from the four pulmonary veins?
11. Write one function of kidneys.
12. The amount of gastric juice produced every day is _____ liters.
13. Which Endocrine gland is known as the 'master gland'?
14. The three pairs of salivary glands produce _____ to _____ mL of saliva daily.
15. Blood pressure is highest in arteries. True/ False?

Q.2 Answer the following questions. (Attempt any three) (15)

- (A) Draw a Structure of neuron? What are the functions of nervous system?
- (B) Explain the principal events of Micturition in detail.
- (C) Write a note on blood groups in humans and blood transfusion in detail.
- (D) Define digestion as a mechanical and chemical process. Enlist and explain the Digestion Processes.

Q.3(A) What is Respiration? Explain the Gas Exchange Process of Respiratory System. (07)

- (B) What is Hormone? Enlist the major glands of Endocrine system with its effect on targeted tissue. (08)

OR

- (B) Draw and Explain the Anatomy and Physiology of EYE. (08)

Q.4(A) Explain the Female Reproductive system with suitable diagram. (07)**OR**

- (A) Explain the Male Reproductive system with suitable diagram. (07)

- (B) How the heart sounds are produced? Explain with neat diagram. (08)