

W.A.



BRAINWARE UNIVERSITY

Term End Examination 2023

Programme – B.Sc.(MLT)-2020/B.Sc.(MLT)-2021

Course Name – Human Anatomy and Physiology

Course Code - BMLT201

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Show the portion of the nephron that extends into the medulla:
- | | |
|--------------------|-------------------------------|
| a) Pappillary Duct | b) Proximal convoluted tubule |
| c) Nephron Loop | d) Distal Convoluted Tubule |
- (ii) Choose the correct option that controls body temperature, sleep, and appetite:
- | | |
|-----------------|------------------|
| a) Thymus | b) Thalamus |
| c) Hypothalamus | d) Thyroid Gland |
- (iii) Fibrous connective tissue that surrounds each kidney is inferred as the:
- | | |
|-----------|------------------|
| a) Cortex | b) Medulla |
| c) Hilum | d) Renal Capsule |
- (iv) State the following structures that is part of the small intestine:
- | | |
|---------------------|--------------------|
| a) Caecum | b) Ileum |
| c) Transverse Colon | d) Ascending Colon |
- (v) State the Normal pH of blood:
- | | |
|--------|--------|
| a) 7.4 | b) 8 |
| c) 7 | d) 6.4 |
- (vi) Saliva contains an enzyme that acts upon which of the following nutrients
- | | |
|-------------|-------------|
| a) Vitamins | b) Minerals |
| c) Protein | d) Starch |
- (vii) Select from the following which is not a Function of Insulin:
- | | |
|------------------------------|--------------------|
| a) Decreasing glycogenolysis | b) Gluconeogenesis |
| c) Glycogenesis | d) Lipogenesis |

- (viii) Absorption of food is observed to occur in:
- | | |
|-------------|--------------------|
| a) Stomach | b) Small Intestine |
| c) Pancreas | d) Large Intestine |
- (ix) In our body involuntary actions are observed to be controlled by:
- | | |
|-------------------------|---------------------------|
| a) Medulla in Forebrain | b) Medulla in Hindbrain |
| c) Medulla in Midbrain | d) Medulla in Spinal Cord |
- (x) Respiration is defined by the following processes:
- | | |
|---|--|
| a) Inspiration, exchange of gases, Expiration | b) Aspiration, Inspiration, Expiration |
| c) External, Internal and Expiration | d) None of these |
- (xi) Pneumatic and inhibitory centers are associated with:
- | | |
|----------------|---------------|
| a) Respiration | b) Breathing |
| c) Inspiration | d) Expiration |
- (xii) Expiration is defined as:
- | | |
|---|--|
| a) Relaxation of diaphragm and intercostals muscles | b) Contraction of diaphragm and intercostals muscles |
| c) Contraction of diaphragm muscles | d) Contraction of inter costal muscles |
- (xiii) Tidal volume in human beings is estimated to be:
- | | |
|-----------|-----------|
| a) 1000ml | b) 500ml |
| c) 200ml | d) 1500ml |
- (xiv) The opening at the lower end of the uterus is inferred as the:
- | | |
|-----------|-------------------|
| a) Cervix | b) Fallopian tube |
| c) Coccyx | d) Vagina |
- (xv) Select the number of bones an adult human skeleton consists of:
- | | |
|--------|--------|
| a) 201 | b) 204 |
| c) 206 | d) 208 |

Group-B
(Short Answer Type Questions)

3 x 5=15

2. List some hormones produced by female reproductive System along with their function (3)
3. Illustrate the function of cerebellum in Nervous system (3)
4. Discuss the functions of Hypothalamus (3)
5. Construct a table explaining the hormones secreted from hypothalamus along with their respective functions. (3)
6. Evaluate the functions of bile (3)

OR

Analyze the different functions of Mouth. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Write in detail about the structures of cells & tissues and draw clean labelled diagram of the same (5)
8. Describe the problems that may arise from blood transfusion. (5)
9. Distinguish between the role of insulin and glucagon in the regulation of glucose homeostasis. (5)
10. Discuss about male reproductive system (5)
11. Describe muscles of head and neck (5)
12. Evaluate the statement: Tubular reabsorption is involved in the formation of urine. (5)

OR

Evaluate the factors that affects glomerular filtration rate. (5)
