



BRAINWARE UNIVERSITY

Term End Semester Examinations, July- 2023

Programme – Bachelor of Science in Nursing

Course Name – Applied Anatomy and Applied Physiology

Course Code – ANAT 105 & PHYS 110

(Semester – I)

Time allotted: 3 hrs.

Full Marks: 75

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable. Write answer of Section – A and Section –B in separate Answer booklet.]

Section – A

(Applied Anatomy)

Marks - 37

Group – A (Multiple Choice Question)

6 x 1 = 6

1. Select the correct answer of the following :-

- i) Cells responsible for the production of antibodies in the immune system:

a T cells	b Red blood cells
c B cells	d Platelets
- ii) Which of the following is the largest gland in human body?

a Thymus	b Kidneys
c Liver	d Pancreas
- iii) Type of tissue is responsible for transmitting electrical impulses in the body:

a Nervous tissue	b Epithelial tissue
c Muscle tissue	d Connective tissue
- iv) Gland responsible for sweat production in the human body is:

a Sebaceous gland	b Mammary gland
c Eccrine gland	d Apocrine gland
- v) The name of the membrane that surrounds the lungs

a Visceral peritoneum	b Visceral pleura
c Parietal peritoneum	d Dura matter
- vi) Organ responsible for the production of bile:

a Stomach	b Small intestine
c Pancreas	d Liver

Group – B (Essay/ Long answer type question)

1 x 10 =

(Answer Any One Question)

2. a. Define neuron.
b. Describe about the functions of sensory and motor nervous system

2+8 =10

OR Describe the heart under the following heading.

2+5+3=10

- a. Outer structure
b. Inner structure
c. Blood supply

Group – C (Short answer type question)

3 x 5 = 15

3. Write short notes *(Answer Any Three Questions)*

- a. Spinal Cord
b. Uterus
c. Nephron
d. Synovial joint
e. Adrenal gland

[5]

[5]

[5]

[5]

[5]

Group – D (Very short answer type question)

3 x 2 = 6

4. Write in short *(Answer Any Three Questions)*

- a. Define inspiration and expiration.
b Enlist the Endocrine glands
c. Enlist the major arteries and veins in human body.
d. Define Bowman's Capsule

[2]

[2]

[2]

[2]

Section – B

(Applied Physiology)

Marks - 38

Group – A (Multiple Choice Question)

7 x 1 = 7

5. Select the correct answer of the following :-

i) Body compartment that contains blood plasma:

- a Intracellular fluid
c Extracellular fluid

- b Interstitial fluid
d Cerebrospinal fluid

ii) The process of gas exchange that occurs in the lungs:

- a Diffusion
c Ventilation

- b Oxidation
d Respiration

iii) Fat soluble vitamin

- a Vitamin E
c Vitamin B12

- b Vitamin C
d Vitamin B1

The life span of RBC is

- | | | | |
|---|----------|---|----------|
| a | 100 days | c | 110 days |
| c | 120 days | d | 200 days |
- v) Pancreas produces hormone to regulate blood sugar levels:
- | | | | |
|---|-----------|---|---------------------|
| a | Cortisol | b | Insulin |
| c | Melatonin | d | Parathyroid hormone |
- vi) Part of the tongue is responsible for detecting bitter taste:
- | | | | |
|---|--------------------|---|----------------------|
| a | Back of the tongue | b | Sides of the tongue |
| c | Tip of the tongue | d | Center of the tongue |
- vii) the approximate average daily urine output for a healthy adult:
- | | | | |
|---|-----------|---|-------------|
| a | 100-200mL | b | 800-1000mL |
| c | 300-500mL | d | 2000-2500mL |

Group – B (Essay/ Long answer type question)

1 x 10 = 10

(Answer Any One Question)

6. a. Discuss the role of hormones in Menstrual Cycle. 5+5 =10
 b. Elaborate the different stages of menstrual cycle.

- OR a. Describe the composition of CSF 5+5=10
 b. Explain about circulation of CSF

Group – C (Short answer type question)

3 x 5 = 15

7. Write short notes *(Answer Any Three Questions)*

- | | |
|--------------------------------------|-----|
| a. Describe the process of digestion | [5] |
| b. Describe the functions of skin | [5] |
| c. Describe about Spermatogenesis. | [5] |
| d. Pulmonary Circulation | [5] |
| e. Transportation across the cell | [5] |

Group – D (Very short answer type question)

3 x 2 = 6

8. Write in short *(Answer Any Three Questions)*

- | | |
|--|-----|
| a. Enlist the functions of breast | [2] |
| b. Define homeostasis | [2] |
| c. Enlist the bones of axial skeleton. | [2] |
| d. Characteristics of cardiac tissue | [2] |
| e. Lens of the eye | [2] |