



BRAINWARE UNIVERSITY

Term End Semester Examinations, July- 2022

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) Secretion of salivary gland is responsible for starch digestion as it contains enzyme : -
 - a Salivary amylase / Plyalin.
 - b Pepsin & lipase.
 - c Lipase & Protease
 - d Amylase & Lipase
- ii) Ductless glands are described as:-
 - a Endocrine
 - b Paracrine
 - c Exocrine
 - d Apocrine
- iii) Largest lymphatic organ is:-
 - a Spleen
 - b Thymus
 - c Liver
 - d Brain
- iv) Which of the following is the inner most layer of human eye?
 - a Retina
 - b Choroid
 - c Sclera
 - d Cornea
- v) Internal carotid artery is the branch of : -
 - a Basal artery
 - b Vertebral artery
 - c Common carotid artery
 - d Anterior cerebral artery
- vi) Layers of the dermis consists all except : -
 - a Basal layer
 - b Papillary layer
 - c Reticular Layer
 - d Pars reticularis

Group – B (Essay/ Long answer type question)

1 x 10 = 10

(Answer Any One Question)

2. Name the different Endocrine Glands present in the Human Body. Write in details about thyroid glands 3+7=10
3. Describe the heart with diagram under the following headings - 5+3+2=10
 - A. Chambers,
 - B. Valves,
 - C. Blood supply.

Group – C (Short answer type question)

3 x 5 = 15

(Answer Any Three Questions)

4. Cerebrospinal Fluid [5]
5. Long bone [5]
6. Layers of skin [5]
7. Mammary gland [5]

Group – D (Very short answer type question)

3 x 2 = 6

(Answer Any Three Questions)

8. Deltoid muscles [2]
9. Enlist the type of WBC. [2]
10. Bowman's Capsule [2]
11. Hylum of the lungs [2]

Section – B

(Applied Physiology)

Marks - 38

Group – A (Multiple Choice Question)

7 x 1 = 7

1. **Select the correct answer of the following :-**
 - i) When a solvent moves through a selectively permeable membrane, such movement of the fluid is term as

a Diffusion	b Osmosis
c Filtration	d Active transport
 - ii) The parasympathetic division of nervous system opposes the sympathetic effect and effectively

a Increase the heart rate	b Reduce the heart rate
c Increases the cardiac contractility	d Decrease the cardiac contractility
 - iii) The fastest conduction velocity is found in

a SA node.	b Atrial muscle.
c AV-node.	d Ventricular conduction system / Purkinje system.

- iv) Which of the following hormone helps in the secretion of HCL from stomach?
- | | |
|-----------|------------|
| a Gastrin | b Secretin |
| c Pepsin | d Renin |
- v) During severe exercise, oxygen consumption is greatest in
- | | |
|-------------------|---------|
| a Brain | b Heart |
| c Skeletal muscle | d Liver |
- vi) RBC, WBC and Platelets are produced in the
- | | |
|--------------|-------------------|
| a Long Bone | b Red Bone Marrow |
| c Short Bone | d Medulary Cavity |
- vii) The absorption of the fats and glyserol takes place in the
- | | |
|-------------------|------------|
| a Ileum | b Stomach |
| c Large intestine | d Lacteals |

Group – B (Essay/ Long answer type question)

1 x 10 = 10

(Answer Any One Question)

2. A) What is Nephron? 3+7=10
B) Describe the mechanism of urine formation.
3. Define blood pressure. Write the factors regulating blood pressure. Write the normal systolic and diastolic Blood Pressure 1+8+1=10

Group – C (Short answer type question)

3 x 5 = 15

(Answer Any Three Questions)

4. Discuss the factors affecting cardiac output [5]
5. Discuss about the type of blood group [5]
6. Spermatogenesis [5]
7. Describe about mechanism of respiration. [5]

Group – D (Very short answer type question)

3 x 2 = 6

(Answer Any Three Questions)

8. Functions of cerebellum [2]
9. Write the function of stomach [2]
10. Define stroke volume and cardiac output [2]
11. Gaseous Exchange of the lungs, [2]