



BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – B.Sc.(FND)-Hons-2022
Course Name – Human Physiology I
Course Code - BFNC102
(Semester I)

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

Group-A

words as far as practicable.]

(Multiple Choice Type Question) 1 x 15=15

- Choose the correct alternative from the following :
- (i) Name the individual who did coin the term 'cell'?

a) Robert Hooke

b) Tatum

c) Schwann

- d) De Bary
- (ii) Name a major component of plant cell wall.

a) Protein

b) Cellulose

c) Lipid

- d) Starch
- (iii) Indicate the component of the plasma membrane responsible for increasing the membrane fluidity.
 - a) Increase in unsaturated fatty acids in the $\overset{\cdot}{\cdot}$
- b) Increase in saturated fatty acids in the

membrane

membrane

c) Increase in glycolipid content in the membrane

- d) Increase in phospholipid content in the membrane
- (iv) Identify from among the options the type of cell with least constancy of shape.

a) Blood platelets

b) Epithelial Cells

c) White Blood Cells

- d) Red blood Cells
- (v) Write the average life span of human Red blood Cells.

a) 90 days

b) 100 days

c) 120 days

- d) None of the above
- (vi) Predict the most appropriate statement(s) as part of the explanation for this statement 'Adult human RBCs are enucleated'.
 - a) Their internal space is available for oxygen transport
- b) They are somatic cells
- c) They do not need to reproduce
- d) They do not metabolise
- (vii) Calculate the cardiac output with the following data: heart rate 70bpm, stroke volume 70ml.

(viii)	a) 51 c) 4.91 Identify the reason why the SA node (sine atrial r	b) 5ml d) 4.8ml	
(VIII)	 Identify the reason why the SA node (sino-atrial r a) generates an action potential which is more in size than other parts of the conducting system 	b) only part of the conducting system generating impulse	
	c) located in the right atrium	d) generates the highest number of action potentials in the conducting system	on
(ix)	Write the condition where plaque builds up on the	e inside of arteries.	
(x)	a) Arthrocentesisc) ArthritisWho carries deoxygenated blood to the lungs fro	b) Arthralgia d) Atherosclerosis m the right ventricle.	
(xi)	a) Pulmonary arteryc) AortaIdentify the possible breathing rate (per min) in a	b) Pulmonary veind) None of the aboven adult human.	
	a) 78 c) 72	b) 15 d) 120	
(xii)	Write the name of organs that functions as an air		
(xiii)	a) Larynxc) Nasal chambersSelect the name of yellow pigment that is formed the liver. It is also primarily responsible for the ye		
(xiv)	a) Zeaxanthinc) CarotenoidsWrite the activity of Atrial Natriuretic peptide (AN)	b) Urochrome d) None of the above NP)?	
(xv)	a) inhibits aldosterone and ADH secretionc) decreases reabsoprtion of sodiumJustify the following parts of the brain regulates t	b) decreases reabsorption of waterd) all of thesehe respiratory process?	
	a) The vagus nerve c) Medulla oblongata	b) Cerebral peduncle d) Cerebellum	
	Grou (Short Answer Ty		3 x 5=15
			(3)
Explain the factors affecting blood pressureWhat is the function of hemoglobin?			
4. Explain the process of body temperature regulation.			
	5. Chart the composition of blood.		
6. Report the role of membrane in transport and communication. OR			(3)
Ju	istify, how thrombocytes necessary for blood coag		(3)
	Grou	•	5 x 6=30
(Long Answer Type Questions)			
8. E 9. E 10. E	Explain the process of blood coagulation Explain cardiac cycle. Define the term - TV,RV,IRV,EC & ERV. Distinguish between neural and chemical control o	f breathing.	(5) (5) (5)
11. (Classify different types of teeth		(5)

Distinguish between pulse pressure and mean pressure.	(5)		
12. Justify considering Rh factor in pregnancy.	(5)		
OR			
Compare among different waves in ECG.	(5)		
