

The West Bengal University of Health Sciences
1st BMLT April, 2022 Examination

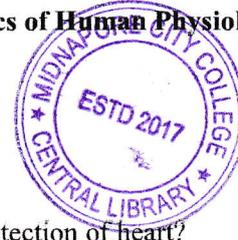
Subject : Basics of Human Anatomy and Basics of Human Physiology

Physiology

Time: 1½ Hours

Full Marks: 50

Attempt *all* questions



1. Tick the correct answer : 10 x 1
- a) Which of the following membrane is responsible for the protection of heart?
 i) Epicardium. ii) Endocardium. iii) Myocardium iv) Pericardium.
- b) Which enzyme breaks down lactose?
 i) Lipase. ii) Pepsin. iii) Amylase. iv) Lactase.
- c) Which of the following is energy independent?
 i) Active transport. ii) Primary active transport.
 iii) Secondary active transport. iv) Passive transport.
- d) Name the tissue involved in the formation of membranes.
 i) Epithelial tissue. ii) Connective tissue. iii) Muscle tissue. iv) None.
- e) In human being the duration of cardiac cycle is _____.
 i) .008 sec. ii) .0008 sec. iii) .08 sec. iv) .8 sec.
- f) Which of the following is not directly associated with lymphatic pathway?
 i) Lymphatic trunk. ii) Collecting duct. iii) Subclavian vein. iv) Carotid arteries.
- g) After deep inspiration maximum expiration of lungs is called _____.
 i) Vital capacity. ii) Total lung capacity.
 iii) Inspiratory capacity. iv) Functional residual capacity.
- h) What does the liver do to help digestion?
 i) Makes important enzymes. ii) Neutralizes stomach acid.
 iii) Produces bile. iv) Regulates insulin.
- i) Carboxyhemoglobin is formed by :
 i) CO. ii) CO₂. iii) HCO₃. iv) HCN.
- j) Which of the following cannot pass through semipermeable walls of glomerulus?
 i) Globin. ii) Albumin. iii) Blood cells. iv) All of them.
2. Write short notes on *any four* of the following : 4 x 5
- a) Why blood is called connective tissue? Write down the composition of blood. 2+3
- b) Glomerular Filtration Rate. 4+1
- c) Describe the structure of plasma membrane. Write two functions of mitochondria. 1+4
- d) What is hypertension? Write down the factors affecting blood pressure. 1+4
- e) Describe chloride shift.
- f) Write a short note on Addison's disease.
3. Answer *any two* from the following :
- a) What is cardiac cycle? Describe the different stages of cardiac cycle. Write down the clinical significances of second heart sound. 1+7+2
- b) Classify hormones on the basis of chemical structure. Describe the functions of thyroid hormones. How hypothalamus controls the secretion of thyroid gland? 3+5+2
- c) Describe the process of gaseous exchange between lungs and tissues. Write briefly about respiratory acidosis. 6+4



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----- BMLT1st year ---April-----Examination, 2022

Subject: Basic of Human Physiology (Practical)

Time : 3 hours

Paper : 104 B

Max. Marks: 50

Attempt Questions: Attempt all questions

(Specify instructions, if any clearly)

Q.No	Statement of Questions	Mark
1.	Procedure for measurement of carotid and radial pulse rate.	10
2.	Procedure for the determination of blood pressure by auscultatory method, how to calculate mean arterial pressure and pulse pressure.	10
3.	Measurement method for respiratory rate and its clinical importance.	10
4.	Viva- voce	15
5.	Lab Record	05