

2023/12  
EP1/18/40-45

**BACHELOR OF PHYSIOTHERAPY  
FIRST SEMESTER  
HUMAN PHYSIOLOGY I  
BPT - 102**

(USE OMR SHEET FOR OBJECTIVE PART)

2023/12

**SET  
B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

( Objective )

Marks: 20

*Choose the correct answer from the following:*

*1×20=20*

- Normal value of ventilation Perfusion is .....
  - 0.82
  - 0.83
  - 0.84
  - 0.85
- How many members are there in ABO blood group system :
  - 4
  - 3
  - 2
  - 5
- Pulmonary ventilation in exercise consists of-
  - 40L
  - 50L
  - 60L
  - 70L
- The space between nerve terminal and muscle is called :
  - Post synaptic junction
  - Pre synaptic junction
  - Synaptic cleft or gutter
  - Acetylcholine
- The resting membrane potential of muscle is :
  - 70 mv
  - 90 mv
  - 100 mv
  - 120 mv
- Erythropoiesis is the formation of :
  - Platelets
  - WBC
  - RBC
  - All of the above
- It is the period during which atrial filling takes place
  - Atrial systole
  - Atrial diastole
  - Ventricular systole
  - Ventricular diastole
- Haemoglobin is the .....present in RBC
  - Carbohydrate
  - Proteins
  - Fats
  - Iron+Protein
- Ribosomes are present on the outer surface of :
  - Rough Endoplasmic reticulum
  - Smooth endoplasmic reticulum
  - Mitochondria
  - Nucleus

10. What is the valve between right atrium and right ventricle?
  - a. Tricuspid Valve
  - b. Bicuspid valve
  - c. Aortic valve
  - d. Pulmonic valve
11. How many cranial nerves are present
  - a. 9
  - b. 10
  - c. 11
  - d. 12
12. Bile is secreted by :
  - a. Kidney
  - b. Stomach
  - c. Liver
  - d. Large intestine
13. Which pair of ribs are called floating ribs?
  - a. 1<sup>st</sup> and 2<sup>nd</sup>
  - b. 5<sup>th</sup> and 6<sup>th</sup>
  - c. 7<sup>th</sup> and 8<sup>th</sup>
  - d. 11<sup>th</sup> and 12<sup>th</sup>
14. Average systolic blood pressure is.....
  - a. 80 mm Hg
  - b. 120 mm Hg
  - c. 110 mmHg
  - d. 90 mmHg
15. The long process a Neuron is :
  - a. Axon
  - b. Myelin
  - c. Soma
  - d. All of the above
16. Functions of intrapleural pressure is
  - a. Acts as lubricant
  - b. Help and creating negative pressures
  - c. Prevent friction
  - d. All
17. Chemoreceptors are present in
  - a. Carotid
  - b. aortic
  - c. None
  - d. Both
18. Wallerian degeneration is seen in :
  - a. Muscle injury
  - b. Joints
  - c. Nerve injury
  - d. All of the above
19. Depolarization of atria is
  - a. P wave
  - b. Q wave
  - c. R wave
  - d. T wave
20. The other name of intrapleural pressure is
  - a. Intrathoracic pressure
  - b. Intralveolar pressure
  - c. Intraabdominal pressure
  - d. Intraib pressure

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**( Descriptive )**

Time : 2 hrs. 30 min.

Marks : 50

*[ Answer question no.1 & any four (4) from the rest ]*

1. a. Write in detail the ABO and Rh blood group system. 5+5=10  
b. What are benefits of blood donation.
2. What is spirometry? Discuss the mechanism of work of spirometry? 5+5=10
3. What is respiratory centres ? What are the different types of respiratory centres ? Mention about medullary respiratory centres with different diagrams/ 3+3+4  
=10
4. What is neuroglia? Classify neuroglia? Mention in details about oligodendrocytes and protoplasmic astrocytes? 2+2+6  
=10
5. What are the chambers of heart? Write about the circulation of heart in details with diagrams. 5+5=10
6. What is cardiac cycle? Write about the cardiac cycle events of atrium and ventricular in details? 5+5=10
7. a. Haemolytic Disease of the Newborn (HDN) 5+5=10  
b. Haemophilia.
8. What is neuromuscular junction? Write about the events taking place in neuromuscular junction. 5+5=10

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