

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

**SET
B**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

(Objective)

Marks: 20

1×20=20

Choose the correct answer from the following:

- Nerve fibre which is insulated by myelin sheath is called :
 - Non myelinated nerve fiber
 - Myelinated nerve fiber-
 - none
 - both
- Which blood group has no blood group antigens ?
 - AB group
 - A group
 - B group
 - O group
- Rough ER has embedded in it
 - Lysosomes
 - Ribosomes
 - Mitochondria
 - Golgi bodies
- The physiological pacemaker of the heart is:
 - SA node
 - Bundle of His
 - AV node
 - Purkinje fibres
- The mildest form of nerve injury is called :
 - Neuropraxia
 - Neurotemesis
 - Axonotemesis
 - All of the above
- It is the total amount of air exhaled after maximal inhalation. The value is about 4800mL.
 - Vital capacity
 - Inspiratory capacity
 - Tidal volume
 - Total lung capacity
- The type of hypoxia caused by stoppage of velocity of blood flow is :
 - Hypoxic hypoxia
 - Stagnant hypoxia
 - Anaemic hypoxia
 - Histotoxic hypoxia
- Spirometry has how many balls
 - 1
 - 3
 - 2
 - 4
- Haemolytic Disease of the Newborn (HDN) is mainly due to incompatibility of :
 - ABO group
 - Familial incompatibility
 - Marital incompatibility
 - Rh group
- Upper costal series is constituted by
 - By first to fifth pair of ribs
 - By sixth to tenth pair of ribs
 - By second to sixth pair of ribs
 - By tenth to twelfth pair of ribs

11. It is characterized by stiffening of the limbs of the corpse caused by chemical changes in the muscles
- | | |
|-----------------------|----------------------|
| a. Rigor mortis | b. Parkinson Disease |
| c. Myaesthesia Gravis | d. Growers disease |
12. The average life span of red blood cells is :
- | | |
|-------------|------------|
| a. 60 days | b. 30 days |
| c. 120 days | d. 90 days |
13. The formed elements of blood are all of the following, except
- | | |
|---------------------|--------------|
| a. Epithelial cells | b. RBC |
| c. WBC | d. Platelets |
14. Contraction of external intercostal muscles causes elevation of these ribs and upward and forward movement of sternum.
- | | |
|-------------------------|-----------------------------|
| a. Pump handle movement | b. Bucket handle movement |
| c. Rib handle movement | d. Thoracic handle movement |
15. Disability of lungs and thorax due to lack of
- | | |
|---------------|---------------|
| a. Compliance | b. Surfactant |
| c. Elasticity | d. Alveoli |
16. The structural and functional unit of kidney is:
- | | |
|---------------------|--------------|
| a. Glomerulus | b. Nephron |
| c. Bowman's capsule | d. Podocytes |
17. Globin of haemoglobin consists of :
- | | |
|------------------------------|------------------------------|
| a. 1 alpha and 1 beta chains | b. 2 alpha and 2 beta chains |
| c. 3 alpha and 3 beta chains | d. 4 alpha and 2 beta chains |
18. Total volume of blood in an average adult
- | | |
|--------------------|--------------------|
| a. 10 to 15 litres | b. 15 to 20 litres |
| c. 5 to 6 litres | d. 20 to 25 litres |
19. The vermiform Appendix is a :
- | | |
|--------------------|----------------------|
| a. Vestigial organ | b. Active organ |
| c. Ancient organ | d. None of the above |
20. Increase in Heart rate is called
- | | |
|----------------|----------------|
| a. Tachycardia | b. Bradycardia |
| c. Polycardia | d. Apnoea |

(Descriptive)

Time : 2 hrs. 30 mins.

Marks : 50

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

- | | |
|---|--------|
| 1. What are the events of cardiac cycle. Explain with a diagram | 10 |
| 2. Describe the Renal system with diagram | 10 |
| 3. Explain the events that take place in Wallerian degeneration and retrograde degeneration | 10 |
| 4. Describe the Digestive System with appropriate diagrams | 10 |
| 5. What are skeletal Muscles? Explain What are the different layers in skeletal system? | 10 |
| 6. Write a brief note on ABO group | 10 |
| Or | |
| Draw and describe a typical animal cell. | |
| 7. What is neuroglia? What are the different neuroglia? Write about fibrous neuroglia? | 10 |
| 8. Write short notes on : a) Deglutition
b) Blood pressure | 5+5=10 |

= = *** = =