

2 X 10 = 20 Marks

- . Classify Leucocytes. Explain the morphology and functions of each type of leucocyte cell.
- 2. Define blood pressure. State the normal value. Explain the long-term regulation of blood pressure.

SHORT ESSAY 10 X 5 = 50 Marks

- Describe the mechanism of humoral immunity.
- Explain the factors influencing the venous return to the heart.
- 5. Explain the different modes of transport of carbon dioxide in the blood.
- Define Acclimatization. Explain the changes taking place in blood and respiratory system during Acclimatization.
- 7. Mention the lung volumes. Define and write the normal value of each.
- Explain four factors affecting the glomerular filtration rate.
- Discuss the buffer systems of the kidney.
- Name the types of sweat glands. Explain their secretory activity.
- State the normal body temperature. How it is measured. How the heat loss is prevented from the body.
- 12. Explain the excitation contraction coupling in skeletal muscle.

SHORT ANSWERS 10 X 3 = 30 Marks

- 13. Mention the difference between active and passive transport.
- 14. Define osmosis. What is osmotic pressure?
- Outline the composition of the blood
- Classify Reticulo-Endothelial cells.
- 17. Name any six coagulation factors of blood.
- Define stroke volume and minute volume. Write their normal values.
- Define asphyxia. Name the stages of asphyxia.
- 20. What is Hering-Breuer deflation reflex?
- 21. Define nephron and classify it.
- Name the nerve supply to the urinary bladder and write their action.

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