

13 MAR 2023

10194

FIRST B.H.M.S.
EXAMINATION

PHYSIOLOGY & BIOCHEMISTRY PAPER-I

Time: 3 hours

Total Marks: 100

INSTRUCTIONS:

1. ANSWER EACH QUESTION ON NEW PAGE.
2. DRAW DIAGRAMS WHEREVER NECESSARY.

SECTION - I

- Q-1 Describe arterial blood pressure under following heading; 15
1. Definition 2. Normal values 3. Types 4. Nervous regulation
- OR
- Q-1 Write short notes. 15
1. Windkessel effect
2. Heart sounds
3. Diastolic events of cardiac cycle
- Q-2 Describe hemoglobin under following headings; 15
1. Definition 2. Normal values 3. Types 4. Derivatives 5. Functions in detail
- OR
- Q-2 Write short notes. 15
1. Extrinsic pathway for formation of prothrombin activator
2. Cell mediated immunity
3. Bone marrow
- Q-3 Write short notes (any four) 20
1. Lymph node
2. Reticulo-endothelial system
3. Pacemaker potential
4. Secondary active transportation
5. DNA
6. Anemia

SECTION - II

- Q-1 Explain in detail transport of carbon dioxide (CO₂) in blood. 15
- OR
- Q-1 Write short notes. 15
1. Chemical regulation of respiration
2. O₂-Hb dissociation curve
3. Chyne-stroke respiration
- Q-2 Give an account of physiology of micturition in detail 15
- OR
- Q-2 Write short notes. 15
1. Juxtglomerular apparatus
2. H⁺ secretion through renal tubules
3. Mechanism of reabsorption of water through renal tubules
- Q-3 Write short notes (any four) 20
1. Nephron
2. Lung compliance
3. Functions of skin
4. Difference between skeletal & smooth muscle
5. Difference between heat gain & heat loss center
6. Saltatory conduction