

2010 Scheme

Q.P. Code: 103001

Reg. No.:

First Professional MBBS Degree Supplementary Examinations

July 2024

Physiology - Paper I

Time: 3 Hours

Total Marks: 50

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Long essay

(10)

1. A 25-year-old man was brought to the emergency department severely bleeding, following a road traffic accident. Clinical examination revealed cold and clammy extremities, tachycardia with thready pulse.
 - a) Classify shock with examples
 - b) Discuss in detail compensatory mechanisms seen in circulatory shock
 - c) Physiological basis for any one clinical feature in this patient (3+5+2)

Short essays

(2x5 =10)

2. Depict the synthesis of gastric (HCl) acid using suitable diagram. Add a note on its regulation (3+2)
3. What is cardiac index. Elaborate various factors affecting cardiac output.

Answer briefly

(5x3=15)

4. Cell mediated immunity
5. Acute mountain sickness
6. Mechanisms of body heat conservation
7. Clinical significance of reticulocyte count
8. Baroreceptor reflex

Draw and label

(2x2½ =5)

9. Juxta glomerular apparatus (JGA)
10. Oxygen Dissociation Curve (ODC)

Explain the physiological basis of the following

(5x2=10)

11. Cardiac muscle is not fatigued
12. Sneeze reflex
13. Hyperosmolarity of inner renal medulla
14. Steatorrhea in obstructive jaundice
15. Tachycardia during exercise
