



2019 Scheme

Q.P. Code: 113001

Reg. no.:

First Professional MBBS Degree Supplementary (SAY) Examinations

May 2023

Physiology I

Time: 3 Hours**Total Marks: 100**

- 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 Essays**(2x15=30)**

1. A male child 3 years old was brought to a doctor with a complaint of bleeding from the nose, mouth, urinary tract, alimentary tract and skin after trivial injury. Sometimes swelling of the joints with pain and fever was also noticed. The bleeding was not profuse, but it was persistent. A careful history revealed similar bleeding tendency in male relatives. Investigations revealed that the coagulation time was prolonged. The bleeding time, prothrombin time and platelet count was normal.
 - a) What is the most likely diagnosis
 - b) Describe the physiological basis of the two pathways involved in the coagulation mechanism.
 - c) Why females are not usually affected by this bleeding disorder
 - d) What is the physiological basis for treatment of this disorder
2. Name the respiratory centres. Describe the neural regulation of respiration. Add a note on periodic breathing.

(2+8+3+2)**(2+8+5)****Short essays****(5x8=40)**

3. Regulation of cardiac output.
4. With the aid of a diagram, explain the mechanism of Micturition.
5. Describe the composition & regulation of exocrine pancreatic secretion.
6. Classify white blood cells and explain their morphology and functions. Add a note on leukaemia.
7. Describe the mechanism of secretion of HCl. Add note on management of peptic ulcer.

Write briefly**(5x4=20)**

8. Explain the composition and functions of lymph.
9. Draw the pacemaker potential and indicate the ionic basis.
10. Describe the long-term regulation of blood pressure. Add a note on hypertension.
11. Define and classify Jaundice.
12. Draw and label a normal jugular venous pulsation tracing.

One word Answers**(10x1=10)**

13. Fibrinogen is converted into fibrin by-----
14. Hyaline membrane disease is caused due to deficiency of -----
15. Natural anticoagulant is -----
16. Steatorrhea occurs due to deficiency of -----
17. Para Amino Hippuric Acid (PAH) is used to estimate -----
18. Basic rhythm of respiration is maintained by -----
19. The law which states heart rate is inversely proportional to blood pressure is called ----
20. Normal body temperature -----^oC
21. The protein like channels responsible for water absorption in distal convoluted and collecting tubules of kidney is called-----
22. Normal filtration fraction is -----
