

2019 Scheme

Q.P. Code: 113001

Reg. no.:

**First Professional MBBS Degree Supplementary (SAY) Examinations
August 2021
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 55- year old man is brought to the casualty after a road traffic accident. He was disoriented and irritable. On examination his blood pressure was 90/40 mmHg, respiratory rate was 24/minute and pulse rate was 150 /minute. His ECG did not show any abnormality.
 - What is your diagnosis
 - Discuss the physiological basis for various clinical features seen and management of this condition
 - Describe baroreceptor reflex. (1+5+4+5)
2. Name the location of the respiratory centres. Explain their role in the regulation of respiration. Describe the mechanisms of periodic breathing. (4+6+5)

Short essays

(5x8=40)

3. Describe the role of T- lymphocytes in immune mechanisms.
4. Describe the dangers associated with blood transfusion. Explain what precautions could be taken to prevent them.
5. Functions of Neutrophil
6. Counter-current exchange system.
7. Name the types of intestinal movements and explain their functions.

Write briefly

(5x4=20)

8. Explain the regulation of gastric juice secretion in different phases.
9. Draw and label a normal cystometrogram.
10. Explain the physiological basis of symptoms in decompression sickness.
11. With the aid of a schematic diagram, describe the intrinsic pathway of coagulation
12. Draw a tracing of the jugular venous pressure and give the basis of each wave.

One word Answers

(10x1=10)

13. The cell that processes and presents antigens to lymphocytes is
14. Nutritional anaemia seen in Vitamin B₁₂ deficiency is.....
15. The tissue capacity to utilise oxygen is lost intype of hypoxia
16. Combination of hypoxia and hypercapnia is called.....
17. The role of pudendal nerve in micturition reflex is by controllingsphincter
18. Heart sound produced due to closure of the aortic and pulmonary valves is.....
19. QRS complex in ECG indicates.....
20. Part of the nephron in which the maximum amount of water is reabsorbed is.....
21. The final product of carbohydrate digestion is
22. Defecation observed immediately after a meal in children is due to..... reflex
