

Q.P.Code :

Reg.No.:.....

First Professional MBBS Degree Examinations September 2020

Physiology paper I

Time: 3 hrs

Max marks =100

Long essay (2x15=30)

1. A 36 yrs old female was admitted in medicine ward with complaints of purplish spots over the skin following fever and sore throat. On examination there was enlargement of spleen. On investigation:

RBC count: 5.8 million cells/cmm

WBC count: 6500 cells/cmm

Platelet count: 65000 cells/cmm

BT: 12 min

CT: 5 min

Peripheral smear showed Normocytes with Normochromia

- Name the condition
- Discuss the physiological basis for the above condition
- Discuss the role of platelets in hemostasis
- Mention another relevant test for hemostasis

(2+5+5+3=15)

2. Explain the mechanism of regulation of various phases of gastric secretion. Explain pathophysiology of peptic ulcer. Describe the physiological basis of management of peptic ulcer

(5+5+5=15)

Short essay (5x8=40)

3. Describe the role of baroreceptor reflex in regulation of BP
4. Chemical regulation of respiration. Add a note on PFT
5. Describe the mechanical events of cardiac cycle
6. What is GFR? Mention the normal amount of GFR per day. Add a note on factors influencing GFR
7. Composition of alveolar air. Factors affecting diffusion of gas across respiratory membrane

Write briefly: (5x4=20)

8. Draw and label the J-G apparatus .Describe the physiological basis of Tubulo-glomerular feedback.(2+2)
9. Diagrammatically represent the Pressure changes during normal respiratory cycle. Explain the physiological basis of negative intra-pleural pressure.(2+2)
10. HIV infection reduces immunity
11. Discuss the Physiological basis of hypoxia in cyanide and carbon monoxide poisoning.
12. Explain the physiological basis of heart sounds.

One word answers: (10x1=10)

13. The maximum amount of air that can be exhaled after a full inspiration is called.....
14. The type of anemia seen in patients with hook worm infestation is
15. Aspirin acts as antithrombotic drug by inhibiting.....
16. Absorption of vitamin B12 takes place in
17. Saw tooth p waves in ECG is suggestive of
18. In caissons disease pain in joints is due to.....
19. Loop diuretic act by inhibiting
20. Closure of semilunar valves occurs duringphase of cardiac cycle
21. BER is produced by
22. In humans effective renal plasma flow is