

Q.P. Code: 103001

Reg. No.:

**First Professional MBBS Degree Supplementary Examinations
January 2019**

Physiology - Paper I

Time: 3 Hours

Total Marks: 50

- *Answer all questions*
- *Draw Diagrams wherever necessary*

Long essay

(10)

1. A 16 years old boy had continuous oozing of blood following tooth extraction for caries. Answer the following:

- What is the probable cause of the bleeding.
- Describe the extrinsic pathway of clotting using a schematic diagram.
- Mechanism of action of heparin as an anticoagulant.
- Role of vitamin K in clotting.
- Explain why blood does not normally clot inside the body

(1+3+2+2+2)

Short essays

(2x5=10)

2. Describe briefly the mechanical events of cardiac cycle.
3. Factors influencing glomerular filtration.

Answer briefly

(5x3=15)

4. Second stage of deglutition
5. Differentiate between Haldane and Bohr effect.
6. Factors affecting diffusion across respiratory membrane
7. Entero-hepatic circulation
8. Glomerulo-tubular feedback

Draw and label

(2x2½ =5)

9. ECG in lead II
10. Pressure changes during normal respiratory cycle

Explain the physiological basis of the following

(5x2=10)

11. Change in heart rate during exercise
12. Mucosal barrier and peptic ulcer
13. Hypoxia in cyanide poisoning
14. Reactive hyperemia
15. Tubular maximum and renal threshold for glucose.
