



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

(10)

Long essay

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)

(2x5=10)

Short essays

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

(5x3=15)

Answer briefly

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

(2x2½ =5)

Draw and label

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

(5x2=10)

Explain the physiological basis of the following

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.
