

Q.P. Code: 103001

Reg. no.: .....

**First Professional MBBS Degree Supplementary Examinations  
January 2018**

**PHYSIOLOGY – Paper I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw Diagrams wherever necessary

**Long essay**

**(10)**

1. A 12 years old boy had a swelling in the knee joint after a small injury. His clotting time was 12 min. Answer the following:

- What may be the probable diagnosis and what is its cause
- Explain the clotting mechanism in detail
- Mention and interpret the tests for assessing bleeding and clotting time (2+5+3)

**Short essays**

**(2x5 =10)**

2. Explain the factors regulating cardiac output
3. Explain the mechanism maintaining osmotic gradient in renal medullary interstitium.

**Answer briefly**

**(5x3=15)**

4. Surfactant
5. T lymphocyte
6. Small intestinal hormones
7. Dead space
8. Pancreatic juice composition

**Draw and label**

**(2x2½ =5)**

9. Conducting system of heart
10. JG apparatus

**Explain the physiological basis of the following**

**(5x2=10)**

11. Respiratory rhythm
12. Pernicious anemia
13. Renin secretion
14. Fourth heart sound
15. Cephalic phase of gastric juice secretion.

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