

**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.
