

First BHMS Degree Examinations, February 2014

PHYSIOLOGY & BIOCHEMISTRY- PAPER I

Time: 3 Hours

Max Marks: 100

- **Answer all the questions**
- **Draw diagrams wherever necessary**

Essays:

(2x10=20)

1. Describe the process of erythropoiesis and enumerate the factors required for the process.
2. Mention the properties of cardiac muscle and describe the stair-case phenomena with its mechanism.

Short notes:

(10x5=50)

3. Plasma proteins
4. Differential count
5. Vital capacity
6. Surfactant
7. Ventricular systole
8. Loop of Henle
9. Functions of skin
10. Pupillary reflex
11. Renal threshold of glucose
12. Regulation of blood pressure

Answer briefly:

(10x3=30)

13. Erythrocyte sedimentation rate (ESR)
14. T-lymphocytes
15. Dead space
16. Bainbridge reflex
17. Myopia
18. Juxtaglomerular apparatus
19. Normal body temperature
20. Rinnie's test
21. Respiratory quotient
22. Hemolytic disease of the newborn