

First BHMS Degree Supplementary Examinations March 2017

**Physiology & Biochemistry I
(2015 scheme)**

Time: 3 hrs

Max marks: 100

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

Long Essay

(2x15=30)

1. Enumerate the plasma proteins. Describe the sites of their production, levels in plasma and functions. Define edema and mention its cause (3+3+3+3+3 = 15)
2. Define arterial blood pressure and describe the factors regulating it. (3+12=15)

Short Essay

(5x8=40)

3. Describe the process of erythropoiesis and factors necessary for it (6+2=8)
4. Describe the transport of oxygen in blood. What is Bohr effect (6+2=8)
5. Describe the neural regulation of respiration. Add a note on Cheyne stokes breathing (6+2=8)
6. Describe micturition reflex and add a note on the role of autonomic nervous system in controlling micturition. (6+2=8)
7. What are the mechanisms of heat gain and heat loss in the body. How does sweat help in regulation of body temperature (6+2=8)

Short notes

(10x3=30)

8. Types of intercellular junctions
9. Mitochondria
10. Rh. factor
11. Staircase phenomenon
12. Stroke volume
13. Caisson's disease
14. Glomerular filtration rate
15. Hypothermia
16. Excitation contraction coupling
17. Lambert Eaton syndrome
