



বিদ্যাসাগর বিশ্ববিদ্যালয়

**VIDYASAGAR UNIVERSITY**

**BMLT**

**2nd Semester Paramedical Examination 2022**

**HUMAN PHYSIOLOGY**

**PAPER—IV (Unit-7)**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

Answer any *two* questions.

2×15

1. What is Erythropoiesis? Describe the different steps of Erythropoiesis. Briefly write a note on fate of RBC. Describe the chemical structure of hemoglobin. Write any two function of hemoglobin. 2+5+3+3+2
2. Describe the special functional tissues of heart. Describe the cause and features of first and second heart sounds. How body temperature regulated during summer season? 5+5+5

3. Write the classification of hormone on the basis of chemical nature of it. Describe the biosynthesis of Thyroid hormone. What is hypothyroidism? Discuss briefly about the spermatogenesis process. 3+5+2+5
4. Write the name of different muscle protein. Describe the modern concept of excitation contraction coupling. Describe the Electron microscopic structure of neuromuscular junction. What is action potential? 2+5+5+3

Answer any *one* question. 1×10

5. Write the composition of saliva. Describe the mechanism of HCl secretion from stomach. What is 'Achlorhydria'? 3+5+2
6. Describe the process of O<sub>2</sub> transport in blood. What is FRC? What is chloride shift? 5+2+3