

- N.B. : (1) Question No. 1 is compulsory.
 (2) Attempt any **four** questions from Q. Nos. 2 to 6.
 (3) Draw **diagrams** wherever **necessary**.

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| 1. | (a) What is the composition of blood ? | 4 |
| | (b) Enumerate the different functions of the blood. | 4 |
| 2. | (a) Explain the structure and function of connective tissue. | 4 |
| | (b) Explain the active process of transport across the cell membrane. | 4 |
| 3. | (a) Write a short note on lymph nodes. | 4 |
| | (b) Explain the role of spleen as a lymphatic tissue. | 4 |
| 4. | Explain in detail the lifecycle of R.B.Cs. | 8 |
| 5. | (a) Explain the energy metabolism in a skeletal muscle. | 3 |
| | (b) Describe the physiology of skeletal muscle contraction. | 5 |
| 6. | (a) Explain the following disorders : | |
| | (i) Myasthenia Gravis | 2 |
| | (ii) Spasticity. | 2 |
| | (b) Write notes on : | |
| | (i) Importance of RH factor | 2 |
| | (ii) Isometric and isotonic contraction of muscle. | 2 |
