

**General Human Physiology and Biochemistry****Time: 3 Hours****Max Marks: 100**

- Answer all questions
- Draw diagrams wherever necessary
- Write **SECTION A** and **SECTION B** in separate Answer books(32 Pages). Do not mix up questions from Section A and Section B.

**QP CODE:102002****Section A - PHYSIOLOGY****Marks: 50****Essay****(14)**

1. Name the hormones of adrenal gland. List the functions of glucocorticoids and explain how the secretion of glucocorticoids is regulated. Add a note on hyper secretion of glucocorticoids. (3+5+3+3=14)

**Short essays****(2x8=16)**

2. Explain the pathway for pain from left leg. What is referred pain and mention its significance with an example
3. Explain the role of diaphragm in breathing. Add a note on changes in intra pulmonary and intra pleural pressure during normal breathing.

**Short notes****(5x4=20)**

4. Draw a diagram of nephron. Explain the first step of urine formation.
5. Explain the safe period as a family planning method with its physiological basis.
6. Describe the basis and inheritance of ABO blood grouping.
7. Name the bile salts and explain its functions.
8. Explain ECG with the help of a neat labeled diagram.

**QP CODE:103002****Section B - BIOCHEMISTRY****Marks: 50****Essay****(14)**

1. Discuss in detail about the formation, transport and disposal of ammonia. Mention the disorders associated with it. (3+2+6+3=14)

**Short essays****(2x8=16)**

2. Explain briefly gluconeogenesis
3. Mention normal level of serum calcium and explain its regulation

**Short notes****(5x4=20)**

4. Clinically important enzymes
5. Functions and deficiency of tocopherols-vitamin E
6. Anti metabolites.
7. Jaundice
8. Functions of immunoglobulins.

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