

**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. Do not mix up questions from Section A and Section B.

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

1. Enumerate the hormones secreted by the pituitary gland. Discuss the actions of growth hormone. Add a note on disorders produced by hyper secretion of growth hormone  
(3+8+3=14)

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

2. Describe the composition and functions of pancreatic juice.
3. Describe the endometrial changes during the different phases of menstrual cycle, giving its hormonal basis.

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

4. Factors influencing glomerular filtration
5. Heart sounds
6. Cell mediated immunity
7. Formation and functions of CSF
8. Referred pain

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

1. Enlist the sources and RDA of vitamin D. Name the active form of vitamin D and how it is formed. Explain its biochemical functions. Mention the causes and manifestations deficiency of vitamin D.  
(2+1+4+4+3=14)

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

2. What are the normal fasting and postprandial plasma glucose level. Explain the role of hormones in blood glucose regulation.
3. Classify lipids with examples. Mention the functions of lipoproteins.

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

4. Mention four differences between marasmus and kwashiorkor.
5. What is the normal serum uric acid level and mention the causes of gout.
6. Explain the biochemical alterations seen in blood and urine in obstructive jaundice.
7. Name four clinically important enzymes and mention their significance.
8. Name the specialized products synthesized by glycine. Explain the synthesis of any two of them.

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