Reg.No.: .		
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First Year BDS Degree Regular Examinations - August 2015

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)

Describe the phases of gastric secretion and its regulation. List the composition and functions of gastric juice. (4+4+2+4=14)

Short essays (2x8=16)

- 2. Draw a neat labeled diagram of neuromuscular junction. Explain how an impulse is transmitted across the neuromuscular junction
- 3. Explain the action of insulin on carbohydrate, protein and fat metabolism. List the common complaints during diabetes mellitus.

Short notes (5x4=20)

- 4. Complications of blood transfusion.
- 5. Factors affecting glomerular filtration rate.
- 6. Explain the stages of spermatogenesis. List the factors influencing it.
- 7. Mention the important differences between first and second heart sounds.
- 8. Explain the transport of carbon dioxide in blood.

QP CODE:103002 Section B - BIOCHEMISTRY Marks: 50

Essay (14)

1. Name the aromatic amino acids. Discuss the metabolism of any one of them. Add a note on the associated metabolic disorders (2+8+4=14)

Short essays (2x8=16)

- 2. List the functions and deficiency manifestations of ascorbic acid
- 3. Explain the transamination reaction with example and its significance

Short notes (5x4=20)

- 4. Fluoride
- 5. Structure of DNA
- 6. Significance of HMP(hexose mono phosphate) pathway
- 7. Lipoprotein
- 8. Hemoglobin structure and function
