

# 2010 Scheme

Reg. No.: .....

## First Year BDS Degree Supplementary Examinations July 2022

### General Human Physiology and Biochemistry

Time: 3 Hours

Max Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- 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. Describe the origin and spread of cardiac impulse. What is the normal heart rate. What are the factors affecting the heart rate (6+1+7)

**Short essays**

**(2x8=16)**

2. Define GFR. What is the normal value of GFR. Enumerate and Describe factors affecting GFR. (2+1+5)
3. Describe the actions of insulin. Add a note on Diabetes Mellitus (4+4)

**Short notes**

**(5x4=20)**

4. Anemia
5. Vital capacity
6. Sarcomere
7. Components of a reflex arc
8. Errors of refraction

**QP CODE:103002**

**Section B - Biochemistry**

**Marks: 50**

**Essay**

**(14)**

1. Describe beta oxidation of palmitic acid with energetics. Add a short note on ketogenesis (10+4)

**Short essays**

**(2x8=16)**

2. Describe glycogenesis and glycogenolysis
3. Give the sources, required daily allowance, biochemical functions, deficiency diseases of vitamin D

**Short notes**

**(5x4=20)**

4. Explain the steps of urea synthesis. Mention the normal serum urea level
5. Mention the biochemical functions of thiamine and its deficiency diseases
6. Define metabolic acidosis; its causes and lab findings
7. Biochemical effects of fluorine in drinking water
8. Mention four clinically important enzymes and corresponding diseases

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