

**First Year BDS Degree Regular/Supplementary Examinations April 2023**

**General Human Physiology and Biochemistry  
(2016 Scheme)**

**Time: 3 Hours**

**Max Marks: 70**

- *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: 112002**

**Section A - Physiology**

**Marks: 35**

**Essay:**

**(10)**

1. List the composition and functions of saliva. Describe how autonomic nervous system regulate salivary secretion. (3+3+4)

**Short Notes:**

**(2x5=10)**

2. Draw the scheme showing intrinsic and extrinsic pathways of coagulation. Mention TWO tests for assessing the integrity of these pathways. (4+1)
3. List the forms in which CO<sub>2</sub> is transported. Explain Haldane effect. (3+2)

**Brief Notes:**

**(5x3=15)**

4. Define glomerular filtration rate and mention its normal value. Mention the clearance of a substance that can be used to measure glomerular filtration rate.
5. Ovulation.
6. Mention the ionic basis of different phases of nerve action potential.
7. Referred pain.
8. Mention the normal range of resting heart rate. What is tachycardia. Give ONE cause.

**QP CODE:113002**

**Section B - Biochemistry**

**Marks: 35**

**Essay:**

**(10)**

1. Describe the classification of enzymes citing examples. Give an account of clinically important enzymes. (5+5)

**Short Notes:**

**(2x5=10)**

2. Explain the significance of hexose monophosphate pathway
3. Describe the four levels of protein structure

**Brief Notes:**

**(5x3=15)**

4. Structure of tRNA
5. List the tests of liver functions
6. List the causes of metabolic acidosis
7. Transamination
8. Functions of cholesterol

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