**ST. GREGORIOS DENTAL COLLEGE, CHELAD**

**Reg. No.: .....................**  
**First Year BDS Degree Regular II Internal Examinations September, 2022**

**General Human Physiology and Biochemistry**

**(2016 Scheme)  
Time: 3 hrs 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**

**Q P Code: 112002 Section A: Physiology Max Marks: 35**

**Essay: (1+3+4+2=10 )**

1. What is saliva? Describe the mechanism of salivary secretion. How the

composition of saliva determines its function. How saliva secretion is regulated.

CO1&CO4, K4

**Short Notes:**2. List the forms in which CO2 is transported. Explain Haldane effect.CO1,K2**(4+1=5)**  
3. Define GFR and explain factors affecting GFR. CO1, K2 **(1+4=5)**

**Answer Briefly: (5x3=15)**4. Pulmonary surfactant and its functions. CO2, K2  
5. Juxtaglomerular apparatus. CO1, K2  
6. Vital capacity and its variations. CO3, K3  
7. Sino-aortic reflex mechanism. CO2, K2

8. Digestive enzymes of pancreas. CO1, K2

**Q P Code: 113002 Section B: Biochemistry Max Marks: 35**

**Essay: (6+4=10)**  
1. Explain competitive inhibition of enzymes and its two clinical significances.

Discuss the enzyme markers in cardiac and liver diseases. CO3 & CO4, K3

**Short Notes:**2. Describe the absorption and transport of iron. CO2, K3 **(3+2+5)**3. Deficiency manifestations of Vitamin A. CO3, K3 **(5)**

**Answer Briefly: (5x3=15)**4 Functions of Albumin. CO1, K2  
5. Role of substrate concentration on enzyme activity. CO1, K2  
6. Function, deficiency and toxicity of fluorine. CO4, K4   
7. Mechanism of oxidative phosphorylation. CO3, K2

8. Principles of colorimetry. CO6, K3

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