**ST.GREGORIOS DENTAL COLLEGE**

**Reg. No.: .....................**  
**First Year BDS Degree Regular III Internal Examinations September 2023**

**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: ( 2+4+3+1=10 )** 1. Define thyroid hormones. Explain the mechanism of thyroid hormone synthesis.

How thyroid hormones involved in metabolism. Mention Myxedema. (CO3, K4)  
**Short Notes: (2x5=10)**2. Explain visual pathway with diagram. (CO2, K2)  
3. Neuromuscular junction structure and transmission. (CO2, K2)  
**Answer Briefly: (5x3=15)**4. Any three functions of growth hormone. (CO1, K2)  
5. Functions of middle ear. (CO1, K2)  
6. Thermoregulatory responses on cold climate. (CO2, K3)  
7. Cushing’s syndrome. (CO1, K2)

8. Spermatogenesis. (CO1, K2)

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

**Essay: (3+4+3=10)**  
1. Explain the role of carnithine in oxidation of fatty acid. Enumerate beta oxidation

of palmitic acid and its energetics. (CO1&CO3, K3)  
**Short Notes:**2. Describe the steps involved in detoxification of ammonia and its associated

disorders. (CO3, K2) **(3+2=5)**  
3. What is the normal ranges of fasting, random and post prandial blood glucose.

Discuss the regulation of blood sugar in fed state. (CO3, K4) **(2+3=5)**  
**Answer Briefly: (5x3=15)**4 Biologically important compounds derived from glycine. (CO1, K2)  
5. Oral glucose tolerance test and its interpretation. (CO6, K4)  
6. Ketosis and mention two causes of ketosis. (CO3, K2)  
7. Add a note on three disorders of aromatic aminoacid metabolism. (CO3, K2)

8. Transamination and its significance. (CO3, K2)

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