

**First Year BDS Degree Regular/Supplementary Examinations
January 2021**

**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. Name the hormones secreted by adrenal cortex. Describe the actions of glucocorticoids and describe the symptoms of Addison's disease. (3+4+3)

Short Notes:

(2x5=10)

2. Draw and label normal ECG recorded from standard limb lead-II. Describe the causes for different waves and intervals. (2+3)
3. Mechanism of concentration of urine in renal tubules.

Brief Notes:

(5x3=15)

4. Fine touch pathway
5. Compliance of lungs and thorax
6. Molecular mechanism of muscle contraction
7. Cephalic phase of gastric secretion
8. Accommodation reflex

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Section B - Biochemistry

Marks: 35

Essay:

(10)

1. Trace the pathway of glycolysis. Add a note on its energetics.

Short Notes:

(2x5=10)

2. Name the essential fatty acids. Enumerate their functions
3. How does kidney regulate acid base balance.

Brief Notes:

(5x3=15)

4. How bilirubin is formed in the body.
5. Competitive inhibition
6. Lesch-Nyhan syndrome
7. Transamination
8. Immunoglobulins