

**First Year BDS Degree Examinations August 2017****General Human Physiology and Biochemistry****(2016 SCHEME)****Time: 3 Hours****Max Marks: 70**

- Answer all questions
- 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. Describe the natural mechanisms responsible for the arrest of bleeding from small blood vessel. Mention the principle of TWO tests of hemostasis. (8+2)

Short Notes:**(2x5=10)**

2. Describe the events and control of second stage of deglutition.
3. Draw a diagram to show the innervation of urinary bladder. Explain micturition reflex.

Brief Notes:**(5x3=15)**

4. Factors affecting cardiac output.
5. List TWO forms in which O_2 is transported in blood. Explain Bohr effect.
6. What is normal serum Ca^{2+} level. Actions of hormones responsible for calcium homeostasis.
7. Hormonal changes during menstrual cycle.
8. Name THREE ascending pathways of central nervous system. Mention ONE sensation carried by each pathway.

QP CODE:113002**Section B - BIOCHEMISTRY****Marks: 35****Essay:****(10)**

1. Describe the synthesis and utilization of ketone bodies. Add a note on ketoacidosis. (7+3)

Short Notes:**(2x5=10)**

2. Give an account of urea cycle
3. Describe the digestion and absorption of carbohydrates

Brief Notes:**(5x3=15)**

4. Causes of jaundice
5. Creatinine clearance
6. Antibiotics interfering in transcription.
7. Specificity of enzymes
8. Functions of vitamin C

