

**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<sub>2</sub> is transported in blood. Explain Bohr effect.
6. What is normal serum Ca<sup>2+</sup> 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