

February 2012**[LA 653]****Sub. Code: 4132**

FIRST B.D.S. DEGREE EXAMINATION
PAPER II – HUMAN PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 544132**Time : 3 hours**
(180 Min)**Maximum : 70 marks**

Answer ALL questions in the same order
Draw Suitable diagrams wherever necessary
Answer Section A and B in Separate Answer Books

SECTION –A
(HUMAN PHYSIOLOGY)

I. Elaborate on:**(1 X 10 = 10)**

1. Draw diagram's to show the pain pathways from the limbs and face. Add a note on Endogenous pain inhibitory pathways.

II. Write notes on:**(5 x 5 = 25)**

1. Define Blood pressure, pulse pressure and Mean arterial pressure. Explain the Baroreceptor reflex with the help of a Flow chart.
2. Define Lung volumes with the help of a diagram. Give the normal values.
3. What is meant by Homeostasis? Mention basic the mechanisms that maintain homeostasis with examples.
4. Name the mechanisms involved in urinary concentration and dilution.
5. Define Ovulation. When does it occur in a 28 day menstrual cycle? Briefly write about the various tests to detect ovulation.

SECTION –B
(BIOCHEMISTRY)

I. Elaborate on:**(1 X 10 = 10)**

1. Describe in detail the formation and fate of ketone bodies in the body Add a note on biochemical findings in Diabetic Ketoacidosis

II. Write notes on:**(5 x 5 = 25)**

1. Biochemical Role of Vitamin B12 & deficiency manifestations
2. Phenylketonuria
3. Metabolic role of Calcium & regulation of calcium homeostasis
4. Substrate level phosphorylation with examples
5. Genetic code
