

# Sri Devaraj Urs University

(Formerly known as Sri Devaraj U.s Acada by of Higher Education and Research)

M.B.B.S. PHASE - I Degree Supplementary Examination Jan. 2009

Time: 3 Hrs.

### BIOCHEMISTRY

[Max. Marks: 100]

## Use separate answer books for section A and section B.

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

**SECTION – A** (Max. Marks: 50)

#### LONG ESSAY

 $1 \times 10 = 10 \text{ Marks}$ 

1. Name the Aromatic Amino Acids. Discuss the Metabolism of any one of them. Add a note on the associated clinical disorders.

#### SHORT ESSAY

 $5 \times 5 = 25 \text{ Marks}$ 

- 2. Lysosomes
- 3. Describe the Hexose Monophosphate shut pathway. Add a note on its Biochemical significance.
- 4. How is ammonia Detoxified in the Human Body.
- 5. Describe the metabolic changes during starvation.
- 6. Enzyme markers of Liver Function.

#### SHORT ANSWERS

5 X 3 = 15 Marks

- 7. Draw a neat Labelled Diagram of the Electron Transport chain indicating the site of action of inhibitors.
- 8. Cytochrome P<sup>450</sup>.
- 9. Suicide Inhibition.
- 10. Oncogenes.
- 11. Beta Oxidation of palmitic acid.

# SECTION – B (Max. Marks: 50)

(Use separate answer book)

#### LONG ESSAY

 $1 \times 10 = 10 \text{ Marks}$ 

1. Define Translation. Write in detail the steps in Translation – Add a note on the Post Translational Modifications.

#### SHORT ESSAY

5 X 5 = 25 Marks

- 2. Name the sulphur containing Vitamins. Write the Chemistry, Biochemical role, Sources and Deficiency manifestations of anyone of them.
- 3. What is the normal serum Calcium? How is Calcium Homeostasis maintained in the Human Body.
- 4. How does Kidney regulate an acid load.
- 5. How is bilirubin Detoxified What is van-den Bergh reaction. Discuss the different responses obtained in the reaction.
- 6. Gene Therapy.

#### SHORT ANSWERS

 $5 \times 3 = 15$  Marks

- 7. Obesity
- 8. Draw a Diagram of the Purine ring indicating the source of Carbon and Nitrogen.
- 9. Polymerase Chain Reaction.
- 10. Acute Intermittent Porphyria.
- 11. Quality Control.

