

149-NR

M.D. DEGREE EXAMINATION – OCTOBER, 2013

BIOCHEMISTRY

Paper-II : Chemistry and Metabolism.

Time: 3 Hours

Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. What are essential fatty acids? Enumerate them. Write two functions and one deficiency manifestation?
2. Explain irreversible steps of glycolysis with the enzymes involved. Write energetic under aerobic and anaerobic conditions.
3. Glucose Alanine cycle.
4. What are Immunoglobulins? Name the immunoglobulin which serves as first line of defense.
5. Draw a well labelled diagram of DNA structure.
6. What are porphyrias? Classify them and discuss acute intermittent Porphyria.
7. Inhibitors of oxidative Phosphorylation.
8. Discuss the various ways by which ammonia is produced from various metabolites in the body.
9. Gluconeogenesis in starvation and well fed state.
10. Explain the biochemical basis of Lesch-Nyhan syndrome and Von Gierke's disease.

- - -