

Pre. Ph.D. Course Work (Old Course) : SUMMER - 2018 (Medical Biochemistry)

SUBJECT: PAPER-II – MEDICAL BIOCHEMISTRY

Day : **Tuesday**
Date : **26/06/2018**

S-2018-4759

Time: **10.00 AM TO 01.00 PM**
Max. Marks: 100.

N.B.:

- 1) Attempt any **FIVE** questions from Section-I and any **FIVE** questions from Section-II.
- 2) Both the sections should be written in **SEPARATE** answer books.
- 3) Draw neat labeled diagrams **WHEREVER** necessary.
- 4) Figures to the **RIGHT** indicate full marks.

SECTION-I

- Q.1** Describe the chemistry, types and functions of hemoglobin. (10)
- Q.2** Describe the Metabolism of LDL and HDL lipoprotein emphasizing the role of apolipoprotein, receptors and enzymes. (10)
- Q.3** Discuss the skeletal and extra skeletal of vitamin D. (10)
- Q.4** Give an account of laboratory approach in diagnosis and monitoring of Diabetes mellitus. (10)
- Q.5** Describe the respiratory and renal regulation of acid base balance. (10)
- Q.6** Discuss the process of protein biosynthesis and role of chaperons in protein folding. (10)

SECTION-II

- Q.7** Justify the statement: "Fat, burns in the flame of carbohydrates". (10)
- Q.8** Describe the chemical composition and structure of membranes. Add a note on transport across membrane. (10)
- Q.9** Write the principle, working and applications of chemiluminescence immunoassay system. (10)
- Q.10** Enumerate the hormones secreted by adipose tissue. Discuss their role. (10)
- Q.11** Discuss the process of internal quality control in clinical laboratory. Add a note on proficiency testing. (10)
- Q.12** Discuss the process of gene regulation in eukaryotes. (10)

* * *