

Q.P.CODE:148-NR

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – **APRIL, 2018****BIOCHEMISTRY**

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Explain in detail the methods used to determine different levels of structural organization of protein
- 2) Explain in detail structural organization of deoxy ribonucleic acid(DNA)
- 3) Explain principle, instrumentation and application of capillary electrophoresis
- 4) Explain different cell culture techniques and their applications.
- 5) Explain the principle, procedure and clinical applications of polymerase chain reaction (PCR)
- 6) Explain briefly the techniques and procedure of isolation and purification of a protein from an animal cell
- 7) Explain principle, instrumentation and application of flow cytometer.
- 8) Explain the applications, advantages and disadvantages of DNA and complementary DNA library.
- 9) What is exosomics and what are its applications?
- 10) What is micro RNA and what are its functions? What are the applications of micro RNA?
