Reg . No.....

## First Year M.Sc. MLT Degree Examinations – November 2015 (Biochemistry)

PAPER – I GENERAL BIOCHEMISTRY & CHEMISTRY OF BIOMOLECULES

#### Time : 3 hrs.

#### Max. marks : 100

- Answer all questions
- Draw diagrams wherever necessary

# Essays:

### (10x10 = 100)

- 1. Explain the structure and functions of plasma membrane
- 2. Explain the principle of fluorimetry, and its instrumentation . Add a note on the applications of this technique.
- 3. Classify the lipids with examples. Mention the functions of lipids.
- 4. Describe the measurement of radioactivity. Add a note on disposal of radioactive materials
- 5. Name the major purine and pyrimidine bases; enumerate the nucleosides and nucleotides formed from these bases . Add a note on functions of free nucleotides.
- 6. What are buffers . Explain the preparation of 0.1 M phosphate buffer of pH 7.4.
- 7. How are the sub cellular organelle fractionated . Outline the process with a diagram and add a note on marker enzymes for sub cellular organelle.
- 8. Explain the structural organization of proteins with appropriate examples .
- 9. Explain the general principle of chromatography. Explain the principle of partition chromatography and add a note on its applications
- 10. Name the types of RNA , explain its structure and functions.

\*\*\*\*\*