

B.Sc. - I (NEP) - Semester-I
**SEC09 / STUG01BCH006 - Biochemistry: Basic Laboratory Skills in
Biochemistry**

P. Pages : 2

Time : Two Hours



GUG/W/24/15903

Max. Marks : 40

Note : All questions are compulsory and carry equal marks.

- 1.** Attempt **any four** of the following (2 marks each). **8**
- a) Give any four good laboratory practices.
 - b) How should you handle broken glassware in the laboratory?
 - c) What is the use of fire extinguisher in the laboratory?
 - d) What is the purpose of fume hood in the lab?
 - e) How the hazardous chemicals are disposed after an experiment in the laboratory?
 - f) What action to be taken if you get chemical in your eyes?
- 2.** Attempt **any four** of the following (2 marks each). **8**
- a) How the pH meter is calibrated before use?
 - b) What is the purpose of autoclaving in the laboratory?
 - c) What are the uses of centrifuge machine?
 - d) How micropipette is used in the laboratory?
 - e) Give the principle of spectrophotometer.
 - f) What are applications of magnetic stirrer?
- 3.** Attempt **any four** of the following (2 marks each). **8**
- a) What are the units of measurement? Give example.
 - b) What are metric units of measurement of length?
 - c) Give the examples of measurement of volume.
 - d) What are metric units of measurement?

e) What is the use of logarithms?

f) What is meant by fraction?

4. Attempt **any four** of the following (2 marks each).

8

a) What are buffer? What is the use of buffer in the laboratory?

b) What are strong acids & strong bases?

c) What is meant by stock standard solution?

d) What are the chemical components of citrate buffer?

e) What is meant by 1N NaOH solution?

f) Define pH what is pH scale?

5. Attempt **any eight** of the following (1 marks each).

8

a) How a test tube containing chemical is labelled?

b) What the meaning of LR and AR chemicals?

c) Give the safety symbol for toxic and flammable chemical.

d) Which law is used in autoclave?

e) What is the temperature and pressure used in autoclave during sterilization?

f) What is meant by rpm in centrifuge?

g) Who made scientific notations?

h) What is the SI unit for the measurement of amount of substance?

i) How do you write 0.0000095 in scientific notations?

j) Define the term molarity.

k) What is meant by percent solution?

l) Name the weak acid present in phosphate buffer.
