

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

P. Pages : 2

Time : Two Hours



GUG/S/25/15903

Max. Marks : 40

Notes : 1. All questions are compulsory and carry equal marks.

- 1.** Attempt **any four** of the following. **2x4**
=8
- a) Write the use of five extinguishes.
 - b) Write a note on maintenance and handling of chemicals.
 - c) How will you dispose the hazardous chemicals?
 - d) What is radioactive waste?
 - e) Write a note on laboratory waste management.
 - f) What are the first aid practices to be followed in case of burn and acid spills?
- 2.** Attempt **any four** of the following. **2x4**
=8
- a) How to Calibrate and use of pH meter?
 - b) Write about the use and maintenance of magnetic stirrer.
 - c) Draw a diagram of RBC counting area on hemocytometer.
 - d) Explain how to use hemoglobinometer .
 - e) What is the use of autoclave?
 - f) Write a note on use and maintenance of centrifuge machine.
- 3.** Attempt **any four** of the following. **2x4**
=8
- a) Write a note on the scientific notation rules.
 - b) What are the different units of measurement?
 - c) Write a note on CGS units.
 - d) Explain how to use logarithms for calculations.
 - e) Write a note on measurements of volumes of liquids.
 - f) What are the units of weight measurement.

4. Attempt **any four** of the following. **2x4**
=8
- a) How to make 1M solution of NaOH?
 - b) Write a note on components of phosphate buffer.
 - c) What is stock solution? State its uses.
 - d) Write a note on the composition of citrate buffer.
 - e) Write a short note on normality.
 - f) Write a note on serial dilution.
5. Attempt **any eight** of the following. **1x8**
=8
- a) What is AR grade of chemicals?
 - b) What is the use of fume hood?
 - c) What do you understand by good laboratory practices.
 - d) What is the use of incubator shaker?
 - e) State any one difference between analytical and top loading balance.
 - f) What is the use of micropipettes.
 - g) A fraction is a number consisting of a numerator and ----- (fill in the blank)
 - h) A power with a base of 10 and an exponent of 2 is written as
 - a) 10^2
 - b) 10×10
 - c) 10^3
 - d) 2^{10}

[Select the correct option]
 - i) The SI unit of mass is kilogram (True or false)
 - j) Define Molality.
 - k) Give any one example of acid.
 - l) Give any one example of base.
