10. Estimation of calcium from natural source (Ragi)

Course outcome:

- Students will have the ability to think critically and analyze biochemical problems.
- They can present scientific and technical information resulting from laboratory experimentation in b written and oral formats.
- They are in a position to explain the principle, instrumentation and applications of colorimetric anal various biochemical compounds.

REFERENCES:

1. Introduction to practical Biochemistry. David T. Plummer
2. Lab Manual of Biochemistry. By Nigam. 2007. Tata McGraw-Hill Education, USA.
3. Biochemical Methods. S. Sadasivam and A. Manickam. 3rd ed, New Age International P.

BCP 407: PRACTICAL GENERAL BIOCHEMISTRY: SOFT CORE

Practical: 8 hours/week **Total credits: 03**

Course objectives:

- To establish broad knowledge of general biochemistry.
- To impart the basic analytical and technical skills to work effectively in biochemistry laboratories.
- To perform accurate quantitative measurements with an understanding of the theory and use of instrumentation, interpret experimental results perform calculations on these results and draw reasonable accurate conclusion.

EXPERIMENTS

1. Buffers: a) Introduction b) Preparation of acetate, citrate and phosphate buffers
2. Quantitative determination of protein concentration by Biuret method.
3. Estimation of protein by Lowry's method.
4. Estimation of protein by Bradford method.
5. Bicinchonic acid protein assay.
6. Measurement of protein concentration by UV spectroscopy.
7. Estimation of glucose from natural or synthetic source by Dinitrosalicylic acid method.
8. Estimation of total carbohydrates from natural source by Phenol sulphuric acid method.
9. Estimation of starch by Anthrone method
10. Estimation of ascorbic acid from natural source (guava, green chilli, orange etc.) by DNPH method.
11. Estimation of inorganic phosphate by Fiske- Subba Rao's method.
12. Estimation of DNA by Diphenylamine method
13. Estimation of RNA by Orcinol acid method