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| PAPER CODE: 1SC2030315 | TITLE OF PAPER: ANALYTICAL CHEMISTRY PRACTICAL |
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| Teaching scheme (hours) per week | | Credit | | Theory Marks | | Practical Marks | | Total |
|----------------------------------|-----------|--------|-----------|-----------------------|------------------|-----------------------|------------------|-------|
| Theory | Practical | Theory | Practical | University Assessment | Cont. Assessment | University Assessment | Cont. Assessment | |
| - | 8 | - | 8 | - | - | 120 | 80 | 100 |

| List of Practicals (Minimum 12) | |
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| 1 | Separation of CO^{2+} & Ni^{2+} by Ion Exchange chromatography. |
| 2 | Separation of Ni^{2+} & Fe^{3+} by Ion Exchange chromatography. |
| 3 | Separation of Zn^{2+} & Mg^{2+} by Ion Exchange chromatography. |
| 4 | To determine the amount of Iron/Calcium in milk powder. |
| 5 | Detection of Caffeine in commercial products (Tablet) by TLC. |
| 6 | Separation of blue or black Ink/ chlorinated insecticides by paper chromatography. |
| 7 | To determine Iodine value of an oil. (Coconut oil, Castor oil, Soybean Oil, Cotton seed oil, etc) |
| 8 | To determine % purity of the given sample of Aspirin. |
| 9 | Synthesis of Silver/gold nanoparticle by Reducing agent |
| 10 | To determine the amount of Iron/Calcium in milk powder. |
| 11 | To determine sodium and potassium in blood serum and urine by flame photometer |
| 12 | Separation of mixture of drugs by TLC & column chromatography |
| 13 | To determine the acidity of lubricating oil sample. |
| 14 | Estimation of Isoniazide/Paracetamol by UV-visible spectrophotometry |
| 15 | Estimation of Ibuprofen by UV-visible spectrophotometry |

List of books

1. Pharmaceutical Analysis Vol-II Aug 12, 2008 by Dr.S.G.Wadodkar and Dr.K.R.Mahadik
2. Pharmaceutical Analysis Vol-II Jun 10, 2008 by Dr.H.N.More and Dr. A.V.Kasture
3. A Textbook of Qualitative Chemical Analysis by Vogel, Arthur I
4. Vogel's Quantitative Chemical Analysis Paperback – 2009 by J.Mendham (Author)
5. Vogel's textbook of quantitative inorganic analysis, including elementary instrumental analysis. Language: English. Edition: 4th ed. / revised by J. Bassett.
6. A text book of practical organic chemistry – A. I. Vogel
7. A handbook of quantitative and qualitative analysis – H. T. Clarke

8. An Advance Course in practical Chemistry, A K. Nad, B. Mahapatra and A. Ghoshal.
9. Vogel's Textbook of Quantitative Chemical Analysis, 6 The Edition, 2002
10. Analytical Chemistry Practice, John H. Kennedy, Saunders College Publishing, Second Edition 1990.