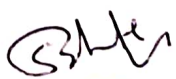


Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalaya , Ramanandnagar (Burli),
Tal.-Palus, Dist. - Sangli.
Department of Chemistry
Add On Course
Student List
2021-2022

Sr.No	Roll No	Name of the students
1	1851	*Chougule Namrata Sunil
2	1852	*Deshmukh Sanjivani Bhaskar
3	1853	*Ghadage Shivani Nitesh
4	1854	*Gurav Vaishnavi Dadaso
5	1855	*Jadhav Kajal Sunil
6	1856	*Kamble Kiran Devanand
7	1857	*Khilare Rutuja Prakash
8	1858	*Koli Maheshvari Madhukar
9	1859	*Nalawade Akanksha Anil
10	1860	*Patil Snehal Vikas
11	1861	*Pawar Omkar Prakash
12	1862	*Pawar Tejaswini Madhukar
13	1863	*Phalle Swarupa Sanjay
14	1864	*Rade Sushama Dinkar
15	1865	*Rankhambe Priyanka Shivaji
16	1866	*Rutuja Pandurang Salunkhe
17	1867	*Sathe Mangal Malhari
18	1868	*Sathe Snehal Suresh
19	1869	*Sawant Shweta Vasudev
20	1870	*Shinde Shweta Dilip
21	1871	*Yadav Tupe Amruta Santosh

22	1872	Arbune Tejas Ravindra
23	1873	Barbole Tejas Santosh
24	1874	Chavan Kabir Maruti
25	1875	Chovgule Sourabh Subhash
26	1876	Damame Suhas Suresh
27	1877	Deshkukh Sourabh Jalindar
28	1878	Deshmuh Sujit Ramchandra
29	1879	Dupate Chinmay Sukhadev
30	1880	Hande Swapnil Subhash
31	1881	Havaldar Shubham Sanjay
32	1882	Jadhav Akash Bhagavan
33	1883	Jadhav Maithili
34	1884	Jadhav Pranav Dilip
35	1885	Jadhav Rushikesh Rangrao
36	1886	Kshirsagar Prathmesh Prashant
37	1887	Kumbhar Abhishek Arjun
38	1888	Lad Pratik Rajendra
39	1889	Lad Satyajeet Hanmant
40	1890	Lad Sourabh Hanmant
41	1891	Manugade Prathmesh Pratap
42	1892	Marale Ritesh Sanjay
43	1893	More Sanket Dilip
44	1894	Mulani Soheb Dastagir
45	1895	Mulla Parwej Anis
46	1896	Mulla Reshma Rahiman
47	1897	Nalawade Vinay Popat
48	1898	Pathan Mujib Jamil

49	1899	Patil Dnyaneshwar Dattary
50	1900	Patil Mayur Manohar
51	1901	Patil Rutuja Krushnrao
52	1902	Patil Saurabh Dhairyasheel
53	1903	Patil Sujit Ramesh
54	1904	Patil Vishal Ashok
55	1905	Pawar Somnath Baban
56	1906	Pawar Suraj Ravindra
57	1907	Pawar Swapnil Pramod
58	1908	Rade Harshad Jayvant
59	1909	Rajmane Akshay Vitthal
60	1910	Salunkhe Nilesh Bhanudas
61	1911	Sawant Nilesh Sukhdev
62	1912	Shekh Sahil Majanu
63	1913	Shinde Rushikesh Vitthal
64	1914	Shirtekar Rushikesh Vishnu
65	1915	Suryawanshi Prasad Laxman
66	1916	Varane Shreeraj Santosh
67	1917	Varude Guruprasad Vikas
68	1918	Vibhute Pratik Balu
69	1919	Yadav Prafull Sanjay
70	1920	Yadav Tupe Amarsinh Santosh


Head of Dept.
Department of Chemistry
 Dr. Patangrao Kadam Mahavidhyalaya
 Ramanandnagar (Burli)

Syllabus

Chromatography:

a) Separation of mixtures

i) Paper chromatographic of Co^{2+} and Ni^{2+}

ii) Separation and identification of the amino acids present in the given mixture by paper chromatography. Reporting the R_f values.

II). Solvent Extractions.

i) To separate a mixture of Ni^{2+} & Fe^{2+} by complexation with DMG and extracting the Ni^{2+} DMG complex in chloroform, and determine its concentration by spectrophotometry.

Analysis of soil:

i) Determination of pH of soil.

ii) Total soluble salt.

iii) Estimation of calcium, magnesium

iv) Qualitative detection of nitrate, phosphate

Ion exchange:

i) Determination of exchange capacity of cation exchange resins and anion exchange resins.

ii) Separation of amino acids from organic acids by ion exchange chromatography.

III Spectrophotometry

Verification of Lambert-Beer's law and determination of concentration of a coloured species (CuSO_4 , KMnO_4)

Reference Books:

- 1) Vogel, Arthur 1: A Text book of Qualitative Inorganic Analysis (Rev, by G.H. Jeffery and other) 5th Ed. The English language Book Society of Longman.
- 2) Willard, Hobart H, et al: Instrumental Methods of Analysis, 7th Ed. Wardsworth Publishing Company, Belmont, California. USA. 1988.
- 3) Christian, Gary D: Analytical Chemistry, 6th Ed, John Wiley & Sons, New York, 2004.

Qualitative and quantitative Aspects of analysis:

Sampling, evaluation of analytical data, errors, accuracy and precision methods of their expressing, normal law of distribution of indeterminate errors, statistical test of data: F, Q and test rejection of data, and confidence intervals.

Optical methods of analysis: (5 lectures)

Origin of spectra, interaction of radiation with matter, fundamental laws of spectroscopy and selection rules, validity of Beer-Lambert's law,

UV-visible spectrometry: Basic principle of instrumentation (choice of source, monochromator and detector) for single and double beam instrument;

Basic principle of quantitative analysis; extermination of metal ion form aqueous solution, geometrical isomers, keto-enol tautomers.

Flame Atomic Absorption and Emission Spectrometry: Basic principle of instrumentation (choice of source, monochromator, detector, choice of flame and Burner design. Techniques of atomization and sample introduction, Method of background correction. Source of chemical interferences and their method of removal. Techniques for the quantitative estimation of trace level of metal ions form water sample.

Thermal methods of analysis:

Theory of thermogravimetry (TG), basic principle of instrumentation. Techniques for quantitative estimation of Ca and Mg from their mixture.

Electroanalytical methods:

Classification of electroanalytical methods, basic principle of pH metric, potentiometric and conductometric titration. Techniques used for the determination of equivalence point. Techniques used for the, of pKa values.

Separation Techniques:

Solvent extraction: Classification, principle and efficiency of the technique. Mechanism extraction: extraction by salvation and chelation.

Techniques of extraction batch, continuous and counter current extractions.

Qualitative and quantitative aspects of solvent extraction: extraction of metal ions from aqueous solution, extraction of organic species from the aqueous media.

Chromatography: Classification principle and efficiency of the technique, Mechanism of separation: adsorption partition & ion exchange. Development of chromatograms: frontal, elution and displacement method.

Reference Books:

- 1) Vogel, Arthur I: A Text book of Qualitative Inorganic Analysis (Rev, by G.H. Jeffery and other) 5th Ed. The English language Book Society of Longman.
- 2) Willard, Hobart H, et al: Instrumental Methods of Analysis, 7th Ed. Wards worth Publishing Company, Belmont, California. USA. 1988.
- 3) Christian, Gary D: Analytical Chemistry, 6th Ed, John Wiley & Sons New York, 200
- 4) Harris, Daniel C: Exploring Chemical Analysis, Ed New York < W,H. Freeman, 2001.
- 5) Khopkar, S,M. Basic Concept of Analytical Chemistry New Age International Publisher, 2009 .
- 6) Skoog .D.A. Holler FJ. And Nieman, T.A. Principle of instrumental Analysis, Thoms

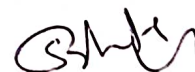
Course Duration -3 Months

After successful completion of course certificate will be issued.

Theory Periods-30

Practical Periods-30

Total number of periods -60



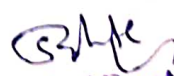
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Department of Chemistry
Dr. Patangrao Kadam Mahavidhyalaya
Ramanandnagar (Burli)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalaya Ramanandnagar (Burli),
ANALYTICAL METHODS IN CHEMISTRY
ADD ON COURSE
Time Table (2021-22)

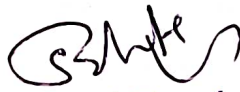
B.Sc. III Chemistry

Time- 01:40 to 02:40 pm

Sr. No.	Day& Date	Name of the Lecturer	Sr. No.	Day& Date	Name of the Lecturer	Sr. No	Day& Date	Name of the Lecturer
1	01.12.2021 Wednesday	Mr. Y. R. Sable	14	03.01.2022 Monday	Mr. V. R. Bhosale	27	01.03.2022 Tuesday	Mr. U. S. Shelke
2	04.12.2021 Saturday	Mr. V. R. Bhosale	15	04.01.2022 Tuesday	Mr. U. S. Shelke	28	05.03.2022 Saturday	Prof. Dr. P.B. Piste
3	06.12.2021 Monday	Mr. U. S. Shelke	16	08.01.2022 Saturday	Prof. Dr. P.B. Piste	29	07.03.2022 Monday	Mr. D. P. Gawari
4	07.12.2021 Tuesday	Prof. Dr. P.B. Piste	17	10.01.2022 Monday	Mr. D. P. Gawari	30	08.03.2022 Tuesday	Mr. D.A. Sasane
5	11.12.2021 Saturday	Mr. D. P. Gawari	18	11.01.2022 Tuesday	Mr. D.A. Sasane	31	12.03.2022 Saturday	Mr. Y. R. Sable
6	13.12.2021 Monday	Mr. D.A. Sasane	19	15.01.2022 Saturday	Mr. Y. R. Sable	32	14.03.2022 Monday	Mr. V. R. Bhosale
7	14.12.2021 Tuesday	Mr. Y. R. Sable	20	17.01.2022 Monday	Mr. V. R. Bhosale	33	15.03.2022 Tuesday	Mr. U. S. Shelke
8	18.12.2021 Saturday	Mr. V. R. Bhosale	21	18.01.2022 Tuesday	Mr. U. S. Shelke	34	19.03.2022 Saturday	Prof. Dr. P.B. Piste
9	20.12.2021 Monday	Mr. U. S. Shelke	22	22.01.2022 Saturday	Prof. Dr. P. B. Piste	35	21.03.2022 Monday	Mr. D. P. Gawari
10	21.12.2021 Tuesday	Prof. Dr. P. B. Piste	23	24.01.2022 Monday	Mr. D. P. Gawari	36	22.03.2022 Tuesday	Mr. D.A. Sasane
11	27.12.2021 Monday	Mr. D. P. Gawari	24	25.01.2022 Tuesday	Mr. D.A. Sasane	37	26.03.2022 Saturday	Mr. Y. R. Sable
12	28.01.2021 Tuesday	Mr. D.A. Sasane	25	29.01.2022 Saturday	Mr. Y. R. Sable	38	28.03.2022 Monday	Mr. V. R. Bhosale
13	01.01.2022 Saturday	Mr. Y. R. Sable	26	31.01.2022 Monday	Mr. V. R. Bhosale	-	-	-


Head of Dept.
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Ramanandnagar (Burli)

62	1912	SHEKH SAHIL MAJANU	P	A	P	P	P	P	P	P	P	P	P	P
63	1913	SHINDE RUSHIKESH VITTHAL	A	A	P	P	P	P	P	P	P	P	P	P
64	1914	SHIRTEKAR RUSHIKESH VISHNU	P	P	P	P	P	P	P	P	P	P	P	P
65	1915	SURYAWANSHI PRASAD LAXMAN	P	P	P	P	P	P	P	P	P	P	P	P
66	1916	VARANE SHREERAJ SANTOSH	P	P	P	P	P	P	P	P	P	P	P	P
67	1917	VARUDE GURUPRASAD VIKAS	P	P	P	P	P	P	P	P	P	P	P	P
68	1918	VIBHUTE PRATIK BALU	P	P	P	P	A	A	A	A	A	A	A	P
69	1919	YADAV PRAFULL SANJAY	P	P	P	A	P	P	P	P	P	P	P	P
70	1920	YADAV TUPE AMARSINH SANTOSH	P	P	P	P	P	P	P	P	P	P	P	P


Head of Dept.
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Dr. Patangrao Kadam Mahavidhyalaya
Ramanandnagar (Burl)

36	1886	KSHIRSAGAR PRATHMESH	P	P	P	P	P	P	P	P	P	P
37	1887	KUMBHAR ABHISHEK ARJUN	P	P	P	P	P	P	P	P	P	P
38	1888	LAD PRATIK RAJENDRA	P	P	P	P	P	P	P	P	P	P
39	1889	LAD SATYAJEET HANMANT	P	P	P	P	P	P	P	P	P	P
40	1890	LAD SOURABH HANMANT	P	P	P	P	P	P	P	A	P	P
41	1891	MANUGADE PRATHMESH PRATAP	P	P	P	P	P	P	P	A	P	P
42	1892	MARALE RITESH SANJAY	P	P	P	P	P	P	P	P	P	P
43	1893	MORE SANKET DILIP	P	P	P	P	P	P	P	P	P	P
44	1894	MULANI SOHEB DASTAGIR	P	P	P	A	P	P	P	P	P	P
45	1895	MULLA PARWEJ ANIS	P	P	P	P	P	P	P	P	P	P
46	1896	MULLA RESHMA RAHIMAN	P	P	P	P	P	P	P	P	P	P
47	1897	NALAWADE VINAY POPAT	P	P	A	P	A	A	A	P	P	P
48	1898	PATHAN MUJIB JAMIL	P	P	P	P	P	P	A	P	P	P
49	1899	PATIL DNYANESHWAR DATTARY	P	P	P	P	P	P	A	P	P	P
50	1900	PATIL MAYUR MANOHAR	P	P	P	P	P	P	P	P	P	P
51	1901	PATIL RUTUJA KRUSHNRAO	P	P	P	P	P	P	P	P	P	P
52	1902	PATIL SAURABH DHAIRYASHEEL	P	P	P	P	P	P	P	P	P	P
53	1903	PATIL SUJIT RAMESH	P	P	P	P	P	P	P	P	P	P
54	1904	PATIL VISHAL ASHOK	P	P	P	P	P	P	P	P	P	P
55	1905	PAWAR SOMNATH BABAN	P	P	P	P	P	P	P	P	P	P
56	1906	PAWAR SURAJ RAVINDRA	P	P	P	P	P	A	P	P	P	P
57	1907	PAWAR SWAPNIL PRAMOD	P	P	P	P	P	P	P	P	P	P
58	1908	RADE HARSHAD JAYVANT	P	A	P	P	P	P	P	P	P	P
59	1909	RAJMANE AKSHAY VITTHAL	P	A	P	P	P	P	P	P	P	P
60	1910	SALUNKHE NILESH BHANUDAS	P	A	P	P	P	P	P	P	P	P
61	1911	SAWANT NILESH SUKHDEV	P	A	P	P	P	P	P	P	P	P
62	1912	SHEKH SAHIL MAJANU	A	P	P	P	P	P	P	P	P	P
63	1913	SHINDE RUSHIKESH VITTHAL	P	P	P	P	P	A	P	P	P	P
64	1914	SHIRTEKAR RUSHIKESH VISHNU	P	P	A	P	P	P	P	P	P	P
65	1915	SURYAWANSHI PRASAD LAXMAN	P	P	A	P	P	P	P	P	P	P
66	1916	VARANE SHREERAJ SANTOSH	A	P	P	P	P	P	P	P	P	P
67	1917	VARUDE GURUPRASAD VIKAS	P	P	P	P	A	P	P	P	P	P
68	1918	VIBHUTE PRATIK BALU	P	P	P	P	P	A	P	P	P	P
69	1919	YADAV PRAFULL SANJAY	P	P	P	P	A	P	P	P	P	P
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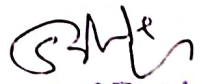


Head of Dept.

Department of Chemistry

Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burl)

39	1889	LAD SATYAJEET HANMANT	P	P	P	P	P	P	P	P	P	P
40	1890	LAD SOURABH HANMANT	P	P	P	P	P	P	P	P	P	P
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56	1906	PAWAR SURAJ RAVINDRA	P	P	P	P	P	P	P	P	P	P
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 Department of Chemistry
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 Ramanandnagar (Burlit)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalaya Ramanandnagar (Burli)
Department Of Chemistry
Subject- Add On Course on Analytical Method In Chemistry
Examination 2021-2022

DATE:-23/04/2022

Time:- 12.00pm to 02.00pm

Day:-Saturday

Marks:-100

- 1) All Question are Compulsory**
2) Each Question having 2 Marks

1. Solvent extraction is better if repeated extractions are done using
A Large Solvent B Small solvent
C Extra solvent D normal solvent
2. Which of the following is not a type of purposive sampling?
a) Probability sampling b) Deviant case sampling
c) Theoretical sampling d) Snowball sampling
3. The minimum sample size for qualitative interviewing is:
a) 30 b) 31
c) 60 d) It's hard to say
4. What is meant by the term 'accuracy'?
A The lack of bias in the data. B The overall quality of the data.
C The level of detail at which data is stored D The extent to which a value approaches its true value.
5. What is meant by the term 'precision'
A The overall quality of the data.
B The extent to which a value approaches its true value.
C The lack of bias in the data.
D The level of detail at which data is stored
6. Which of the following may be caused by error in manual digitizing?
A Fuzzyness. B Switch-backs.
C Overshoot and undershoot. D Wobble.
7. The intensity of an absorption band is always proportional to which of the following factor?

- a) Atomic population
- b) Molecular population of the initial state
- c) Molecular population of the final state
- d) Temperature

8. On which factors the vibrational stretching frequency of diatomic molecule depend?

- a) Force constant b) Atomic population
- c) Temperature d) Magnetic field

9. The vibrations, without a center of symmetry are active in which of the following region?

- a) Infrared but inactive in Raman b) Raman but inactive in IR
- c) Raman and IR d) Inactive in both Raman and IR

10. The frequency of vibration of a bond is a function of which factor?

- a) Force constant of the bond
- b) Masses of the atoms involved in bonding
- c) Force constant of the bond and Masses of the atoms
- d) Bond order

11. Lambert's law states that the intensity of light decreases with respect to

- a) Concentration b) Distance
- c) Composition d) Volume

12. Beer's law states that the intensity of light decreases with respect to

- a) Concentration b) Distance
- c) Composition d) Volume

13. Beer Lambert's law gives the relation between which of the following?

- a) Reflected radiation and concentration
- b) Scattered radiation and concentration
- c) Energy absorption and concentration
- d) Energy absorption and reflected radiation

14. In atomic absorption spectroscopy the most strongly absorbed light is called as

- A) Resonance line B) Base line
- C) Stokes line D) anti Stokes line

15. In atomic emission spectroscopy the emission due to the electronic transition of

- A) state to singlet ground state.
- C) Singlet ground state to triplet excited state

- D) Triplet excited state to singlet ground state.
B) singlet excited Singlet ground state to singlet excited state

16. In atomic emission spectroscopy the graph drawn between
A) Emission vs. Concentration B) Absorbance Vs Concentration
C) Absorbance Vs wave length D) Emission Vs wave length

17. Which one of the following indicators would be most suitable for this titration?
A any acid/base indicator is suitable B phenolphthalein (pKa = 9.6)
C cresol red (pKa = 8.3) D methyl red (pKa = 5.1) E methyl yellow (pKa = 3.1)

18. In which of the following acid / base titrations, can we NOT determine the equivalence point in an accurate manner?
A strong acid / strong base B strong acid / weak base
C weak acid / strong base D weak acid / weak base

19. Which of the following statements regarding the solubility of $Mg(OH)_2$ is correct?
A pH has no effect on the solubility of $Mg(OH)_2$.
B $Mg(OH)_2$ is less soluble at pH 4 than pH 7.
C $Mg(OH)_2$ is less soluble in 0.1 M $MgCl_2$ solution than in water
D all of the above

20. How many stereoisomers are possible for the complex $[Ni(en)_3]^{2+}$? en = ethylenediamine = $NH_2CH_2CH_2NH_2$
A 1 B 2
C 3 D 4

21) A most common example of extraction is with help of
A Ether B alcohol
C benzene D chloroform

22. The ether layer is used to separate
A Fiber B inorganic impurities
C organic impurities D gases

23. When the component has a small value of K, it is supposed to have an affinity for:
a) Mobile phase b) No phase
c) Stationary phase d) Whole solution

24. Solvent extraction is more effective when the extraction is repeated with:

- a) Extra solvent
- b) Large solvent
- c) Small solvent
- d) No solvent

25. A mobile phase cannot be a :

- a) Gas
- b) Solid
- c) Liquid
- d) Solid or gas

26) The travelling distance of mobile phase in TLC is

- A) 2 cm
- B) 1 cm
- C) 2.5 cm
- D) 10 cm

27) In TLC, initially the sample is

- A) In contact with mobile phase
- B) Not in contact with mobile phase
- C) Coated at the level of mobile phase
- D) Coated below the level of mobile phase

28) The sample introduction in HPTLC is carried by

- A) Goniometry
- B) platinum-iridium capillary
- C) Densitometry
- d) Micropipette

29) Identification of spots on the tlc plate is done by all of the following except

- A) Spraying with reagents
- B) Under microscope
- C) Fluorescence
- D) Fluorescent adsorbent

30) The binder used in the preparation of TLC plates is

- A) Monnitol
- B) Calcium
- C) Dextrose
- D) PVP

31. What is the reason for the red colour of the red soil?

- A. Phosphoric Acid
- B. Humus
- C. Nitrogen
- D. Iron

32. Which of the following soil has air space and loosely packed?

- A. Sandy Soil
- B. Clayey Soil
- C. Loamy Soil
- D. All of these

33). Water holding capacity is low?

- a). Clay soil. b). Loam soil.
- c). Gravel. d). Sandy soil.

34). First manufactured fertilizer in India is..?

- a). SSP. b). DSP.
- c). Urea. d). Phosphate.

35). Recently formed soil order is..?

- a). Histosol. b). Entisol.
- c). Alfisol. d). Ultisols.

36) Clay soil should have..?

- a). 40% clay. (b). 20% clay.
- c). 35% clay. (d). 30 % clay.

36. Which sentence is true about batch method ?

- A. It is multiple step process.
- B. It is not used for preparation of the demineralized water.
- C. In this process more than two containers.
- D. This is single step process

38. Which method are used for preparing of demineralized water?

- A. Gas Chromatography B. Batch method (ion exchange)
- C. Mass spectroscopy D. Complexometric Titration

39). Which is not application of ion Exchange ?

- A. It is used for softening of water.
- B. It is used for demineralization of water.
- C. It is used for separation of similar ion in one sample.
- D. It is used in preformulation.

40). Which is application of demineralized water ?

- A. Biological studies B. conductance experiment
- C. A and B D. None of the above

41). Which is not ion exchange technique ?

- A. Batch method B. Column method
- C. Paper Chromatography D. A and B

42). Tungsten lamp filament has required how much temperature ?

- A. 2000k B. 3000k
- C. 4000k D. 5000k

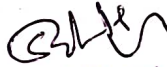
Rayat Shikshan Sanstha's
Dr.Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli),
Tal.-Palus, Dist. - Sangli.
Department of Chemistry
Add On Course
Student List 2021-2022
Exam Presenty Report Date 23/04/2022

Sr.No	Roll No	Name of the students	
1	1851	*Chougule Namrata Sunil	P
2	1852	*Deshmukh Sanjivani Bhaskar	P
3	1853	*Ghadage Shivani Nitesh	P
4	1854	*Gurav Vaishnavi Dadaso	P
5	1855	*Jadhav Kajal Sunil	P
6	1856	*Kamble Kiran Devanand	P
7	1857	*Khilare Rutuja Prakash	P
8	1858	*Koli Maheshvari Madhukar	P
9	1859	*Nalawade Akanksha Anil	P
10	1860	*Patil Snehal Vikas	P
11	1861	*Pawar Omkar Prakash	P
12	1862	*Pawar Tejaswini Madhukar	P
13	1863	*Phalle Swarupa Sanjay	P
14	1864	*Rade Sushama Dinkar	P
15	1865	*Rankhambe Priyanka Shivaji	P
16	1866	*Rutuja Pandurang Salunkhe	P
17	1867	*Sathe Mangal Malhari	P

18	1868	*Sathe Snehal Suresh	P
19	1869	*Sawant Shweta Vasudev	P
20	1870	*Shinde Shweta Dilip	P
21	1871	*Yadav Tupe Amruta Santosh	P
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23	1873	Barbole Tejas Santosh	P
24	1874	Chavan Kabir Maruti	P
25	1875	Chovgule Sourabh Subhash	P
26	1876	Damame Suhas Suresh	P
27	1877	Deshkukh Sourabh Jalindar	P
28	1878	Deshmuh Sujit Ramchandra	P
29	1879	Dupate Chinmay Sukhadev	P
30	1880	Hande Swapnil Subhash	P
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32	1882	Jadhav Akash Bhagavan	P
33	1883	Jadhav Maithili	P
34	1884	Jadhav Pranav Dilip	P
35	1885	Jadhav Rushikesh Rangrao	P
36	1886	Kshirsagar Prathmesh Prashant	P
37	1887	Kumbhar Abhishek Arjun	P
38	1888	Lad Pratik Rajendra	P
39	1889	Lad Satyajeet Hanmant	P
40	1890	Lad Sourabh Hanmant	P

41	1891	Manugade Prathmesh Pratap	P
42	1892	Marale Ritesh Sanjay	P
43	1893	More Sanket Dilip	P
44	1894	Mulani Soheb Dastagir	P
45	1895	Mulla Parwej Anis	P
46	1896	Mulla Reshma Rahiman	P
47	1897	Nalawade Vinay Popat	P
48	1898	Pathan Mujib Jamil	P
49	1899	Patil Dnyaneshwar Dattary	P
50	1900	Patil Mayur Manohar	P
51	1901	Patil Rutuja Krushnrao	P
52	1902	Patil Saurabh Dhairyashel	P
53	1903	Patil Sujit Ramesh	P
54	1904	Patil Vishal Ashok	P
55	1905	Pawar Somnath Baban	P
56	1906	Pawar Suraj Ravindra	P
57	1907	Pawar Swapnil Pramod	P
58	1908	Rade Harshad Jayvant	P
59	1909	Rajmane Akshay Vitthal	P
60	1910	Salunkhe Nilesh Bhanudas	P
61	1911	Sawant Nilesh Sukhdev	P
62	1912	Shekh Sahil Majanu	P
63	1913	Shinde Rushikesh Vitthal	P
64	1914	Shirtekar Rushikesh Vishnu	P

65	1915	Suryawanshi Prasad Laxman	P
66	1916	Varane Shreeraj Santosh	P
67	1917	Varude Guruprasad Vikas	P
68	1918	Vibhute Pratik Balu	P
69	1919	Yadav Prafull Sanjay	P
70	1920	Yadav Tupe Amarsinh Santosh	P


Head of Dept.
Department of Chemistry
Dr. Patangrao Kadam Mahavidhyalaya
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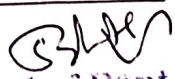
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Exam Result

Total Marks 100

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7	1857	Khilare Rutuja Prakash	88
8	1858	Koli Maheshvari Madhukar	80
9	1859	Nalawade Akanksha Anil	70
10	1860	Patil Snehal Vikas	78
11	1861	Pawar Omkar Prakash	82
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14	1864	Rade Sushama Dinkar	90
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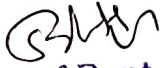
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 Department of Chemistry
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 Ramanandnagar (Burli)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalaya Ramanandnagar (Burli)
Department Of Chemistry
Add On Course on "Analytical Methods in Chermistry"
2021-2022

Programme Outcome

- To acquire basic concepts, principles and techniques of modern analytical Chemistry.
- To develop an understanding of the range and uses of analytical methods in Chemistry.
- To establish and appreciation of the role of Chemistry in quantitative analysis.
- To provide experience in some scientific methods employed in analytical Chemistry.
- Students are introduced to the fundamental instrumental methods of chemical analysis commonly use in pharmaceutical laboratories.
- Students are introduced to the fundamental analytical technique that are useful for the purification and characterisation of advanced material


Head of Dept.
Department of Chemistry
Dr. Patangrao Kadam Mahavidhyalaya
Ramanandnagar (Burli)



Rayat Shikshan Sanstha's

Dr. PATANGRAO KADAM MAHAVIDYALAYA RAMANANDNAGAR (BURLI),

TAL: PALUS, DIST: SANGLI - 416 308

Reaccredited with 'A' Grade by NAAC (CGPA-3.02)

Department of Chemistry

"Add On Certificate Course"

2021-2022

CERTIFICATE

This is to certify that Mr. /Mrs. /Miss. _____ has actively participated in Add On certificate Course, "**Analytical Methods in Chemistry**" for B.Sc. Part- III students conducted by Department of Chemistry, Dr. Pantangrao Kadam Mahavidyalaya, Ramanandnagar (BurlI) in the year 2021-2022.


Mr. Y. R. Sable
Course Incharge

Prof. Dr. P. B. Piste
Head of Department

Dr. L. D. Kadam
Principal



Rayat Shikshan Sanstha's

**Dr. Patangrao Kadam Mahavidyalaya Ramanandnagar (Burli),
Tal.- Palus, Dist. - Sangli.**

Reaccredited with 'A' Grade by NAAC (CGPA-3.02)
Department of Chemistry

Year: 2021-2022

Date 24/04/2022

Add On Course on Analytical Methods in Chemistry

The Department of Chemistry conduct the Add On Course (self-finance course) "Analytical Methods in Chemistry". The duration of this course is three months. In this year 70 students admitted for this course. The course is for the 100 marks. This course Includes three paper based on analytical techniques.

1. Chromatography.
2. Spectrophotometry.
3. Qualitative and quantitative Aspects of analysis.

This course is successfully completed by the B.Sc. Part III students in the academic year 2021-2022.

Outcomes:

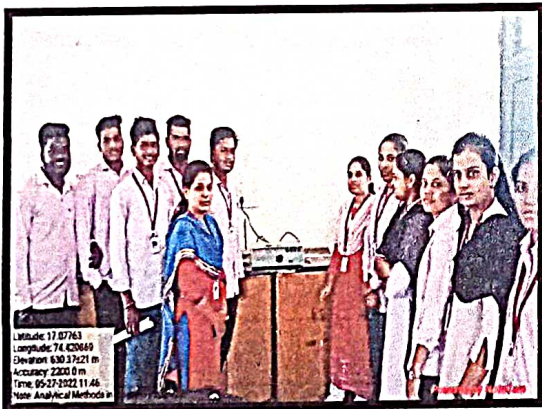
- ✚ To acquire basic concepts, principles and techniques of modern analytical Chemistry.
- ✚ To develop an understanding of the range and uses of analytical methods in Chemistry.
- ✚ To establish and appreciation of the role of Chemistry in quantitative analysis.
- ✚ To provide experience in some scientific methods employed in analytical Chemistry.

**The Total no of
beneficiaries are 70**

Photo Gallery



Student doing analysis of the some Chemical Samples by Spectrophotometer



Demonstration of Spectrophotometer to students by Miss P.R. Ghodake and Miss V.V.Nalawade .

Head of Department

**Principal
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)**