

COURSE COORDINATOR REPORT

COURSE NAME: FUNDAMENTALS IN CHEMISTRY

A free Add-On Course for UG students in the Department of Chemistry Science, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 6th Dec. 2019 – 21st Feb. 2020. The course title was "FUNDAMENTALS IN CHEMISTRY".

It is any type of assessment that evaluates the talent/ability/potential to perform a certain task, with no prior knowledge and or training one of the most common form of chemistry course. Chemistry is crucial in everyday life and in almost all professions. This is why they are such a common feature in chemistry course explore the qualities and interaction of matter. There are two distinct levels of subtopic include organic and inorganic chemistry industrial and research application and the chemistry of food, healthcare and the environments.

An aptitude test is designed to assess what a person is capable of doing or to predict what a person is able to learn or do given the right education and instruction. The goal of an aptitude test is to predict the ability to learn new skills.

The course duration was 10 weeks (30 hours). Two theory classes were engaged on Friday & Saturday and one Practical was engaged in every week. The structure of marking system was 80 marks on theory paper and 20 marks on practical execution. The question paper of theory examination was in MCQ type of 40 questions with four multiple choices. Practical examination was also taken on this course for 20 marks. All the 75 students were present in both theory and practical examination. The result was prepared and certificates were also distributed to the students.


Dr. P. S. Utale

Course Coordinator

Action Taken Report

An aptitude test is designed to assess what a person is capable of doing or to predict what the person is able to learn or do given the right to education and instruction . The goal of an aptitude test is to predict the ability learn new skills.

Fundamental in Chemistry: This course was conducted satisfactory and 70 students benefited by this course.

To,
The Principal
SSES Amt's Science College,
Congress Nagar, Nagpur-12

Subject: For permission to conduct the add on courses in the department

Respected Sir,

This is to request you that, the teachers of our Chemistry department have prepared the syllabus and modules of the 30 hours certificate courses for the session 2019-2020.

The details of the course module, syllabus and time table is submitted here with.

Hence please permit to run the add on courses and oblige me.

Thanking you

Dr
19.6.2019

Yours sincerely



(Prof. R. D. Khope)

Professor & Head
Head Department of Chemistry
Department of Chemistry
Shri Shivaji Science College
Congress Nagar, Nagpur.

*Permitted
R. D. Khope*

SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S SCIENCE COLLEGE, NAGPUR

Date: 01/12/2019

NOTICE

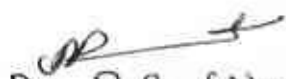
All the students of B.Sc. (Chemistry) are hereby informed that the Department of Chemistry is going to start the Certificate Course in "**Fundamentals in chemistry**" from 6th Dec.2019 – 21st Feb. 2020.

So, the interested students should register their name for this course in the department of Chemistry. The Schedule is as follows.

Registration starts on: 01/12/2019 (11:00 am to 4:00 pm)

Registration end on: 03/12/2019 (4:00 pm)

Venue of registration: Department of Chemistry


Dr. P. S. Utale
Coordinator



**Shri Shivaji Education Society, Amravati's
SCIENCE COLLEGE**

Congress Nagar, Nagpur-12 (M.S.), India

Accredited with CGPA of 3.51 at 'A+' grade
A College with Potential for Excellence Member of APQN,
Recognized Centre for Higher Learning
Mentor College under 'PARAMARSH Scheme', UGC, New Delhi




*Department of Chemistry
Organizes
Add on Course for Chemistry*

On

Fundamentals In Chemistry

6th Dec. 2019- 21st Feb. 2020


Coordinator

Dr. P. S. Utale
Department of Chemistry

Chairman

Prof. M. P. Dhore
Principal, SSES's Science College,
Congress Nagar, Nagpur

CERTIFICATE COURSE IN FUNDAMENTALS IN CHEMISTRY

Started from the Session 2019-20

Department of Chemistry

Duration: 6th Dec. 2019 -21st Feb. 2020

CERTIFICATE COURSE
IN
FUNDAMENTALS IN CHEMISTRY
Started from the Session 2019-20
Department of Chemistry
Duration: 6th Dec. 2019 -21st Feb. 2020

About the Course:

An aptitude test, by definition, is any type of assessment that evaluates the talent/ability/potential to perform a certain task, with no prior knowledge and or training one of the most common form of chemistry course. Chemistry is crucial in everyday life and in almost all professions. This is why they are such a common feature in chemistry course explore the qualities and interaction of matter. There are two distinct levels of subtopic include organic and inorganic chemistry industrial and research application and the chemistry of food, healthcare and the environments.

Objectives:

After doing this course you will be able to:

1. To assist students in the proper choice of courses in their career such as Scientist, officer, manager
2. To make choice relating to their future occupation such as; Chemical Industry, project assistant, pharmacist
3. To make prediction about an individual's probable success in courses and careers.

Job Opportunities:

Aptitude tests inculcate many factors like Chemical industry, project assistant, pharmacist Aptitude test is useful in various competitive examination such as IIT-JAM, NET, SET, GATE, CAT, MPSC, UPSC, Banking sectors, postal services and Government departmental examination.

Course Outcome:

1. Ability to identify Geometrical shapes and sizes.
2. Development of skill to do computations neatly and improve the computational ability.
3. Development of skill to make use of various chemical formulae in daily life.
4. Ability to make use of profit and loss in daily life and in professional area.
5. Ability to make use of concepts like time, speed, work in daily life.

Faculty: The classes shall be conducted by the faculty of Department of chemistry of Shri.
Shivaji Science College, Nagpur

Duration: Thirty Hours

Syllabus:

Chapter-I: Periodic properties

and ionic radii, vander- wall's radius, oxi

Chapter-II: Aliphatic hydrocarbons

Alkanes, wurtz reaction, Halogenation, Dehydrohalogenation.

Chapter-III: Phenols

Aromatic hydrocarbons, carboxylation, fries rearrangement, ethers,

Chapter-IV: Covalent bonding

LCAO approximation, MO structure of N_2 , O_2 , H_2 , NO , CO

Chapter-V: Thermodynamic equilibrium

Gibbs and Helmholtzs, free energy, phase equilibrium, liquid state, electrochemistry

Chapter-VI: Coordination compounds


Werner's theory and coordination compound, chelates, CFT, ELECTRONIC SPECTRA


Practical:

1. Preparation of Methyl Magnesium Iodide
2. Preparation of Hexamine Cobalt Chloride
3. Construction of Daniell Cell.
4. Conductometric Titration of weak acid with strong base.

Textbook: Quantitative Aptitude- S. Chand Publications By-Dr. R. S. Agrawal


Course Coordinate


IQAC Coordinator
Internal Quality Assurance Cell
(IQAC)
S. S. E. S. A. Science College
Congress Nagar, Nagpur.



Principal
Principal
S. S. E. S. Amravati's
Science College, Nagpur.

**SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'SSHRI SHIVAJI SCIENCE COLLEGE,
NAGPUR**

Certificate Course in "Fundamentals in chemistry"

TIME TABLE

Day	Name of Teacher	Theory/Practical	Time
Fri	Dr. P.S. Utale	Theory	4:00pm-5:00pm
Fri		Theory	5:00pm -6:00pm
Sat		Practical	4:00pm-5:00pm

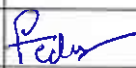
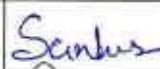
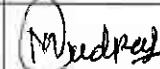

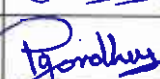

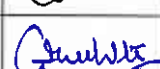
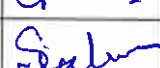
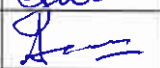
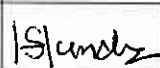
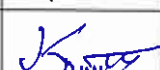
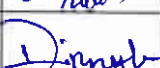
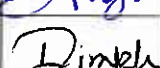
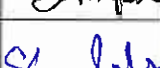
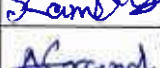
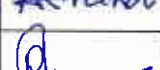

Dr. P. S. Utale
Course Coordinator
Department of Chemistry

SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S SCIENCE COLLEGE, NAGPUR

Academic Session:2019-2020

DEPARTMENT OF CHEMISTRY

List of students for the Certificate Course in Fundamentals in chemistry

S.N.	Name of Students	Class	Date of Registration	Signature
1.	Prajakta Feddewar	B. Sc. III	02/12/19	
2.	Santoshi Fulewar	B. Sc. III	02/12/19	
3.	MunalGadpal	B. Sc. III	02/12/19	
4.	Khushi Gandhi	B. Sc. III	02/12/19	
5.	PayalGarghate	B. Sc. III	02/12/19	
6.	Kiran Garodikar	B. Sc. III	02/12/19	
7.	RuchitaGechode	B. Sc. III	02/12/19	
8.	Shweta Gohane	B. Sc. III	02/12/19	
9.	AnushadeviGottiparthi	B. Sc. III	02/12/19	
10.	SanyuktaHande	B. Sc. III	02/12/19	
11.	Kundan Hatewar	B. Sc. III	02/12/19	
12.	Dimple Ilme	B. Sc. III	02/12/19	
13.	Harshad Ingole	B. Sc. III	02/12/19	
14.	Sahyadri Kamble	B. Sc. III	02/12/19	
15.	Arvind Karnad	B. Sc. III	02/12/19	
16.	Riya Agrawal	B. Sc. III	02/12/19	

16.	Riya Agrawal	B. Sc. III	02/12/19	Riya
17.	Taniya Arora	B. Sc. III	02/12/19	Taniya
18.	Akansha Asatkar	B. Sc. III	02/12/19	Akansha
19.	Shital Ashtankar	B. Sc. III	02/12/19	Shital
20.	Kalyani Bajanghate	B. Sc. III	02/12/19	K. Bajanghate
21.	Ashitosh Bambal	B. Sc. III	02/12/19	Ashitosh
22.	Pallavi Bansod	B. Sc. III	02/12/19	Pallavi
23.	Priya Barde	B. Sc. III	02/12/19	Priya
24.	Aniket Belsare	B. Sc. III	02/12/19	Aniket
25.	Nayan Bhandarkar	B. Sc. III	02/12/19	Nayan
26.	Priya Bhongade	B. Sc. III	02/12/19	Priya
27.	Pratiksha Bhoyar	B. Sc. III	02/12/19	Pratiksha
28.	Manali Bokade	B. Sc. III	03/12/19	Manali
29.	Khushbu Bopche	B. Sc. III	03/12/19	Khushbu
30.	Anuja Borkar	B. Sc. III	03/12/19	Anuja
31.	Vishakha Chilamwar	B. Sc. III	03/12/19	Vishakha
32.	Apeksha Choudhary	B. Sc. III	03/12/19	Apeksha
33.	Samiksha Dangore	B. Sc. III	03/12/19	Samiksha
34.	Shreya Devikar	B. Sc. III	03/12/19	Shreya
35.	Saurabh Dhabarde	B. Sc. III	03/12/19	Saurabh
36.	Diksha Dhamdhar	B. Sc. III	03/12/19	Diksha
37.	Shweta Dhanorkar	B. Sc. III	03/12/19	Shweta
38.	Rupali Fale	B. Sc. III	03/12/19	Rupali
39.	Tehseen Khan	B. Sc. III	03/12/19	Tehseen
40.	Shashank Khandwe	B. Sc. III	03/12/19	Shashank
41.	Noel Khobragade	B. Sc. III	03/12/19	Noel
42.	Harshita Kohad	B. Sc. III	03/12/19	Harshita

43.	Shrutika Kolhe	B. Sc. III	03/12/19	g.kolhe
44.	Renuka Kulkarni	B. Sc. III	03/12/19	renu
45.	Sakshi Kurhade	B. Sc. III	03/12/19	sk
46.	Adesh Lambade	B. Sc. III	03/12/19	AL
47.	Vikky Manchalwar	B. Sc. III	03/12/19	Vikky
48.	Pawan Mankar	B. Sc. III	03/12/19	Pawan
49.	Himali Mankar	B. Sc. III	03/12/19	Himali
50.	Kartikey Matte	B. Sc. III	03/12/19	Kartikey
51.	Nupur Mishra	B. Sc. III	03/12/19	N. Mishra
52.	Mushtaque Mohd. Faiz	B. Sc. III	03/12/19	M. Faiz
53.	Dhanashree Morghade	B. Sc. III	03/12/19	D. Morghade
54.	Payal Mule	B. Sc. III	03/12/19	Payal
55.	Vaishali Nakahle	B. Sc. III	03/12/19	V. Nakahle
56.	Jayshree Nakhate	B. Sc. III	03/12/19	J. Nakhate
57.	Swapnil Nasare	B. Sc. III	03/12/19	S. Nasare
58.	Jayshri Nikhade	B. Sc. III	03/12/19	J. Nikhade
59.	Shruti Nikose	B. Sc. III	03/12/19	S. Nikose
60.	Chhabu Pathode	B. Sc. III	03/12/19	C. Pathode
61.	Yugansh Patil	B. Sc. III	03/12/19	Y. Patil
62.	Kirti Pawar	B. Sc. III	03/12/19	K. Pawar
63.	Prajwal Pohle	B. Sc. III	03/12/19	P. Pohle
64.	Rutuja Potkar	B. Sc. III	03/12/19	R. Potkar
65.	Payal Raghorte	B. Sc. III	03/12/19	P. Raghorte
66.	Afrine Sabahat	B. Sc. III	03/12/19	A. Sabahat
67.	Payal Sahu	B. Sc. III	03/12/19	P. Sahu
68.	Rupal Shahane	B. Sc. III	03/12/19	R. Shahane
69.	Tejaswini Soni	B. Sc. III	03/12/19	T. Soni
70.	Anjali Sontakke	B. Sc. III	03/12/19	A. Sontakke

71.	Vaishali Telrandhe	B. Sc. III	03/12/19	<i>VA</i>
72.	Snehal Vaidye	B. Sc. III	03/12/19	<i>Snehal</i>
73.	Sanjana Waghmare	B. Sc. III	03/12/19	<i>S. Waghmare</i>
74.	Trishali Wakodikar	B. Sc. III	03/12/19	<i>Trishali</i>
75.	Priyal Wankhede	B. Sc. III	03/12/19	<i>Wankhede</i>
76.				
77.				
78.				

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS
NAGAR, NAGPUR

DEPARTMENT OF CHEMISTRY

Add-on Course

Teaching Plan

Title: "Fundamentals in chemistry"

Week	Hours	Topics
Week 1	3	Periodic properties and ionic radii, vander- wall's radius, oxi
Week 2	3	Aliphatic hydrocarbons Alkanes, wurtz reaction, Halogenation, Dehydrohalogenation.
Week 3	3	Aromatic hydrocarbons, carboxylation, fries rearrangement, ethers
Week 4	3	Covalent bonding LCAO approximation, MO structure of N_2 , O_2 , H_2 , NO , CO
Week 5	3	Thermodynamic equilibrium Gibbs and Helmholtzs, free energy, phase equilibrium, liquid state, electrochemistry
Week 6	3	Coordination compounds Werner's theory and coordination compound, chelates, CFT, ELECTRONIC SPECTRA
Week 7	3	Practicals: 1. Preparation of Methyl Magnesium Iodide
Week 8	3	2. Preparation of Hexamine Cobalt Chloride
Week 9	3	3. Construction of Daniell Cell.
Week 10	3	4. Conductometric Titration of weak acid with strong base.

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS
NAGAR, NAGPUR.

Add-on course examination (2019-2020)

Certificate Course: "Fundamentals in chemistry"

NOTICE FOR EXAM

Date: 22/02/2020

All the registered students of the add-on Course on "**Fundamentals in chemistry**", under the Department of Chemistry for the session 2019-20 are hereby informed that the **Theory examination** is to be scheduled on 29/02/20 (Saturday) from 10:00 am to 11:00 am in C10 at our college centre. All Students should be present before 10 minutes of the scheduled time of examination. List of students along with roll no. is given as below:

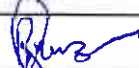

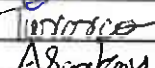
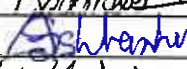
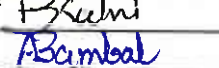
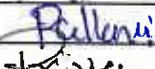
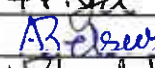
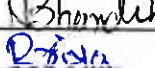
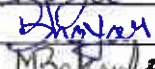
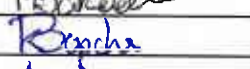

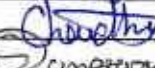

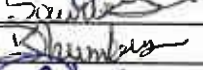

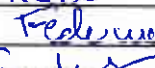







Dr. P. S. Urale
Course Coordinator
Department of Chemistry

**SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE,
CONGRESS NAGAR, NAGPUR**

Department of Chemistry

Attendance Sheet for Exam

Title: "Fundamentals in chemistry"

S.N	Roll. No.	Name of Students		Signature
		Surname	Name	
				
1	ACS2401	Agrawal	Riya	
2	ACS2402	Arora	Taniya	
3	ACS2403	Asatkar	Akansha	
4	ACS2404	Ashtankar	Shital	
5	ACS2405	Bajanghate	Kalyani	
6	ACS2406	Bambal	Ashitosh	
7	ACS2407	Bansod	Pallavi	
8	ACS2408	Barde	Priya	
9	ACS2409	Belsare	Aniket	
10	ACS2410	Bhandarkar	Nayan	
11	ACS2411	Bhongade	Priya	
12	ACS2412	Bhoyar	Pratiksha	
13	ACS2413	Bokade	Manali	
14	ACS2414	Bopche	Khushbu	
15	ACS2415	Borkar	Anuja	
16	ACS2416	Chilamwar	Vishakha	
17	ACS2417	Choudhary	Apeksha	
18	ACS2418	Dangore	Samiksha	
19	ACS2419	Devikar	Shreya	
20	ACS2420	Dhabarde	Saurabh	
21	ACS2421	Dhamdhar	Diksha	
22	ACS2422	Dhanorkar	Shweta	
23	ACS2423	Fale	Rupali	
24	ACS2424	Feddewar	Prajakta	
25	ACS2425	Fulewar	Santoshi	

26	ACS2426	Gadpal	Munal	<i>Munal</i>
27	ACS2427	Gandhi	Khushi	<i>Khushi</i>
28	ACS2428	Garghate	Payal	<i>Payal</i>
29	ACS2429	Garodikar	Kiran	<i>Kiran</i>
30	ACS2430	Gechode	Ruchita	<i>Ruchita</i>
31	ACS2431	Gohane	Shweta	<i>Shweta</i>
32	ACS2432	Gottiparthi	Anushadevi	<i>Anushadevi</i>
33	ACS2433	Hande	Sanyukta	
34	ACS2434	Hatewar	Kundan	<i>Kundan</i>
35	ACS2435	Ilme	Dimple	<i>Dimple</i>
36	ACS2436	Ingole	Harshad	<i>Harshad</i>
37	ACS2437	Kamble	Sahyadri	<i>Sahyadri</i>
38	ACS2438	Karnad	Arvind	<i>Arvind</i>
39	ACS2439	Khan	Tehseen	<i>Tehseen</i>
40	ACS2440	Khandwe	Shashank	<i>Shashank</i>
41	ACS2441	Khobragade	Noel	<i>Noel</i>
42	ACS2442	Kohad	Harshita	<i>Harshita</i>
43	ACS2443	Kolhe	Shrutika	<i>Shrutika</i>
44	ACS2444	Kulkarni	Renuka	<i>Renuka</i>
45	ACS2445	Kurhade	Sakshi	<i>Sakshi</i>
46	ACS2446	Lambade	Adesh	<i>Adesh</i>
47	ACS2447	Manchalwar	Vikky	<i>Vikky</i>
48	ACS2448	Mankar	Pawan	<i>Pawan</i>
49	ACS2449	Mankar	Himali	<i>Himali</i>
50	ACS2450	Matte	Kartikey	<i>Kartikey</i>
51	ACS2451	Mishra	Nupur	<i>Nupur</i>
52	ACS2452	Mohd. Faiz	Mushtaque	<i>Mushtaque</i>
53	ACS2453	Morghade	Dhanashree	<i>Dhanashree</i>
54	ACS2454	Mule	Payal	<i>Payal</i>
55	ACS2455	Nakahle	Vaishali	<i>Vaishali</i>
56	ACS2456	Nakhate	Jayshree	<i>Jayshree</i>
57	ACS2457	Nasare	Swapnil	<i>Swapnil</i>
58	ACS2458	Nikhade	Jayshri	<i>Jayshri</i>
59	ACS2459	Nikose	Shruti	<i>Shruti</i>
60	ACS2460	Pathode	Chhabu	<i>Chhabu</i>

64	ACS2464	Potkar	Rutuja	Rutuja
61	ACS2461	Patil	Yugansh	Yugansh
62	ACS2462	Pawar	Kirti	K. Pawar
63	ACS2463	Pohle	Prajwal	Prajwal
65	ACS2465	Raghorde	Payal	Payal
66	ACS2466	Sabahat	Afrine	Afrine
67	ACS2467	Sahu	Payal	Payal
68	ACS2468	Shahane	Rupal	Rupal
69	ACS2469	Soni	Tejaswini	Tejaswini
70	ACS2470	Sontakke	Anjali	Anjali
71	ACS2471	Telrandhe	Vaishali	Vaishali
72	ACS2472	Vaidye	Snehal	Snehal
73	ACS2473	Waghmare	Sanjana	Sanjana
74	ACS2474	Wakodikar	Trishali	Trishali
75	ACS2475	Wankhede	Priyal	Priyal


Coordinator

Dr. P. S. Utale

SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S SHIVAJI SCIENCE COLLEGE, NAGPUR
Academic Session: 2019-20
DEPARTMENT OF CHEMISTRY
Theory Exam
FUNDAMENTALS IN CHEMISTRY

Time: One Hour] [Maximum Marks: 80

- Note:** i) Solve All questions.
ii) All Questions carry two marks.
iii) Tick the correct option

01. The number of moles of solute per kg of solvent is called as-
(a) molarity (b) normality (c) mole fraction (d) molality
02. In exothermic reaction, ΔH is-
(a) positive (b) negative (c) zero (d) may be positive or negative
03. Pure water does not conduct electricity because it-
(a) is neutral (b) has low boiling point (c) is at most unionized (d) is readily decomposed
04. A process in which no heat is absorbed or evolved is-
(a) adiabatic process (b) isothermal process (c) reversible process (d) irreversible process
05. Molarity of 2NHCl is-
(a) 1M (b) 2M (c) 4M (d) 0.5M
06. Neutron is discovered by-
(a) J.J. Thomson (b) E. Goldstein (c) J. Chadwick (d) Pauli
07. The atomic no. of iron is 26. Its electronic configuration is-
(a) 2, 8, 8, 8 (b) 2, 8, 15, 1 (c) 2, 8, 13, 3 (d) 2, 8, 14, 2
08. Buffer solutions play an important role in-
(a) increasing pH value (b) decreasing pH value (c) keeping pH constant (d) increasing K_a
09. Rust is -
(a) $Fe_2O_3 \cdot nH_2O$ (b) Fe_2O_3 (c) $Fe_2O_3 + Fe(OH)_2$ (d) $Fe_2O_3 + Fe(OH)_3$
10. Concentration of the solution cannot be expressed in-
(a) mole fraction (b) viscosity (c) formality (d) ppm.
11. Which of the following does not form Grignard reagent?
(a) CH_3F (b) CH_3Cl (c) CH_3I (d) CH_3Br
12. SN^2 reaction takes place with-
(a) retention of configuration (b) inversion of configuration (c) racemization (d) elimination

13. Atombomb is based on -
(a) nuclear fission (b) nuclear fusion (c) natural radioactivity (d) induced radioactivity
14. Nylon-66 is an example of -
(a) polystyrene (b) natural polymer (c) polyamide (d) polyester
15. Formalin is the commercial name of -
(a) formic acid (b) fluoroform (c) 40% aqueous solution of formaldehyde (d) methanol
16. The least water soluble alcohol is -
(a) methanol (b) ethanol (c) propanol (d) 1-pentanol
17. Isotonic solutions have the same -
(a) density (b) molar concentration (c) normality (d) osmotic pressure
18. The halogen which does not give precipitate with AgNO_3 is -
(a) F^- (b) Cl^- (c) Br^- (d) I^-
19. Indicator used in the titration of CH_3COOH and NaOH is -
(a) methyl orange (b) methyl red (c) thymol blue (d) phenolphthalein
20. Heroin is the derivative of -
(a) nicotine (b) caffeine (c) morphine (d) cocaine
21. Which of the following sugar is the sweetest sugar?
(a) glucose (b) fructose (c) sucrose (d) maltose
22. When sodium chloride is dissolved in water the freezing point of water -
(a) increases (b) decreases (c) remains same (d) first decrease & then increase
23. How many signals will you observe in the ^1H -NMR spectrum of acetone?
(a) 1 (b) 2 (c) 3 (d) 6
24. An example of intensive property is -
(a) weight (b) boiling point (c) volume (d) energy
25. Basicity of acetic acid is -
(a) 1 (b) 2 (c) 3 (d) 4
26. Which of the following solid is a good conductor of electricity?
(a) sodium (b) diamond (c) sodium chloride (d) graphite
27. What is the oxidation state of Mn in KMnO_4 ?
(a) +4 (b) +5 (c) +6 (d) +7
28. Which of the following compounds easily mix with water?
(a) $\text{C}_2\text{H}_5\text{OH}$ (b) C_6H_6 (c) CHCl_3 (d) CS_2

29. The halogen which is solid at room temperature is-
(a)F (b)Cl (c) Br(d)I
30. The compound which rotate plane polarized light to clockwise direction is known as-
(a)dextrorotatory (b)laevorotatory (c) racemic mixture (d)optically active compound
31. A catalyst used in the Clemmenson's reduction is-
(a) Zn-Hg/HCl (b) Cu_2Cl_2 (c) MnO_2 (d)noneofthese
32. The co-ordination number of Na^+ in NaCl is?
(a)8 (b) 2 (c)4 (d)6
33. Most electronegative element in the periodic table is-
(a)fluorine (b)chlorine(c)helium (d)hydrogen
34. Which is pseudo solid?
(a) diamond (b)glass (c)KCl (d) sand
35. Which of the following property is not considered by thermodynamics?
(a)temperature(b)pressure (c)time (d) volume
36. Which of the following spectroscopic method is used to determine absorption wave length?
(a) UV-VIS (b) IR (c)NMR (d) Mass
37. Aqueous solution of NH_4Cl have pH-
(a) 7(b)less than 7 (c)more than 7 (d)none of these
38. A very small range in the air is of-
(a) X-ray (b) γ -ray (c) β -ray (d) α -ray
39. Fundamental modes of vibration of the nonlinear tri-atomic water molecule are-
(a) 4 (b) 3 (c) 2 (d) 6
40. How will you form toluene from benzene?
(a) Friedel Craft's alkylation (b) Mannich reaction(c)Aldol condensation(d)Perkin Reaction

Answer key

- 1) d
- 2) b
- 3) c
- 4) a
- 5) b
- 6) c
- 7) a
- 8) c
- 9) a
- 10) d
- 11) a
- 12) d
- 13) a
- 14) c
- 15) c
- 16) d
- 17) d
- 18) b
- 19) d
- 20) c
- 21) b
- 22) b
- 23) a
- 24) b
- 25) a
- 26) c
- 27) d
- 28) c
- 29) d
- 30) a
- 31) d
- 32) d
- 33) a
- 34) b
- 35) c
- 36) a
- 37) a
- 38) c
- 39) b
- 40) a

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SHIVAJI SCIENCE COLLEGE, NAGPUR

Academic Session: 2019-20

DEPARTMENT OF CHEMISTRY

Practical Exam

FUNDAMENTALS IN CHEMISTRY

Time: One Hour] [Maximum Marks: 20

Note: Solve any two of the following questions.

- Q. 1. Write the preparation of ethanol from methyl magnesium iodide. (10)
- Q. 2. Write the preparation of Hexammine Cobalt Chloride. (10)
- Q. 3. What happens during the titration of a weak acid with a strong base? (10)

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S					
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR					
B.SC. III (FUNDAMENTALS IN CHEMISTRY)					
Score Card (Session 2019-20)					
S.N	Roll. No.	Max. Marks	Min. Marks	Obtained Marks	Grade
1	ACS2401	100	45	94	O
2	ACS2402	100	45	56	B
3	ACS2403	100	45	50	C
4	ACS2404	100	45	90	A+
5	ACS2405	100	45	72	A
6	ACS2406	100	45	60	B
7	ACS2407	100	45	98	O
8	ACS2408	100	45	96	O
9	ACS2409	100	45	74	A
10	ACS2410	100	45	68	B+
11	ACS2411	100	45	98	O
12	ACS2412	100	45	56	B
13	ACS2413	100	45	68	B+
14	ACS2414	100	45	70	B+
15	ACS2415	100	45	80	A
16	ACS2416	100	45	46	C
17	ACS2417	100	45	50	C
18	ACS2418	100	45	70	B+
19	ACS2419	100	45	56	B
20	ACS2420	100	45	76	A

21	ACS2421	100	45	80	A
22	ACS2422	100	45	78	A
23	ACS2423	100	45	56	B
24	ACS2424	100	45	68	B+
25	ACS2425	100	45	70	B+
26	ACS2426	100	45	80	A
27	ACS2427	100	45	50	C
28	ACS2428	100	45	50	C
29	ACS2429	100	45	70	B+
30	ACS2430	100	45	56	B
31	ACS2431	100	45	76	A
32	ACS2432	100	45	80	A
33	ACS2433	100	45	48	C
34	ACS2434	100	45	60	B
35	ACS2435	100	45	58	B
36	ACS2436	100	45	80	A
37	ACS2437	100	45	50	C
38	ACS2438	100	45	50	C
39	ACS2439	100	45	70	B+
40	ACS2440	100	45	56	B
41	ACS2441	100	45	76	A
42	ACS2442	100	45	60	B

43	ACS2443	100	45	50	C
44	ACS2444	100	45	70	B+
45	ACS2445	100	45	56	B
46	ACS2446	100	45	76	A
47	ACS2447	100	45	80	A
48	ACS2448	100	45	78	A
49	ACS2449	100	45	68	B+
50	ACS2450	100	45	50	C
51	ACS2451	100	45	70	B+
52	ACS2452	100	45	56	B
53	ACS2453	100	45	76	A
54	ACS2454	100	45	80	A
55	ACS2455	100	45	78	A
56	ACS2456	100	45	90	A+
57	ACS2457	100	45	98	O
58	ACS2458	100	45	92	O
59	ACS2459	100	45	80	A
60	ACS2460	100	45	56	B
61	ACS2461	100	45	76	A
62	ACS2462	100	45	70	B+
63	ACS2463	100	45	56	B
64	ACS2464	100	45	76	A

65	ACS2465	100	45	80	A
66	ACS2466	100	45	94	O
67	ACS2467	100	45	56	B
68	ACS2468	100	45	76	A
69	ACS2469	100	45	70	B+
70	ACS2470	100	45	56	B
71	ACS2471	100	45	76	A
72	ACS2472	100	45	96	O
73	ACS2473	100	45	70	B+
74	ACS2474	100	45	56	B
75	ACS2475	100	45	76	B+
Appear			75		
Pass			75		
Percentage			100%		


Coordinator

Dr. P. S. Utale


Principal



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Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

Add-on Course

Course Exam Name: Certificate Course in FUNDAMENTALS IN CHEMISTRY

Name of Student:

Riya Agarwal

Roll No.:

A C S 2 4 0 1

Session: 2019-20

Test Date: 29/02/2020

Max. Marks: 80

Invigilator Signature

Obtained Marks:

74

INSTRUCTIONS FOR FILLING THE SHEET

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5. Cutting and erasing on this sheet is not allowed.
6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

WRONG METHODS



CORRECT METHOD



A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D					
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	11	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	31	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	41	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	13	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	24	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	44	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

Add-on Course

Course Exam Name: Certificate Course in FUNDAMENTALS IN CHEMISTRY

Name of Student:

Shital Astankar

Roll No.:

ACS2404

Session: 2019-20

Test Date: 29/02/2020

Max. Marks: 80

Invigilator Signature

Obtained Marks:

70

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WRONG METHODS



CORRECT METHOD



A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D				
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10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	20	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	30	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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CERTIFICATE

Mr./Ku. Riya Agarwal is awarded with certificate on
successful completion of the course entitled, Certificate course in Fundamentals in Chemistry.

Session 2023-24 under Add-on course conducted for 30 hours from 06/12/2019 to 21/02/2020 by
Department of Chemistry, SSES's, Science College, Congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'Q' Grade.


Dr. P. S. Utale

Coordinator, Department of Mathematics


Prof. M. P. Dhore

Principal, Science College, Nagpur



Shri Shivaji Education Society Amravati's
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CERTIFICATE

~~Mr./Ku.~~ Shital Ashanekar is awarded with certificate on

successful completion of the course entitled, Certificate course in Fundamentals in Chemistry.

Session 2023-24 under Add-on course conducted for 30 hours from 06/12/2019 to 21/02/2020 by
Department of Chemistry, SSES's, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'A' Grade.


Dr. P. S. Utale

Coordinator, Department of Mathematics


Prof. M. P. Dhore

Principal, Science College, Nagpur

Month: 6th Dec. 2019 – 21st Feb. 2020

Name of the Teacher: Dr. P. S. Utale

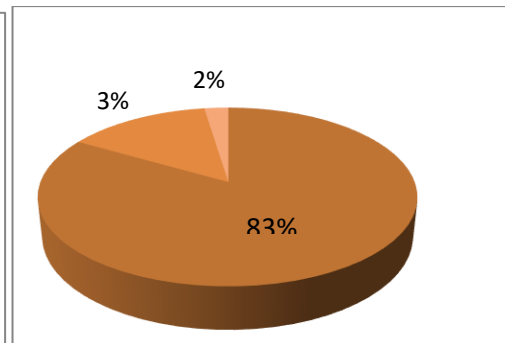
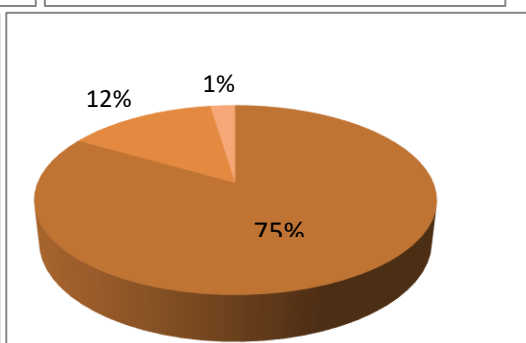
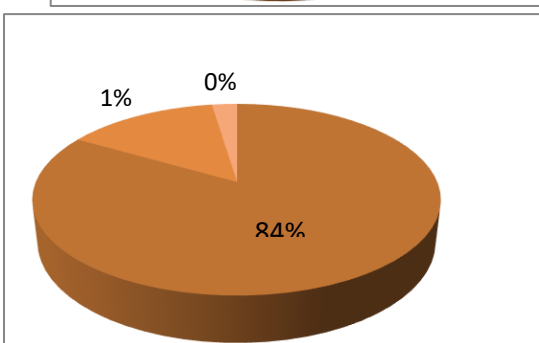
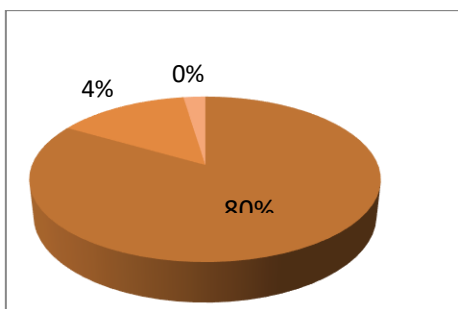
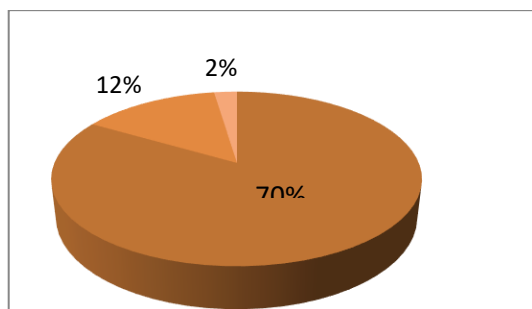
Name of the Teacher: Dr. P. S. Utale


S.N.	Surname	Name
1	Agrawal	Riya
2	Arora	Taniya
3	Asakar	Akansha
4	Ashrankar	Shital
5	Bajanghate	Kalyani
6	Bambal	Ashtosh
7	Bansod	Pallavi
8	Barde	Priya
9	Belzare	Aniket
10	Bhandarkar	Nayan
11	Bhongade	Priya
12	Bhojar	Pratiksha
13	Bokade	Manali
14	Bopche	Krushbu
15	Borkar	Anuja
16	Chilamwar	Vishakha
17	Choudhary	Apeksha
18	Dangore	Saniksha
19	Devkar	Shreya
20	Dhabarde	Saurabh
21	Dhamdhar	Diksha
22	Dhanorkar	Shweta

[illegible]


Feedback Analysis

Sr.No.	Questions	Response in %		
1.	How would you rate the overall quality of the Certificate Course-Integrating Excel into Chemical Analysis?	Excellent	Good	Average
		70%	12%	2%
2.	How well did the Certificate Course-Integrating Excel into Chemical analysis content meet your expectations?	Exceeded expectations	Met expectations	Below expectations
		80%	4%	00
3.	How effective were the course instructors in delivering the certificate Course-Integrating Excel into Chemical Analysis?	Very effective	Effective	Ineffective
		84%	1%	00
4.	How likely are you to recommend the Certificate Course-Integrating Excel into Chemical Analysis to others?	Very likely	Likely	Unlikely
		75%	12%	1%
5.	How satisfied are you with the practical sessions of the Certificate Course-Integrating Excel into Chemical Analysis?	Very satisfied	Satisfied	Dissatisfied
		83%	3%	2%




Internal Quality Assurance Cell (IQAC)
S. S. E. S. A. Science College
Congress Nagar, Nagpur.




Principal
S. S. E. S. Amravati's
Science College, Nagpur.

