SIR C R REDDY COLLEGE FOR WOMEN

(Affiliated to AdikaviNannaya University, Rajahmahendravaram)

Vatluru (Post), Pedapadu Mandal, Eluru Dist., (A.P)

PG ENTRANCE COACHING

For

M.Sc., (CHEMISTRY)

Date: 28-April-2023 to 27 -May-2023

Time: 8:30 am to 9:30 am

&

4.30pm to 5.30pm

Organized by

CAREER GUIDANCE & PLACEMENT CELL

2022-2023

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About Programme

The Career Guidance and Placement Cell at Sir CR Reddy College for Women organized PG entrance coaching classes for AP PGCET 2023 in Commerce, Mathematics, Physics, Chemistry, and Life Sciences. These classes were conducted by senior faculty members who specialize in the respective subjects at the college.

Program: PG Entrance Coaching for M.Sc. Chemistry

Subjects Covered:

- Chemistry

Target Audience:

- III B.SC(MPC,MCCS,CBZ) students aspiring for postgraduate studies

Duration:[

- 28 April 2023 to 27 May 2023

Time:

- 8:30 AM to 9:30 AM & 4.30PM to 5.30PM

Organized By:

- Career Guidance and Placement Cell at Sir CR Reddy College for Women

Resource person:

- Coaching by Mrs .P.Ramya krishna senior lecturer in chemistry

Program Overview:

- Specifically designed coaching program focusing on AP PGCET 2023 for M.Sc. aspirants.
- Conducted by seasoned faculty members from Sir CR Reddy College, each specializing in MSC Chemistry.
- Comprehensive curriculum comprising subject-specific lectures, problem-solving sessions, practice tests, and exam strategy workshops.
- Tailored content to acquaint students with the AP PGCET exam pattern, syllabi, and effective preparation methodologies.

Benefits for B.Sc. Students:

- Early guidance and preparation assistance for M.Sc. entrance exams.
- Exposure to exam patterns, aiding in better preparedness.
- Access to experienced faculty for subject-specific guidance and doubt resolution.
- Enhanced readiness for M.Sc. studies by initiating preparation in advance.

This coaching program aims to support B.Sc. students in their aspirations for pursuing postgraduate studies by providing structured coaching specifically aligned with the requirements of the AP PGCET 2023 examination.

Learning Objectives and Learning Outcomes

Learning Objectives:

1. Subject Mastery: To facilitate a comprehensive understanding of the core concepts and subject-specific knowledge required for M.Sc.Chemistry entrance exams.
2. Exam Familiarity: To familiarize students with the exam pattern, question types, and syllabus specific to AP PGCET 2023.
3. Problem-Solving Skills: To enhance problem-solving abilities and critical thinking necessary to tackle complex questions in the entrance exams.
4. Time Management: To equip students with effective time management strategies for the exam and optimize their performance within the stipulated time frame.
5. Exam Strategy: To provide guidance on effective exam strategies, including question selection, prioritization, and efficient answering techniques.

Expected Outcomes:

1. Strong Foundation: Students are expected to build a strong foundational understanding of their respective subjects, providing a basis for advanced studies.
2. Improved Performance: Enhanced problem-solving skills and a better grasp of exam patterns can result in improved performance in mock tests and the actual entrance exam.
3. Confidence: Through regular practice and guidance, students are likely to gain confidence in handling diverse questions and scenarios during the examination.
4. Effective Preparation: Students should be better prepared to face the challenges of the entrance exams by utilizing learned strategies and subject-specific knowledge.
5. Readiness for Postgraduate Studies: The coaching program aims to prepare students adequately for the rigors of postgraduate studies in their chosen fields.

Permission Letter

Permission Letter

18-04-2023
Eluru

To
The Principal
Sir C.R.Reddy College for Women
Eluru

Subject: Request to grant permission to conduct P.G Entrance test Coaching Classes to final year students.

This is to bring to your kind notice that, Career Guidance and Placement Cell is planning to conduct P.G Entrance test Coaching Classes for interested III B.Sc/B.Com students specializing life Sciences, Mathematics, Physics, Chemistry, Commerce .

The coaching classes aim is to provide additional support and guidance to our ambitious students who aspire to excel in their respective fields and we believe that providing coaching classes with in our college will not only benefit our students but also contribute to the overall academic excellence of our institution. These classes will be conducted for about 30 days i.e., from 28th April 2023 to 27th May 2023. The duration of these classes will be from 8:30 am to 9:30 am and 4:30 pm to 5:30 pm. I kindly request your approval for this initiative, as it aligns with our commitment to fostering academic excellence and preparing our students for successful futures.

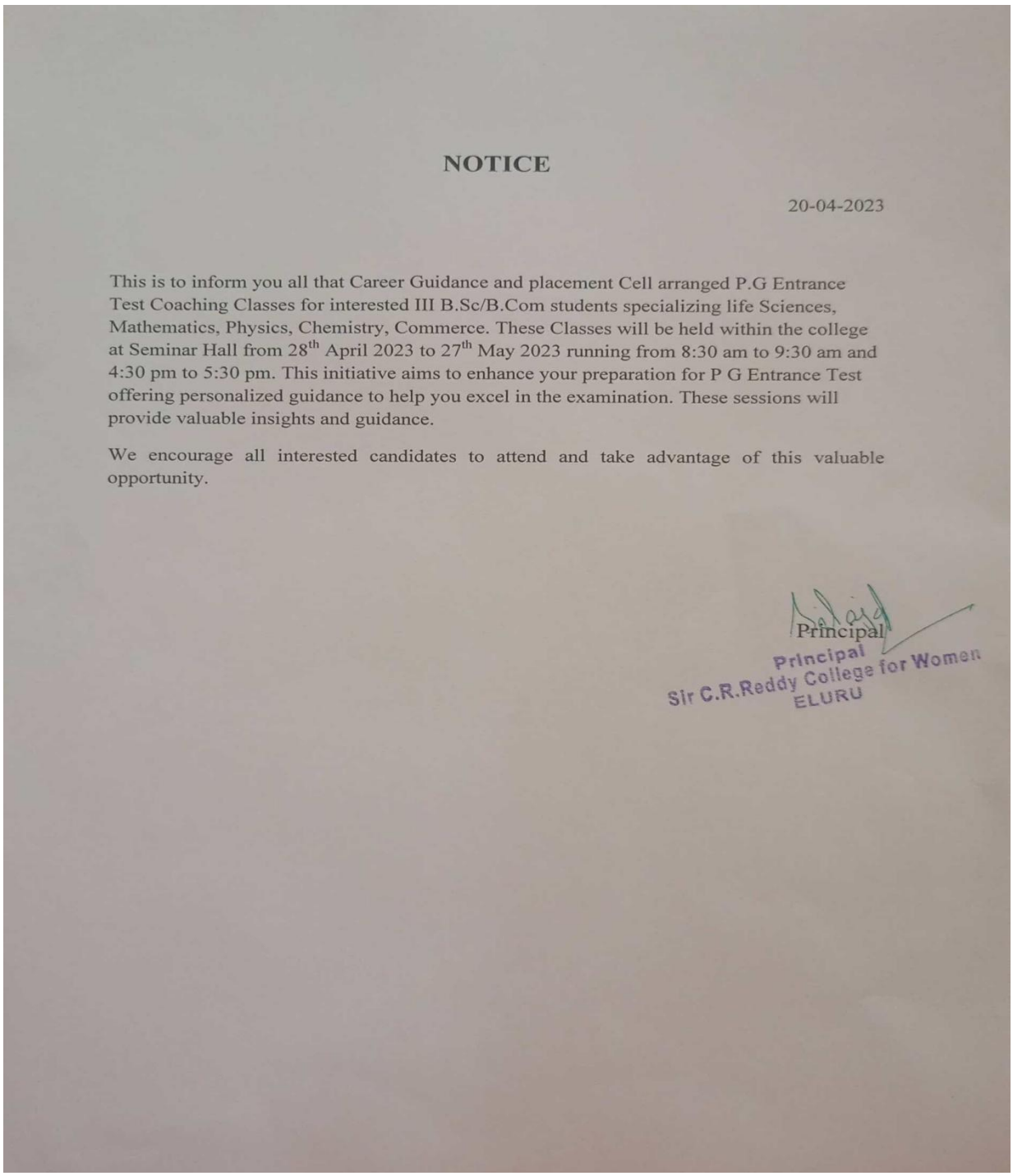
Thanking you Madam,

Permitted

Principal
Sir C.R.Reddy College for Women
ELURU

Yours Faithfully,
(Coordinator)
Career Guidance and Placement Cell

Notice To Students



NOTICE

20-04-2023

This is to inform you all that Career Guidance and placement Cell arranged P.G Entrance Test Coaching Classes for interested III B.Sc/B.Com students specializing life Sciences, Mathematics, Physics, Chemistry, Commerce. These Classes will be held within the college at Seminar Hall from 28th April 2023 to 27th May 2023 running from 8:30 am to 9:30 am and 4:30 pm to 5:30 pm. This initiative aims to enhance your preparation for P G Entrance Test offering personalized guidance to help you excel in the examination. These sessions will provide valuable insights and guidance.

We encourage all interested candidates to attend and take advantage of this valuable opportunity.

Principal

Principal
Sir C.R.Reddy College for Women
ELURU

Course Structure

Chemical Sciences

Inorganic Chemistry:

s-block elements, p-block elements, Chemistry of d block elements, f block elements, Organ metallic Chemistry, Organ metallic Chemistry, Spectral and Magnetic Properties of Metal Complexes, Stability of metal complexes

Organic Chemistry

Hydroxyl Compounds, Carboxylic acids and derivatives, Exercises in inter conversion, heterocyclic compounds, Amino Acids and proteins.

Physical Chemistry

Liquid State, Gaseous State, Physical State, Electro chemistry, chemical kinetics.

General Chemistry

Theory of quantities analysis, Chemical Bonding, Molecular symmetry, Evaluation of analytical data

General principles of inorganic quantative analysis.

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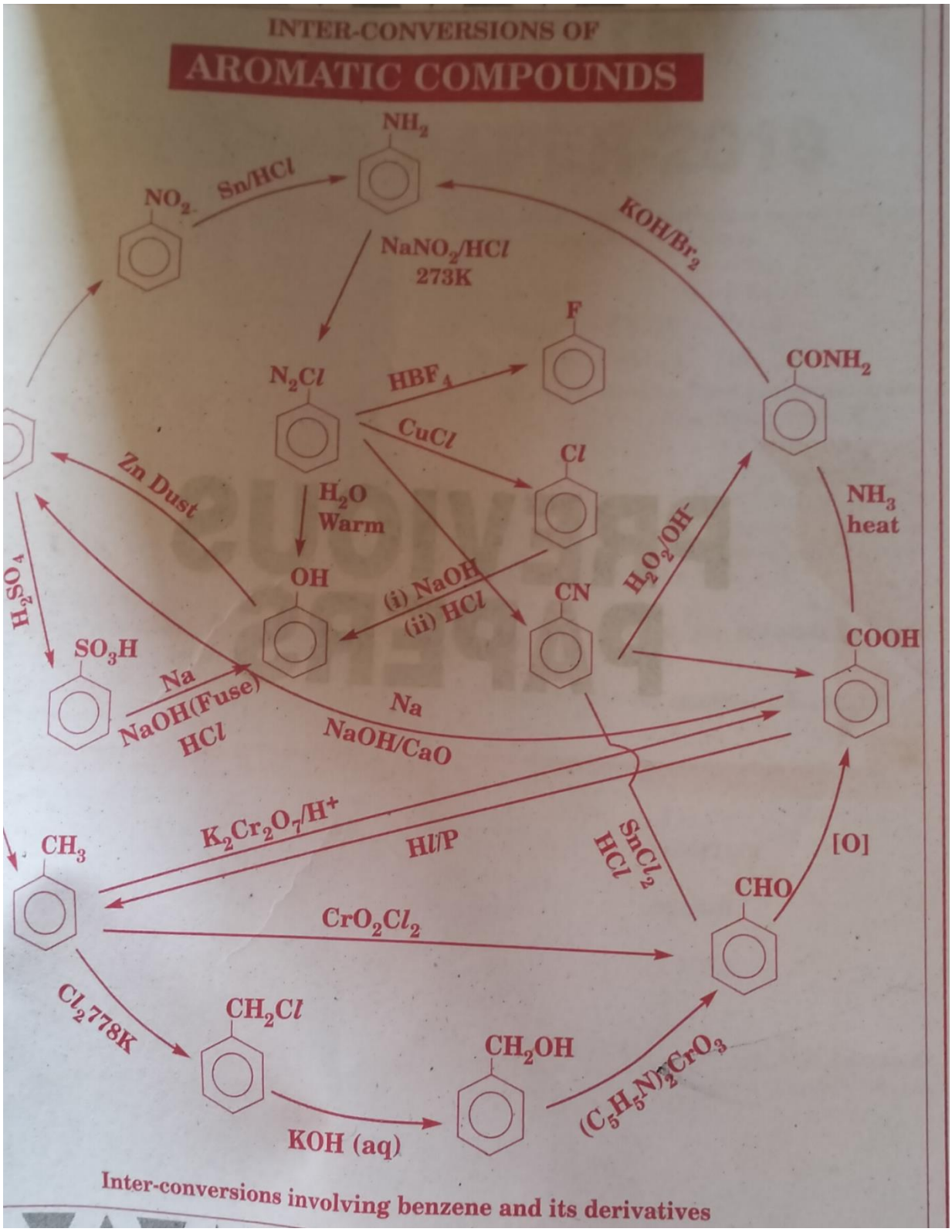
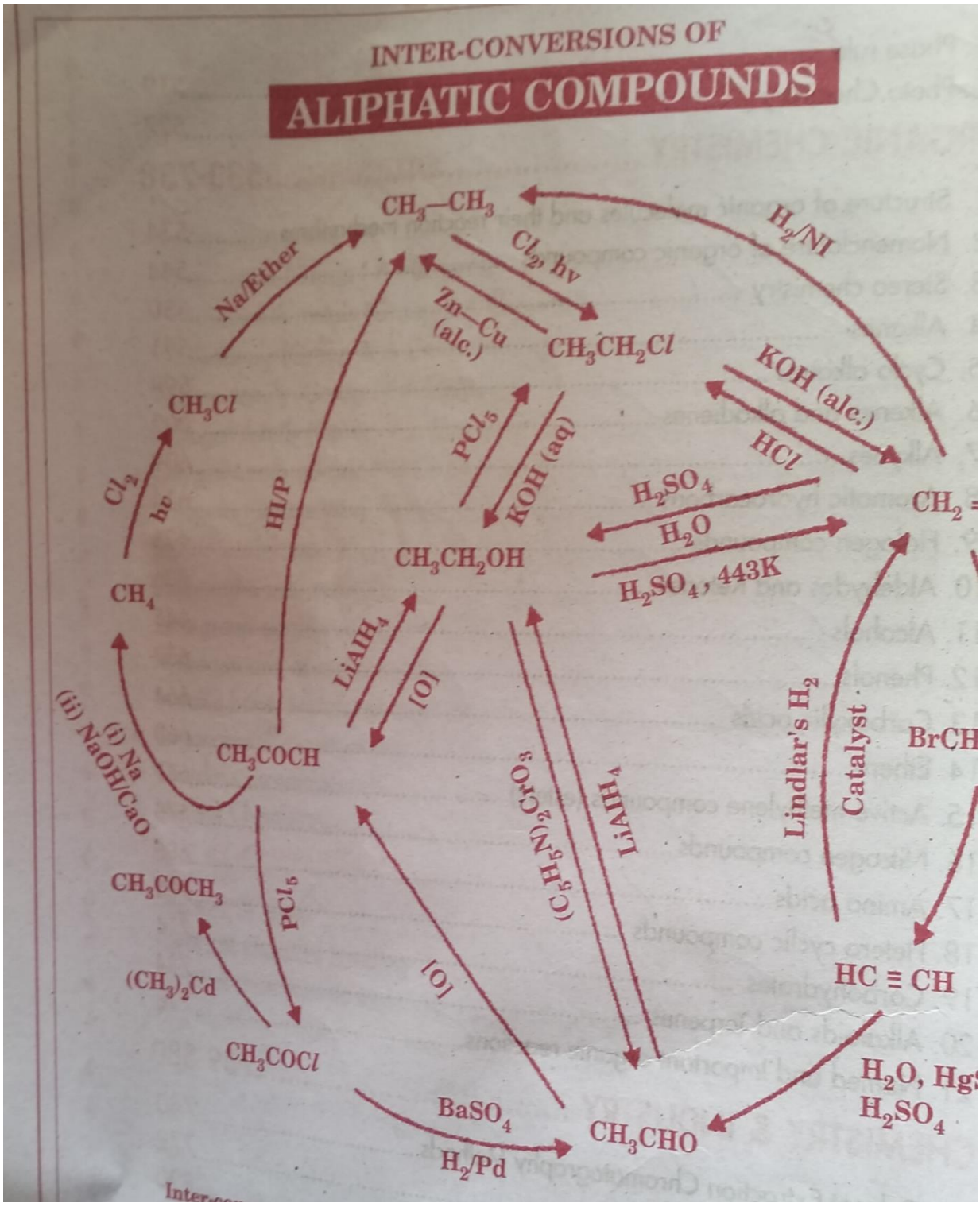


Inter-conversions involving benzene and its derivatives


INTER-CONVERSIONS OF
ALIPHATIC COMPOUNDS
CH3—CH3
H2/NI
Na/Ether
Cl2, hv
Zn—Cu (alc.)
CH3CH2Cl
KOH (alc.)
HCl
CH3Cl
PCl5
KOH (aq)
Cl2
hv
HI/P
H2SO4
H2O
CH2 =
CH3CH2OH
H2SO4, 443K
CH4
LiAlH4
[O]
(i) Na
(ii) NaOH/CaO
CH3COCH
(C5H5N)2CrO3
LiAlH4
Lindlar's H2
Catalyst
BrCH
CH3COCH3
PCl5
[O]
(CH3)2Cd
HC ≡ CH
CH3COCl
H2O, Hg
H2SO4
BaSO4
H2/Pd
CH3CHO

The number of possible geometrical isomers for $[Pt(NO_2)(C_5H_5N)(NH_2OH)]^+$ is

1. 2 2. 4 3. 3 4. 6

The order of stability of complexes Fe^{2+}, CO^{2+}, Ni^{2+}, Cu^{2+} for the given ligand is:

1. $Fe^{2+} > CO^{2+} > Ni^{2+} > Cu^{2+}$
2. Fe^{2+} $Ni^{2+} > CO^{2+} > CU^{2+}$
3. $Cu^{2+} > Ni^{2+} > CO^{2+} > Fe^{2+}$
4. $Cu^{2+} > CO^{2+} > Fe^{2+} > Ni^{2+}$

Which of the following complexes do not obey Effective atomic number rule ?

i. $[Cr(NH_3)_6]^{2+}$ ii. $[Ni(NH_3)_6]^{2+}$
iii. $[CO(NH_3)_6]^{2+}$ iv. $[Pt(NH_3)_6]^{4+}$
1. ii, iv only 2. i,ii, iii only
3. iv only 4. i, ii only

The d orbital involved in hybridization of orbitals of Fe during the formation of $Fe(CO)_5$ is

1. $3d_z2$ 2. $3d_x2_{-y}2$ 3. $4d_z2$ 4. $4d_x2_{-y}2$

The pair in which both the molecules have same magnetic moment:

1. $[Cr(H_2O)_6]^{2+}$, $[CoCl_4]^{2-}$
2. $[Cr(H_2O)_6]^{2+}$, $[Fe(H_2O)_6]^{2+}$
3. $[Mn(H_2O)_6]^{2+}$, $[Fe(H_2O)_6]^{2+}$
4. $[COCl_4]^{2-}$, $[Mn(H_2O)_6]^{2+}$

Which one of the following is not coloured?

1. $[Ti(H_2O)_6]^{3+}$ 2. $[CO(H_2O)_6]^{2+}$
3. $[Cu(H_2O)_6]^{2+}$ 4. $[Sc(H_2O)_6]^{3+}$

$HgR_2 + Mg \xrightarrow{solvent} MgR_2 + Hg$

The solvent used in the above reaction is:

1. Ethanol 2. Methanol
3. Benzene 4. Ether

The number of bridging carbonyls present in $Fe_3(CO)_{12}$ is

1. 1 2. 2 3. 3 4. 4

Which one of the following is nido-carborane ?

1. $C_2B_{10}H_{12}$ 2. $C_2B_4H_8$
3. $C_2B_7H_{13}$ 4. $C_2B_{10}H_{10}$

Which one of the following is correct?

1. VO_2^{2+} is hard acid 2. SC^{3+} is soft acid
3. CO is hard base 4. ROH is soft base

11. The crystal field stabilisation energy for high-spin d^4 octahedral complex is:

1. -6 Dq 2. -12 Dq
3. -18 Dq+P 4. -16 Dq + P

12. i. $[PtCl_4]^{2-} \xrightarrow{NH_3} X \xrightarrow{NH_3} Y$

ii. $[PtCl_4]^{2-} \xrightarrow{NH_3} X \xrightarrow{C_2H_4} Z$

In the above reactions Y and Z respectively are:

1. trans $[PtCl_2(NH_3)_2]$, trans $[PtCl_2(NH_3)(C_2H_4)]$
2. trans- $[PtCl_2(NH_3)_2]$, cis-$[PtCl_2(NH_3)(C_2H_4)]$
3. cis- $[PtCl_2(NH_3)_2]$, trans-$[PtCl_2(NH_3)(C_2H_4)]$
4. cis - $[PtCl_2(NH_3)_2]$, cis-$[PtCl_2(NH_3)(C_2H_4)]$

13. 'X' is an essential trace element. Its use in industry (particularly electroplating) causes severe water pollution. What is 'X' ?

1. Fe 2. Cu 3. Co 4. Ni

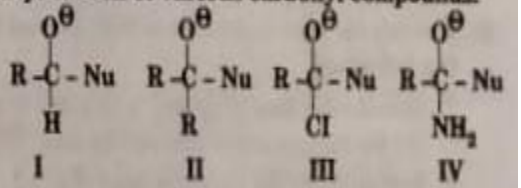
14. Identify X and Y in the following reaction sequence

$C_6H_6 \xrightarrow[H_2SO_4]{dil.H_2SO_4}$ PhCHOHMe $\xrightarrow{X}$ PhCOMe

$\xrightarrow[H_3O^{\oplus}]{Br_2/NaOH}$ Y

X Y
1. mCPBA $PhCOCH_2Br$
X Y
2. H_2CrO_4 PhCOOH
X Y
3. H_2CrO_4 PhCOOBr
X Y
4. $KMnO_4$ PhBr

15. Observe the following tetrahedral intermediates that are formed when nucleophile attacks acyl carbon of various carbonyl compounds.



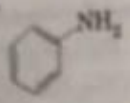
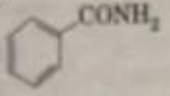
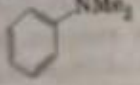
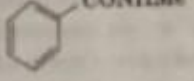
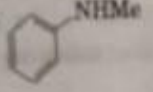
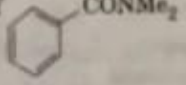
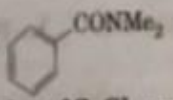
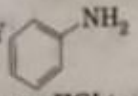
Which of these intermediates will lead to a substitution product ?

1. III, IV 2. I, III 3. II, IV 4. II, III, IV

16. The product of a nitro compound A ($C_3H_7NO_2$) and nitrous acid, does not dissolve in sodium hydroxide. Nitro compound A gave B when reacted with NaOH followed by H_2SO_4 isomer of A when reacted with HCHO/NH_4Cl gave C. What are B and C ?

	B	C
1.	CH_3COCH_3	$CH_3CH_2CH(NO_2)CH_2NH_2$
2.	CH_3CH_2CHO	$(CH_3)_2C(NO_2)CH_2NH_2$
3.	CH_3COCH_3	$(CH_3)_2C(NO_2)CH_2NH_2$
4.	CH_3COCH_3	$CH_3CH_2CH=CH_2$

17. An organic compound X dissolves in dil. HCl but does not give IR absorption band in the range of 3500-3400 cm^{-1}, where as compound Y does not dissolve in dil. HCl but displayed IR absorption band at 3500-3400 cm^{-1}. Identify X and Y.

1. X:  Y: 
2. X:  Y: 
3. X:  Y: 
4. X:  Y: 

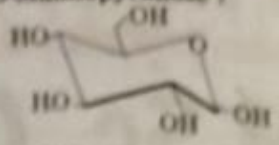
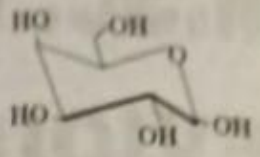
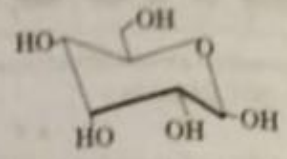
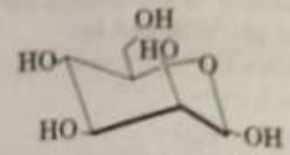
18. Solution of $ZnCl_2$ and conc. HCl turned cloudy on heating with an alcohol (A). A on reaction with PBr_3 and then with the reagent B is converted to C (major), which on reduction gave D. What are A, B and D ?

	A	B	D
1.	$CH_3CH_2CH_2OH$	NaCN	$CH_3CH_2CH_2NHCH_3$
2.	$CH_3CH_2CH_2OH$	AgCN	$CH_3CH_2CH_2NHCH_3$
3.	$CH_3CHOHCH_3$	AgCN	$(CH_3)_2CHNHCH_3$
4.	$(CH_3)_3COH$	NaCN	$(CH_3)_3CCH_2NH_2$

19. Identify the statement that is NOT correct from the following

1. Benzene free from thiophene is obtained by shaking the mixture containing both by conc. HNO_3
2. Pyrrole resembles aniline in reactivity
3. Furan is less aromatic than pyrrole.
4. Pyridine resembles nitrobenzene in reactivity towards electrophilic substitution

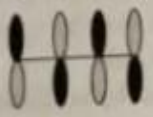
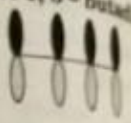
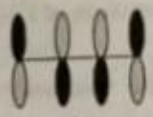
20. Which of the following represents the structure of D-Mannopyranose ?

1. 
2. 
3. 
4. 

21. The amino acid containing guanidine group

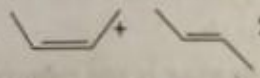
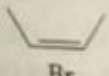
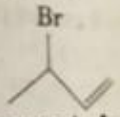
1. Lysine
2. Valine
3. Proline
4. Arginine

22. Which of the following molecular orbital represents excited state HOMO of 1, 3 - butadiene

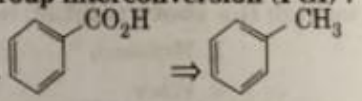
1. 
2. 
3. 
4. 

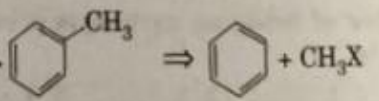
23. The major produect from the following reaction is

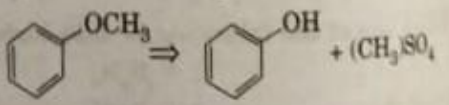
Meso–2,3 – dibromobutane $\xrightarrow{I^-}$?

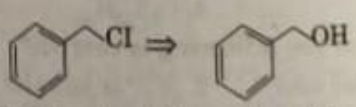
1. 
2. 
3. 
4. 

24. Which of the following represents functional group interconversion (FGI) ?

I. 

II. 

III. 

IV. 

1. II, III 2. I, III 3. I, IV 4. II, IV

25. **Which of the following will give doublet and a quartet in ^{1}H–NMR spectroscopy?**
1. Ethyl chloride 2. Acetic acid
3. Ethane 4. Acetaldehyde

26. **The number of carbon atoms present in a compound, whose mass spectrum showed M$^+$at m/z 86 (% RA 50) and M+1 at 87 (%RA 2.8)**
1. 3 2. 5 3. 2 4. 4

27. **Match the following**

List– I	List – II
A. PhCOCH3	I. 1725
B. PhCH2OH	II. 1760
C. PhCH2CHO	III. 3330
	IV. 1685

Correct answer is

	A	B	C
1.	IV	III	I
	A	B	C
2.	IV	III	II
	A	B	C
3.	I	IV	II
	A	B	C
4.	I	II	IV

28. **In a conductance cell. the dimensions of the electrodes are 1 cm and 1.5 cm and the two electrodes are separated by 0.5 cm, then the cell constant value in cm^{-1} is.**
1. 7.5 2. 0.4 3. 1.0 4. 0.33

29. **The molar conductances of sodium acetate, hydrochloric acid and sodium chloride at infinite dilution are 91.0 × 10^{-4}, 426.16 ×10^{-4} and 126.45 s.m^2. mol^{-1}, respectively at 25°C. The molar conductance at infinite dilution for acetic acid is**
1. 461.61 2. 390.71 3. 643.61 4. 210.70

30. **All electro chemical cell in construct by combining Ag and Cd electrodes. The standard eduction potentials of Ag and Cd at 25°C are + 0.80 and –0.40 V respectively. Which of the following statement is correct?**
1. In electrochemical cell reaction Ag becomes Ag$^+$ and Cd^{2+} becomes Cd
2. Both Ag and Cd electrodes undergo oxidation reaction
3. In electro chemical cell reacting Ag$^+$ reduces to Ag and Cd oxidises to Cd^{2+}
4. Both Ag and Cd electrodes undergo reduction reaction.

31. **The rate constant value for the decomposition of gaseous $N_2O_5 \rightleftharpoons 2NO_2 + \frac{1}{2}O_2$ is 5 × 10^{-4} S^{-1}. Calculate the time required for the N_2O_5 concentration to be reduced to 10% of the original value.**
1. 4.6 × 10^3 2. 4.6 × 10^{-3}
3. 5.93 × 10^2 4. 5.93 × 10^3

32. **Persulphate – Iodide reaction follows second order kinetics. The units for the rate of the above reaction is**
1. dm^3.mol^{-1}.S^{-1} 2. mol.dm^3.S^{-1}
3. dm^6.mol^{-2}.S^{-1} 4. S^{-1}

33. **–3, 100 J.mol^{-1} work is done during the conversion of one mole of water at 100°C to steam at 1 atm. pressure. Heat of vapourisation of water at 100°C is 40,670 J.mol^{-1}. Change in internal energy during the process in J.mol^{-1} is**
1. 0 2. 43,770
3. –13.1 4. 37,570

34. **Joule – Thomas coefficient, $\mu_{J\text{-}T}$ is defined as**
1. $\left(\frac{\partial E}{\partial T}\right)_V$ 2. $\left(\frac{\partial T}{\partial P}\right)_H$ 3. $\left(\frac{\partial H}{\partial P}\right)_T$ 4. $\left(\frac{\partial P}{\partial T}\right)_V$

35. **The efficiency of an engine operating between 110°C and 25°C is**
1. 17.7% 2. 28.5% 3. 22.2% 4. 77.8%

36. **The molar extinction coefficient of phenanthroline complex of iron (//) is 12,000 dm^3.mol^{-1}. cm^{-1}. and the minimum detectable absorbance is 0.01. The minimum concentration of the complex in molarity that can be detected in a Lambert – Beer law cell of path length 1.00 cm is**
1. 8.33 × 10^{-7} 2. 120
3. 12 × 10^5 4. 0.01

37. **The quantum yield of the following reaction is** $2HI \xrightarrow{h\nu} H_2 + I_2$
1. < 1 2. 1 × 10^6 3. 1 × 10^2 4. 2

38. **The selection rules for spectral transitions in atomic spectra are (i)Δn= 1,2,3,4..... And (ii)ΔℓΔ ±1. Using these selection rules, determine which of the following transitions are allowed**
I. 1s → 2p II. 2s → 3s III. 2p → 3s IV. 4p → 5f
1. I & II 2. I & III 3. II & IV 4. II & III

39. **Which of the following spectra are shown by molecules when vibrational motion is accompanied by a change in the dipolemoment of the molecule ?**
1. Microwave 2. Raman
3. I.R. 4. uv-visible

40. **The organic compound with molecular formula C_3H_6 shows only one NMR signal is**
1. cyclo propane 2. 1–propene
3. n–propane 4. cyclopropene

41. **With respect to all alkali matals, which of the following is not correct?**
1. react readily with water and liberate H_2
2. react with nitrogen and form nitrides
3. dissolve in mercury
4. soluble in anhydrous liquid ammonia

42. **In which of the following reactions of N_2H_4, N_2 is not evolved ?**

1. $N_2H_4 + Na \rightarrow$
2. $N_2H_4 + PtCl_4 \rightarrow$
3. $N_2H_4 + O_2 \rightarrow$
4. $N_2H_4 + IO_3^- \rightarrow$

43. **Zircon belongs to which type of silicates ?**

1. Chain silicates
2. Ortho silicates
3. Pyrosilicates
4. Cyclic silicates

44. **Which of the following metals react with dilute sulphuric acid and give H_2 gas ?**

i. Cu ii. Fe iii. Zn

1. i, ii
2. ii, iii
3. i, iii
4. i, ii, iii

45. **The number of amphoteric oxides in the following: CO_2, SnO_2, NO_2, ZnO, SnO, NO, CO, V_2O_5, Al_2O_3, CrO_3**

1. 5
2. 6
3. 3
4. 4

46. **Which of the following are the properties of interhalogen compounds ?**

i. Polar molecules ii. Reducing agents iii. Low thermal stability

1. i, ii only
2. i, ii, iii only
3. i, iii only
4. ii, iii only

47. **Which of the following are the common hydrolysis products of XeF_4 and XeF_6 ?**

i. Xe ii. HF iii. O_2 iv. XeO_3

1. i,ii,iii
2. ii, iv
3. ii, iii, iv
4. i, ii, iv

48. **The order of stability of +2 oxidation state of Cr, Mn, Fe and Co is:**

1. Mn > Fe > Cr > Co
2. Cr > Mn > Co > Fe
3. Co > Mn > Fe > Cr
4. Fe > Mn > Co > Cr

49. **Which of the following statements is correct?**

1. Titanium group metals form stable interstitial metal hydrides.
2. Cr(III) compounds are strong oxidizing agents
3. Mo, W differ in their properties
4. Ti(IV), is less acidic than Ti(III)

50. **Which pair of ions has same number of electrons ?**

1. La^{3+}, Ce^{3+}
2. Eu^{3+}, Gd^{3+}
3. Dy^{3+}, Sm^{2+}
4. Lu^{3+}, Yb^{2+}

51. **Which of the following reactions does not occur in liquid ammonia ?**

1. $KCl + AgNO_3 \rightarrow AgCl + KNO_3$
2. $Zn(NH_2)_2 + 2NaNH_2 \rightarrow Na_2Zn(NH_2) + 2NH_3$
3. $CuI + Na \rightarrow Cu + NaI$
4. $BF_3 + NH_3 \rightarrow BF_3 \cdot NH_3$

52. **The correct statement regarding Fajan's rules is:**

1. The cations with smaller size have lower polarizing power
2. For effective polarzation, there should be high charge on the cation or the anion or both
3. Cations with pseudo inert gas configuration have less polarzing power.
4. The anions with large size have less polarizability.

53. **Which of the following is paramagnetic nature?**

1. CO
2. CN^-
3. NO
4. NO_2

54. **The indicator which can be used to detect equivalence point in the titration of Na_2CO_3 with HCl is:**

1. Methyl red
2. Cresol red
3. Phenol red
4. Phenolphthalein

55. **Which of the following is not correct?**

1. Copper is better conductor than bismuth.
2. Osmium is so soft that it can be cut with a knife
3. Sodium metal is a good conductor of electricity
4. Tungsten melts at high temperatures.

56. **According to significant figure convention, the result obtained by adding 12.13, 19.0 and 2.01 is**

1. 33.144
2. 33.14
3. 33
4. 33.1

57. **The molecule having S_4 axis is :**

1. $SiCl_4$
2. $BeCl_2$
3. CCl_4
4. XeF_4

58. **Which of the following is insoluble in dilute nitric acid ?**

1. HgS
2. PbS
3. Bi_2S_3
4. CuS

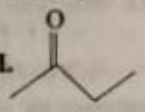
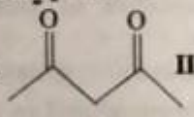
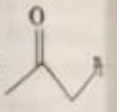
59. **The colour of $HgNH_2Cl$ is :**

1. Red
2. Yellow
3. Black
4. White

60. **Number of bonding electron pairs and number of lone pairs of electrons in ClF_3, SF_6 and IF_7 respectively are:**

1. 3,1; 4,2 ; 5,1
2. 3,1; 4,1; 5,2
3. 3,2; 4,1; 5,1
4. 3,2; 4,2; 5,2

61. **Arrange the following in the correct acidic order of the α-CH_2 protons.**

I. 
II. 
III. 

1. I > III > II
2. III > II > I
3. I < II < III
4. I < III < II

62. **Heat of hydrogenations of three alkenes I, II respectively are –28,5, – 30.3 and –26.9 Kal/mol. What are X, Y, Z ?**

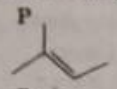
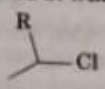
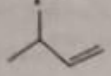
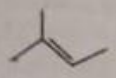
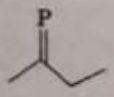
I. 2–Methyl –2–butene

II. 2–Methyl – 1– butene

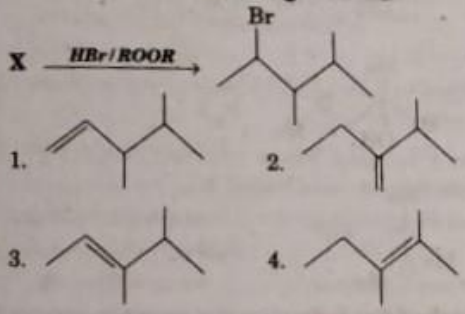
III. 3–Methyl –1–butene

	X	Y	Z
1.	II	III	I
	X	Y	Z
2.	II	I	III
	X	Y	Z
3.	I	II	III
	X	Y	Z
4.	I	III	II

63. An alkene $P(C_5H_{10})$ on HBr addition followed by reaction with Zn/H^+ gives Q, which can also be prepared from R and S. What are P, R and S ?

	P	R	S
1.			Me_2CuLi
2.		$(CH_3)_3CCl$	Et_2CuLi
3.			$(Me_2CH)_2CuLi$
4.		$(CH_3)_3CCl$	Me_2CuLi

64. What is X in the following reaction?



65. An alkene X C_8H_8 on bromination followed by reaction with alc-KOH and then $NaNH_2$ gave Y.Y on hydration yielded Z. What is Z ?

1. $PhCHOHCH_3$
2. $PhCH_2CHO$
3. $PhCOCH_3$
4. $PhCH_2CH_2OH$

66. Which of the following statements is NOT correct with respect to cyclohexane conformations?

1. Twist boat conformation is free from angle strain.
2. Chair conformation is free from torsional strain.
3. Boat form possess Pitzer strain.
4. Boat conformation is free from van der Waats strain.

67. What are X, Y, Z in the following conversion?

Benzene $\xrightarrow[\text{iii. Z}]{\text{i. X, ii. Y}}$ m- Nitrobenzoic acid

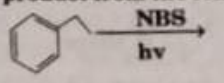
X	Y	Z
1. $CH_3Cl/AlCl_3$	$HNO_3+H_2SO_4$	$KMnO_4/OHH_3O^+$
2. $CH_3Cl/AlCl_3$	$KMnO_4/OHH_3O^+$	$HNO_3+H_2SO_4$
3. $HNO_3+H_2SO_4$	Sn/HCl	$CH_3Cl/AlCl_3$
4. $HNO_3+H_2SO_4$	$CH_3Cl/AlCl_3$	RCO_3H

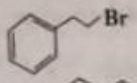
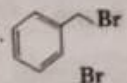
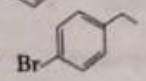
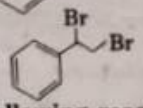
68. Identify the correct matched pair from the following

Substituent on benzene	Influence on benzene
I. –OMe	+M & –I
II. $-NO_2$	+M
III. $-NHCOCH_3$	–M
IV. –CHO	–M

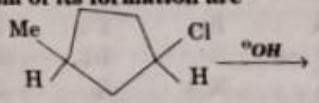
1. II, III
2. I, III
3. II, IV
4. I, IV

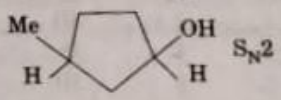
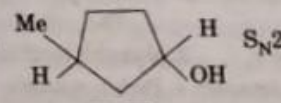
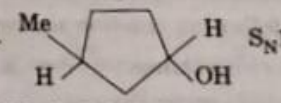
69. Major product from the following reaction is



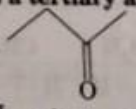
1. 
2. 
3. 
4. 

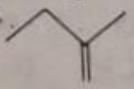
70. The product from the following reaction and mechanism of its formation are

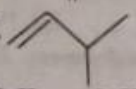


1. 
2. 
3. 
4. 

71. 2–Methyl–2– butene on reaction with B_2H_6/H_2O_2, ^-OH gave an alcohol X. Which of the following reactions give isomer of X which is a tertiary alcohol ?

I.  + MeMgBr, H_3O^+

II.  + dil. H_2SO_4

III.  + dil. H_2SO_4

1. I, II
2. II, III
3. I, III
4. I, II, III

72. Which of the following conversions represe Kolbe reaction?

1. Phenol → Salicilaladehyde.
2. Penol → Anisole
3. Phenol → Salicylic acid
4. Phenol → Picric acid

Students List

SIR C.R.REDDY COLLEGE FOR WOMEN,ELURU

PG ENTRANCE COACHING

2022-2023

SUB: CHEMISTRY

ATTENDENCE SHEET

S.NO	ROLL NO	NAME OF THE STUDENT	CLASS	SIGNATURE OF THE STUDENT
1.	200124	K.BABY BHARGAVI	MPC	K. Baby Bhargavi
2.	200113	CH.PANDU VARSHA	MPC	Ch. Pandu varsha
3.	204657	P.SUMIYABHI	MCCS	P. Sumiyabhi
4.	201827	M.N.J.PRIYANKA	ZFC	M.N.J. Priyanka
5.	204601	B.JAHNAVI	MCCS	B. Jahnavi
6.	204602	B.KRISHNA HARI CHANDANA	MCCS	B. Krishna Hari Chandana
7.	204616	B.DIVYA	MCCS	B. Divya
8.	201816	CH.DEVI	ZFC	Ch. Devi
9.	201820	G.MOUNIKA	ZFC	G. Mounika
10.	201838	T.ASHA JYOTHI	ZFC	T. Asha Jyothi
11.	201001	CH.SATWIKA	CBZ	Ch. Satwika
12.	2010030	M.RAMYA	CBZ	M. Ramya

B.

ATTENDENCE LIST

SIR C R REDDY COLLEGE FOR WOMEN , ELURU

CAREER GUIDANCE & PLACEMENT CELL

PG ENTRANCE COACHING 2022-2023

SUB: CHEMISTRY

S.NO	ROLLNO	GROUP	NAME OF THE STUDENT
1	200124	MPC	K.BABY BHARGAVI
2	200113	MPC	CH.PANDU VARSHA
3	204657	MCCS	P.SUMIYABHI
4	201827	ZFC	M.N.J.PRIYANKA
5	204601	MCCS	B.JAHNAVI
6	204602	MCCS	B.KRISHNA HARI CHANDANA
7	204616	MCCS	B.DIVYA
8	201816	ZFC	CH.DEVI
9	201820	ZFC	G.MOUNIKA
10	201838	ZFC	T.ASHA JYOTHI
11	201001	CBZ	CH.SATWIKA
12	2010030	CBZ	M.RAMYA

SIGNATURE

REPORT

PROGRAMME: PG Entrance COACHING FOR III B.Sc. Aspirants in Chemistry subject.

In association with IQAC &In accordance with the resolution made during the meeting and documented in the minutes, it was unanimously agreed to arrange PG entrance coaching classes for interested students pursuing IIIB.Sc (MCCs,MPC,CBZ,ZFC). This significant decision forms an integral part of the report on the PG entrance coaching classes in **Chemistry** subject conducted from 28-April-2023 to 27 -May-2023 from 9:30 to 12:30 and 4.30 to 5.30.These classes were conducted senior and expert faculty from the concerned department.

Approximately motivated students actively participated in the coaching sessions These meticulously organized classes aimed to prepare the students comprehensively for the upcoming PG entrance examinations scheduled in the month of May 2023. The coaching sessions were diligently conducted from 9:30 AM to 12:30 PM, adhering to a structured curriculum meticulously designed to equip students with the essential skills and knowledge required for success in the examination.

12 members were participated in this coaching and out of 12 members 2 were qualified and secured good ranks.

The outcomes of these coaching classes have been highly encouraging. Close to 12 students showcased exceptional performance, securing remarkable pg. ranks demonstrating both their commitment and the effectiveness of the coaching program. Furthermore,

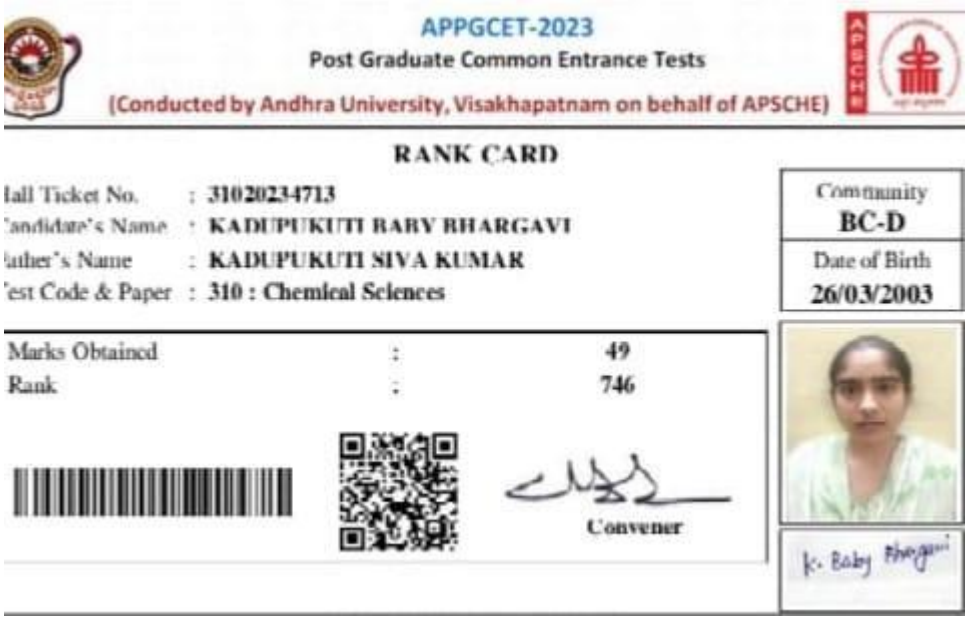
The successful arrangement of these coaching classes aligns directly with the decision made during the meeting These sessions facilitated a conducive learning environment, significantly contributing to the preparedness and success of the students preparing for the PG entrance examination.

Their dedication has been instrumental in empowering our students for academic success.

LIST OF STUDENTS QUALIFIED IN M.Sc CHEMISTRY ENTRANCE EXAM 2018-2019

S.NO	NAME OF THE STUDENT	GROUP
1	KANDUPUKUTI BABY BHARGAVI	MPC
2	PATAN SUMIYABHI	MCCS

RANK CARDS



APPGCET-2023
Post Graduate Common Entrance Tests
(Conducted by Andhra University, Visakhapatnam on behalf of APSCHE)

RANK CARD

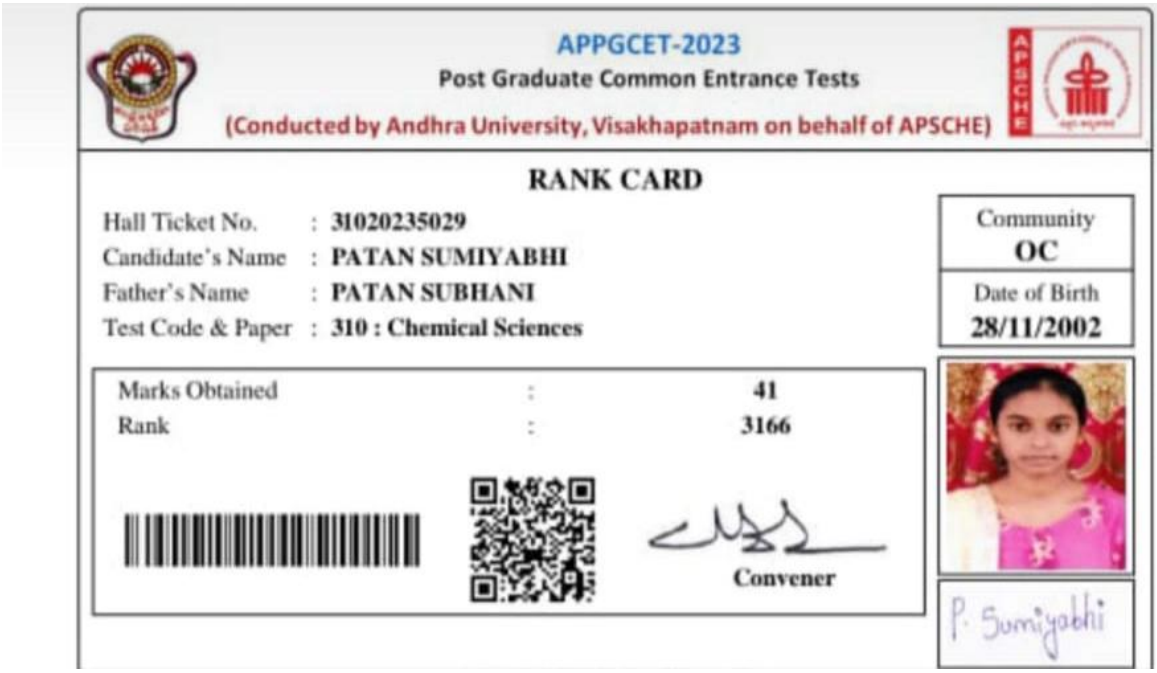
Hall Ticket No. : 31020234713
Candidate's Name : KADUPUKUTI BABY BHARGAVI
Father's Name : KADUPUKUTI SIVA KUMAR
Test Code & Paper : 310 : Chemical Sciences

Community: BC-D
Date of Birth: 26/03/2003

Marks Obtained : 49
Rank : 746

Convener

K. Baby Bhargavi



APPGCET-2023
Post Graduate Common Entrance Tests
(Conducted by Andhra University, Visakhapatnam on behalf of APSCHE)

RANK CARD

Hall Ticket No. : 31020235029
Candidate's Name : PATAN SUMIYABHI
Father's Name : PATAN SUBHANI
Test Code & Paper : 310 : Chemical Sciences

Community: OC
Date of Birth: 28/11/2002

Marks Obtained : 41
Rank : 3166

Convener

P. Sumiyabhi

PHOTO GALLERY

PG CET ENTRANCE COACHING IN CHEMISTRY

YEAR:2022-2023