

SIR C R REDDY COLLEGE FOR WOMEN

(Affiliated to AdikaviNannaya University, Rajamahendravaram)

Vatluru (Post), Pedapadu Mandal, West Godavari Dist., (A.P)



PG ENTRANCE COACHING

For

M.Sc., (chemistry)

Date: 05-Apr-2019 to 04-May-2019

Time: 9:30 am to 12:30 Pm

Organized by

CAREER GUIDANCE & PLACEMENT CELL

2018–2019

INDEX

S. No	Particulars	Page No
1	About Programme	1
2	Learning Objectives and Learning Outcomes	2
3	Permission Letter	3
4	Notice to Staff and Students	4
5	Course Structure	5
6	Course Material	6
7	Students List	14
8	Student attendance Subject wise	15
9	Report	16
10	Rank Cards	17
11	Photo Gallery	25

About Programme

The Career Guidance and Placement Cell at Sir CR Reddy College for Women organized PG entrance coaching classes for NANNAYACET 2019 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:

- April 5th, 2019, to May 4th, 2019 (30 days)

Time:

- 9:30 AM to 12:30 PM (Morning sessions)

Resource Person:

- Coaching by Mrs.B.Tulasi Koteswari(HOD of Chemistry)

Organized By:

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

Program Overview:

- Specifically designed coaching program focusing on NANNAYACET 2019 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 NANNAYACET 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 NANNAYACET 2019 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 syllabi specific to NANNAYACET 2019.
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

18-03-2019
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 5th April 2019 to 4th May 2019. The duration of these classes will be from 9:30 am to 12:30 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
[Signature]
Principal
Sir C.R.Reddy College for Women
ELURU

Yours Faithfully

[Signature]
(Coordinator)

Career Guidance and Placement Cell

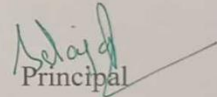
Notice to Students

NOTICE

19-03-2019

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 5th April 2019 to 4th May 2019 running from 9:30 AM to 12:30 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 G.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 ,gases state, solid state, physical state, electro chemistry, chemical kinetics

General chemistry:

Theory of quantitative analysis's, chemical bonding ,molecular symmetry ,evaluation of analytical data

Course Material

Index

12. Phase rule	519
13. Photo Chemistry	527

ORGANIC CHEMISTRY533-738

1. Structure of organic molecules and their reaction mechanisms	534
2. Nomenclature of organic compounds	544
3. Stereo chemistry	550
4. Alkanes	591
5. Cyclo alkanes	598
6. Alkenes and alkadienes	602
7. Alkynes	609
8. Aromatic hydrocarbons	614
9. Halogen compounds	625
10. Aldehydes and Ketones	636
11. Alcohols	645
12. Phenols	657
13. Carboxylic acids	664
14. Ethers	668
15. Active methylene compounds (esters)	671
16. Nitrogen compounds	678
17. Amino acids	696
18. Hetero cyclic compounds	705
19. Carbohydrates	714
20. Alkaloids and Terpenes	724
21. Named and Important organic reactions	728

CHEMISTRY & INDUSTRY739-880

1. Solvent Extraction Chromatography Methods	740
2. Spectroscopy	772
3. Drug Chemistry	820
4. Macro Molecules	844
5. Catalysis	865

Index

19. Andhra University, 2010	983
20. University of Hyderabad, 2010	987

INORGANIC CHEMISTRY.....223-382

1. Periodic properties	224
2. Alkali metals (Group I A Elements)	236
3. Alkaline earth metals (Group II A Elements).....	248
4. Boron family (Group III A Elements)	258
5. Carbon family (Group IV A Elements).....	271
6. Nitrogen family (Group V A Elements)	284
7. Oxygen family (Group VI A Elements).....	294
8. Halogens (Group VII A Elements)	306
9. Transition elements	320
10. Lanthanides and Actinides	327
11. Zero group elements	330
12. Hydrogen and its compounds.....	341
13. Metallic bond, Metallurgy and Alloys	348
14. Organometallic compounds	353
15. Coordination compounds.....	360
16. Nuclear Chemistry.....	371

PHYSICAL CHEMISTRY.....383-532

1. Structure of atom.....	384
2. Theory of chemical bonding.....	395
3. Gaseous state (Kinetic molecular theory of gases).....	409
4. Solutions.....	424
5. Liquid state (Binary liquid mixtures)	427
6. Colligative properties of dilute solutions	433
7. The Solid state.....	443
8. Chemical equilibrium.....	456
9. Chemical Kinetics	465
10. Chemical Thermodynamics (Chemical energetics).....	478
11. Electro Chemistry.....	497

The number of possible geometrical isomers for $[\text{Pt}(\text{NO}_2)(\text{C}_2\text{H}_5\text{N})(\text{NH}_2\text{OH})]^+$ is
 1. 2 2. 4 3. 3 4. 6

The order of stability of complexes Fe^{3+} , CO^{3+} , Ni^{2+} , Cu^{2+} for the given ligand is:
 1. $\text{Fe}^{3+} > \text{CO}^{3+} > \text{Ni}^{2+} > \text{Cu}^{2+}$
 2. $\text{Fe}^{3+} > \text{Ni}^{2+} > \text{CO}^{3+} > \text{Cu}^{2+}$
 3. $\text{Cu}^{2+} > \text{Ni}^{2+} > \text{CO}^{3+} > \text{Fe}^{3+}$
 4. $\text{Cu}^{2+} > \text{CO}^{3+} > \text{Fe}^{3+} > \text{Ni}^{2+}$

Which of the following complexes do not obey Effective atomic number rule ?
 i. $[\text{Cr}(\text{NH}_3)_6]^{3+}$ ii. $[\text{Ni}(\text{NH}_3)_6]^{2+}$
 iii. $[\text{Co}(\text{NH}_3)_6]^{2+}$ iv. $[\text{Pt}(\text{NH}_3)_6]^{4+}$
 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 $\text{Fe}(\text{CO})_5$ is
 1. $3d_{z^2}$ 2. $3d_{x^2-y^2}$ 3. $4d_{z^2}$ 4. $4d_{x^2-y^2}$

The pair in which both the molecules have same magnetic moment:
 1. $[\text{Cr}(\text{H}_2\text{O})_6]^{2+}$, $[\text{CoCl}_4]^{2-}$
 2. $[\text{Cr}(\text{H}_2\text{O})_6]^{2+}$, $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$
 3. $[\text{Mn}(\text{H}_2\text{O})_6]^{2+}$, $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$
 4. $[\text{CoCl}_4]^{2-}$, $[\text{Mn}(\text{H}_2\text{O})_6]^{2+}$

Which one of the following is not coloured?
 1. $[\text{Ti}(\text{H}_2\text{O})_6]^{3+}$ 2. $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$
 3. $[\text{Cu}(\text{H}_2\text{O})_6]^{2+}$ 4. $[\text{Sc}(\text{H}_2\text{O})_6]^{3+}$

$\text{HgR}_2 + \text{Mg} \xrightarrow{\text{solvent}} \text{MgR}_2 + \text{Hg}$
The solvent used in the above reaction is:
 1. Ethanol 2. Methanol
 3. Benzene 4. Ether

The number of bridging carbonyls present in $\text{Fe}_3(\text{CO})_{12}$ is
 1. 1 2. 2 3. 3 4. 4

Which one of the following is nido-carborane ?
 1. $\text{C}_2\text{B}_{10}\text{H}_{12}$ 2. $\text{C}_2\text{B}_4\text{H}_8$
 3. $\text{C}_2\text{B}_7\text{H}_{13}$ 4. $\text{C}_2\text{B}_{10}\text{H}_{10}$

Which one of the following is correct?
 1. VO_2^{3+} 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. $[\text{PtCl}_4]^{2-} \xrightarrow{\text{NH}_3} \text{X} \xrightarrow{\text{NH}_3} \text{Y}$
ii. $[\text{PtCl}_4]^{2-} \xrightarrow{\text{NH}_3} \text{X} \xrightarrow{\text{C}_2\text{H}_4} \text{Z}$
In the above reactions Y and Z respectively are:
 1. $\text{trans}[\text{PtCl}_2(\text{NH}_3)_2]$, $\text{trans}[\text{PtCl}_2(\text{NH}_3)(\text{C}_2\text{H}_4)]$
 2. $\text{trans}[\text{PtCl}_2(\text{NH}_3)_2]$, $\text{cis}[\text{PtCl}_2(\text{NH}_3)(\text{C}_2\text{H}_4)]$
 3. $\text{cis}[\text{PtCl}_2(\text{NH}_3)_2]$, $\text{trans}[\text{PtCl}_2(\text{NH}_3)(\text{C}_2\text{H}_4)]$
 4. $\text{cis}[\text{PtCl}_2(\text{NH}_3)_2]$, $\text{cis}[\text{PtCl}_2(\text{NH}_3)(\text{C}_2\text{H}_4)]$

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

$$\text{C}_6\text{H}_6 \xrightarrow[\text{H}_2\text{SO}_4]{\text{dil. H}_2\text{SO}_4} \text{PhCHOHMe} \xrightarrow{\text{X}} \text{PhCOMe}$$

$$\xrightarrow[\text{H}_3\text{O}^+]{\text{Br}_2/\text{NaOH}} \text{Y}$$

X	Y
1. mCPBA	PhCOCH ₂ Br
X	Y
2. H ₂ CrO ₄	PhCOOH
X	Y
3. H ₂ CrO ₄	PhCOBr
X	Y
4. KMnO ₄	PhBr

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

O^\ominus	O^\ominus	O^\ominus	O^\ominus
R-C-Nu	R-C-Nu	R-C-Nu	R-C-Nu
H	R	Cl	NH ₂
I	II	III	IV

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 ($C_6H_7NO_2$) 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?

- | | |
|---------------|--------------------------|
| 1. B | C |
| CH_3COCH_3 | $CH_2CH_2CHNO_2CH_2NH_2$ |
| 2. B | C |
| CH_2CH_2CHO | $(CH_2)_2CNO_2CH_2NH_2$ |
| 3. B | C |
| CH_3COCH_3 | $(CH_2)_2CNO_2CH_2NH_2$ |
| 4. B | C |
| CH_3COCH_3 | $CH_2CH_2CH=CH_2$ |

17. An organic compound X dissolves in dil. HCl but does not give IR absorption band in the range of $3500-3400\text{ cm}^{-1}$, whereas compound Y does not dissolve in dil. HCl but displayed IR absorption band at $3500-3400\text{ cm}^{-1}$. 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?

- | | | |
|------------------|--------|----------------------|
| 1. A | B | D |
| $CH_3CH_2CH_2OH$ | $NaCN$ | $CH_3CH_2CH_2NHCH_3$ |
| 2. A | B | D |
| $CH_3CH_2CH_2OH$ | $AgCN$ | $CH_3CH_2CH_2NHCH_3$ |
| 3. A | B | D |
| $CH_3CHOHCH_3$ | $AgCN$ | $(CH_3)_2CHNHCH_3$ |
| 4. A | B | D |
| $(CH_3)_2COH$ | $NaCN$ | $(CH_3)_2CCH_2NH_2$ |

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

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

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

-
-
-
-

21. The amino acid containing guanidine group

- Lysine
- Valine
- Proline
- Arginine

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

-
-
-
-

23. The major product from the following reaction is

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

-
-
-
-

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

-
-
-
-

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

25. Which of the following will give doublet and a quartet in $^1\text{H-NMR}$ 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 88 (% 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. PhCOCH_3 | I. 1725 |
| B. PhCH_2OH | II. 1760 |
| C. PhCH_2CHO | 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 $126.45 \text{ s.m}^2 \cdot \text{mol}^{-1}$, 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 reduction 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 $\text{N}_2\text{O}_5 \rightleftharpoons 2\text{NO}_2 + \frac{1}{2}\text{O}_2$ is $5 \times 10^{-4} \text{ S}^{-1}$.

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^{-2}
3. 5.93×10^2
4. 5.93×10^4

32. Persulphate - Iodide reaction follows second order kinetics. The units for the rate of the above reaction is

1. $\text{dm}^3 \cdot \text{mol}^{-1} \cdot \text{S}^{-1}$
2. $\text{mol} \cdot \text{dm}^3 \cdot \text{S}^{-1}$
3. $\text{dm}^6 \cdot \text{mol}^{-2} \cdot \text{S}^{-1}$
4. S^{-1}

33. -3, 190 $\text{J} \cdot \text{mol}^{-1}$ 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 $40,670 \text{ J} \cdot \text{mol}^{-1}$. Change in internal energy during the process in $\text{J} \cdot \text{mol}^{-1}$ is

1. 0
2. 43,770
3. -13.1
4. 37,570

34. Joule - Thomas coefficient, $\mu_{J,T}$ 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 (II) is $12,000 \text{ dm}^3 \cdot \text{mol}^{-1} \cdot \text{cm}^{-1}$, 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 $2\text{HI} \xrightarrow{h\nu} \text{H}_2 + \text{I}_2$

1. < 1
2. 1×10^6
3. 1×10^2
4. 2

38. The selection rules for spectral transitions in atomic spectra are (i) $\Delta n = 1, 2, 3, 4, \dots$ And (ii) $\Delta l = \pm 1$. Using these selection rules, determine which of the following transitions are allowed

- I. $1s \rightarrow 2p$
- II. $2s \rightarrow 3s$
- III. $2p \rightarrow 3s$
- IV. $4p \rightarrow 5f$

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 dipole moment of the molecule?

1. Microwave
2. Raman
3. IR.
4. uv-visible

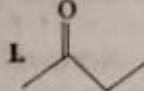
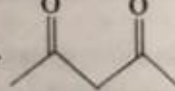

40. The organic compound with molecular formula C_3H_6 shows only one NMR signal is

1. cyclo propane
2. 1-propene
3. n-propane
4. cyclopropene

41. With respect to all alkali metals, 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

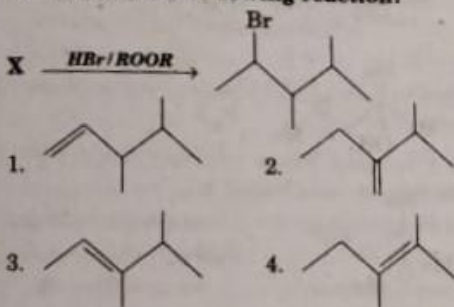
42. In which of the following reactions of N_2H_4 , N_2 is not evolved?
- $N_2H_4 + Na \rightarrow$
 - $N_2H_4 + PtCl_4 \rightarrow$
 - $N_2H_4 + O_2 \rightarrow$
 - $N_2H_4 + IO_3^- \rightarrow$
43. Zircon belongs to which type of silicates?
- Chain silicates
 - Ortho silicates
 - Pyrosilicates
 - Cyclic 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_2
- | | | | |
|------|------|------|------|
| 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?
- Titanium group metals form stable interstitial metal hydrides.
 - Cr(III) compounds are strong oxidizing agents
 - Mo, W differ in their properties
 - 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^{3+} | 4. Lu^{3+} , Yb^{3+} |
51. Which of the following reactions does not occur in liquid ammonia?
- $KCl + AgNO_3 \rightarrow AgCl + KNO_3$
 - $Zn(NH_3)_2 + 2NaNH_2 \rightarrow Na_2Zn(NH_2)_2 + 2NH_3$
 - $CuI + Na \rightarrow Cu + NaI$
 - $BF_3 + NH_3 \rightarrow BF_3 \cdot NH_3$
52. The correct statement regarding Fajan's rules is:
- The cations with smaller size have lower polarizing power
 - For effective polarization, there should be high charge on the cation or the anion or both
 - Cations with pseudo inert gas configuration have less polarizing power.
 - The anions with large size have less polarizability.

53. Which of the following is paramagnetic nature?
- | | | | |
|-------|-----------|-------|-----------|
| 1. CO | 2. CN^- | 3. NO | 4. NO^+ |
|-------|-----------|-------|-----------|
54. The indicator which can be used to determine equivalence point in the titration of $NaOH$ with HCl is:
- | | |
|---------------|--------------------|
| 1. Methyl red | 2. Cresol red |
| 3. Phenol red | 4. Phenolphthalein |
55. Which of the following is not correct?
- Copper is better conductor than bismuth.
 - Osmium is so soft that it can be cut with a knife.
 - Sodium metal is a good conductor of electricity.
 - Tungsten melts at high temperatures.
56. According to significant figure convention, the result obtained by adding 12.13, 19.0 and 2.46 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 , BrF_3 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 X, Y, Z respectively are -28.5, -30.3 and -26.9 KJ/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?

1. P R S
2. P R S
3. P R S
4. P R S

64. What is X in the following reaction?



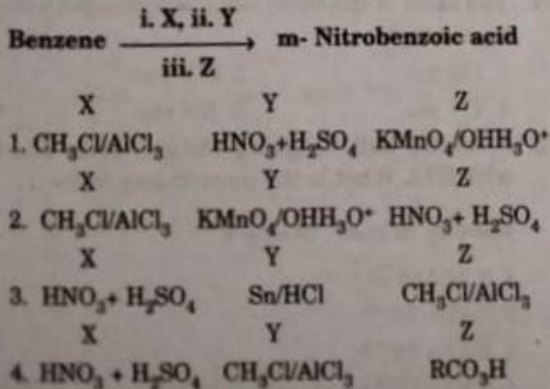
65. An alkene X (C_8H_{16}) on bromination followed by reaction with alc-KOH and then $NaNH_2$ gave Y. Y on hydration yielded Z. What is Z?

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 Waals strain.

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

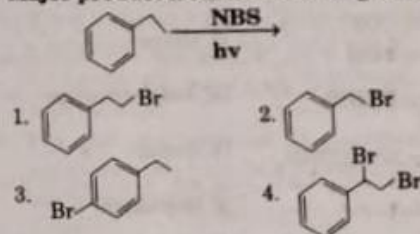


68. Identify the correct matched pair from the following

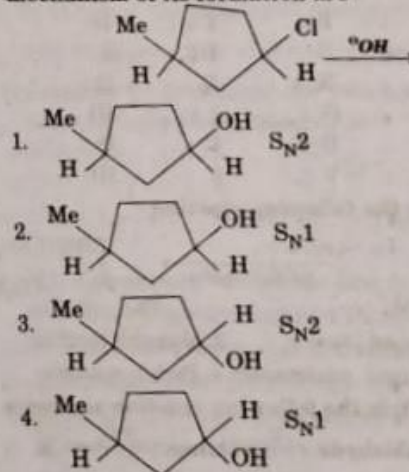
Substituent on benzene	Influence on benzene
I. -OMe	+M & -I
II. -NO ₂	+M
III. -NHCOCH ₃	-M
IV. -CHO	-M

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

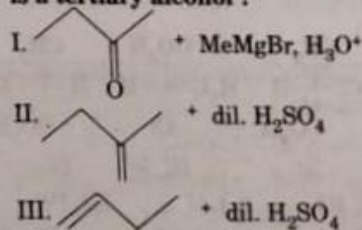
69. Major product from the following reaction is



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



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?



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

72. Which of the following conversions represent Kolbe reaction?

1. Phenol \rightarrow Salicylaldehyde.
2. Phenol \rightarrow Anisole
3. Phenol \rightarrow Salicylic acid
4. Phenol \rightarrow Picric acid

Students List

SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU

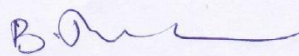
PG ENTRANCE COACHING

2018-2019

SUB: CHEMISTRY

ATTENDANCE SHEET

S.NO	ROLL.NO	NAME OF THE STUDENT	CLASS	SIGNATURE OF THE STUDENT
1	1083	V.LAKSHMI DURGA	MPC	V. L. Durga
2	1337	K.SWARNA SRI	CBZ	K. Swarna Sri
3	1356	V.YAMUNA	CBZ	V. Yamuna
4	1046	K.BHAVANI	MPC	K. Bhavani
5	1027	B.SOWJANYA	MPC	B. Sowjanya
6	1011	P.ROSHITHA DURGA	MPC	P. Roshitha Durga
7	1334	G.P.L.SAROJINI	CBZ	G. P. L. Sarojini
8	1339	K.TIRUMARA	CBZ	K. Tirumara
9	1079	V.PAVANI	MPC	V. PAVANI
10	1050	M.HEMA LATHA	MPC	M. Hema Latha
11	1014	U.RAJANI	MPC	U. Rajani
12	1080	V.NAVYA SRI	MPC	V. Navya Sri
13	1050	P. ROHITHA SRI	MPC	P. Rohitha Sri
14	1330	G.DURGA	MPC	G. Durga
15	1028	CH.ANAJALI	CBZ	Ch. Anjali
16	1038	G.THIRUMARA	MPC	G. Thirumara
17	1006	G.SAI LAHARI	MPC	G. Sai Lahari
18	1017	A.VASAVI	MPC	A. Vasavi
19	1310	K.SAI JEEVANA	CBZ	K. S. Jeevana
20	1314	M.BHANU SRI	CBZ	M. Bhanu Sri



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 (CBZ, MPC). This significant decision forms an integral part of the report on the PG entrance coaching classes in Chemistry subject conducted from 05-Apr-2019 to 04 -May-2019 from 9:30 to 12:30 .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 2019. 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.

20 members were participated in this coaching and out of 20 members 15 were qualified and secured good ranks.

The outcomes of these coaching classes have been highly encouraging. 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 conductive learning environment, significantly contributing to the preparedness and success of the students preparing for the PG entrance examination.

A Standout achievement includes one of our students GPL Sarojini Pursuing 3 rd Bsc.CBZ who distinguishing themselves by securing outstanding 84th rank in NANNAYA CET and secured more ranks like 84, 186, 245, 409, 440.



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

RANK CARDS

DIRECTORATE OF ADMISSIONS ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM NANNAYACET - 2019 :: RANK CARD		
Hall Ticket No : 081040123	RegNo : 203720	Application No : 104633
Name : PUJITHA LAKSHMI SAROJINI GUTHIKONDA Gender : Female Date of Birth : 22-07-1996 Father's Name : MAHESWARA RAO	Category : BCD	 D. Jyoti a DIRECTOR, DOA NANNAYACET-2019
Address : DoorNo : 46 Street : 4TH LINE Town : MOTHEVARITHOTA City : ELURU District : WEST GODAVARI State : ANDHRA PRADESH Pin : 534002	Test : 104-Chemical Sciences Marks Obtained: <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">61</div> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">RANK</div> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">84</div>	
Note : * Admission into any course is subject to fulfilment of eligibility criteria for that course. * Any correction in biodata should be brought to the notice of the Convener at the time of counseling.		

DIRECTORATE OF ADMISSIONS ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM NANNAYACET - 2019 :: RANK CARD		
Hall Ticket No : 081040197	RegNo : 205730	Application No : 104659
Name : SWARNA SRI KUPPALA Gender : Female Date of Birth : 03-08-1999 Father's Name : GANGADHARA RAO	Category : GENERAL(OC)	 K. Swarna Sri D. Jyoti DIRECTOR, DOA NANNAYACET-20
Address : DoorNo : 1-64 Street : NEHRU COLONY Town : SATRAMPADU City : ELURU District : WEST GODAVARI State : ANDHRA PRADESH Pin : 534007	Test : 104-Chemical Sciences Marks Obtained: <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">52</div> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">RANK</div> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">186</div>	
Note : * Admission into any course is subject to fulfilment of eligibility criteria for that course. * Any correction in biodata should be brought to the notice of the Convener at the time of counseling.		


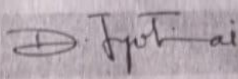
1 of 1 | Export to the selected format | Export

 **DIRECTORATE OF ADMISSIONS**
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD 



Hall Ticket No : 081040033 RegNo : 201173 Application No : 101322

Name : DURGA JANNU
 Gender : Female
 Date of Birth : 30-08-1997
 Father's Name : VENKANNA
 Address :
 DoorNo : 7-142
 Street : TURPU VEEDHI
 Town : VENKATAPURAM
 City : ELURU
 District : WEST GODAVARI
 State : ANDHRA PRADESH
 Pin : 534001

Category : BCB
 Test : 104-Chemical Sciences
 Marks Obtained:
 48
RANK
 245


 D. Durga

 DIRECTOR, DOA
 NANNAYACET-2019


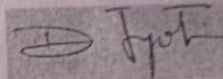
Note :
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 **DIRECTORATE OF ADMISSIONS**
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD 


Hall Ticket No : 101040053 RegNo : 204280 Application No : 103184


Name : ROSHITHA DURGA POKALA
 Gender : Female
 Date of Birth : 25-12-1997
 Father's Name : SRINIVASA RAO
 Address :
 DoorNo : 3-51/A
 Street : KATTAVAPODALAGUDEM
 VILLAGE
 Town : RAVIKAMPADU POST
 City : JANGAREDDYGUDEM MANDAL
 District : WEST GODAVARI
 State : ANDHRA PRADESH
 Pin : 534451

Category : GENERAL(OC)
 Test : 104-Chemical Sciences
 Marks Obtained:
 43
RANK
 409


 R. Roshitha Durga

 DIRECTOR, DO
 NANNAYACET-2019

Note :
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DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD


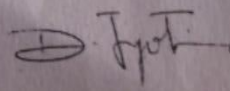


Hall Ticket No : 081040154 **RegNo : 204266** **Application No : 102022**

Name : ROHITHA SRI PODIPIREDDY
Gender : Female
Date of Birth : 16-02-1998
Father's Name : PODIPIREDDY ATCHYUTH KUMAR


Address :
DoorNo : 9-22
Street : PADAMATA VEEDHI
Town : KAIKARAM
City : UNGUTURU
District : WEST GODAVARI
State : ANDHRA PRADESH
Pin : 534416


Test : 104-104-Chemical Sciences
Marks Obtained:
42
RANK
456


P. Rohitha Sri

DIRECTOR, DOA
NANNAYACET-2019

Note :

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DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD


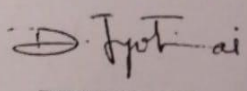


Hall Ticket No : 081040175 **RegNo : 205144** **Application No : 104639**

Name : SOWJANYA BOTLA
Gender : Female
Date of Birth : 23-08-1999
Father's Name : BOTLA NAGARAJU


Address :
DoorNo : 2-59
Street : MAINROAD
Town : CHAKRAYAGUDEM
City : ELURU
District : WESTGODAVARI
State : ANDHRA PRADESH
Pin : 534452


Test : 104-Chemical Sciences
Marks Obtained:
42
RANK
493


B. Sowjanya

DIRECTOR, DOA
NANNAYACET-2019

Note :


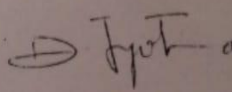
- * Admission into any course is subject to fulfilment of eligibility criteria for that course.
- * Any correction in biodata should be brought to the notice of the Convener at the time of counseling.


DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD





Hall Ticket No : 081040049 RegNo : 201703 Application No : 104603

<p>Name : HEMALATHA MAREEDU Gender : Female Date of Birth : 04-05-1998 Father's Name : RAGHAVENDRA RAO</p> <p>Address :</p> <p>DoorNo : 7-40 Street : RCM HIGH SCHOOL Town : VEGIVADA City : PEDAVEGI MANDAL District : WEST GODAVARI State : ANDHRA PRADESH Pin : 534452</p>	<p>Category : BCB</p> <p>Test : 104-104-Chemical Sciences</p> <p>Marks Obtained:</p> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 80px; margin: 0 auto;">37</div> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RANK</p> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 80px; margin: 0 auto;">793</div>
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 M. Hemalatha

 DIRECTOR, DOA
 NANNAYACET-2019


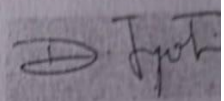
Note :
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DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD




Hall Ticket No : 081040106 RegNo : 203272 Application No : 101297

<p>Name : NAVYA SRI VAVILAPALLI Gender : Female Date of Birth : 03-05-1999 Father's Name : VAVILAPALLI RAMA KRISHN</p> <p>Address :</p> <p>DoorNo : 7-3 Street : TARAKARAMACOLONY Town : BAPULAPADU MANDALAM City : HANUMANJUNCTION District : KRISHNA State : ANDHRA PRADESH Pin : 521105</p>	<p>Category : BCD</p> <p>Test : 104-Chemical Sciences</p> <p>Marks Obtained:</p> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 80px; margin: 0 auto;">39</div> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RANK</p> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 80px; margin: 0 auto;">652</div>
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 V. Navya

 DIRECTOR, DOA
 NANNAYACET-2019

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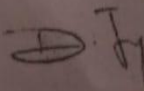

DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD


Hall Ticket No : 081040203 RegNo: 205872 Application No : 103749

<p> Name : TIRUMALA KAMPACHATU Gender : Female Date of Birth : 04-01-1999 Father's Name : RAMANAIAH Address : DoorNo: 2-13/C Street: MADICHERLA Town: MADICHERLA City: BAPULAPADU MANDALAM District: KRISHNA State: ANDHRA PRADESH Pin : 521105 </p>	<p> Category : BCD Test : 104-Chemical Sciences Marks Obtained: <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">35</div> RANK <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">1036</div> </p>
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Note :

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- * Any correction in biodata should be brought to the notice of the Convener at the time of counseling.


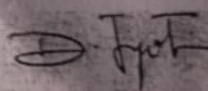

 K. Tirumala

DIRECTOR
NANNAYA


DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD

Hall Ticket No : 081040071 RegNo: 202297 Application No : 103664

<p> Name : LAKSHMI DURGA VEGUNTA Gender : Female Date of Birth : 27-08-1998 Father's Name : BALAJI Address : DoorNo: 7-103 Street: PANCHAYATHI OFFICE Town: VATLURU City: PEDAPADU MANDALAM District: WEST GODAVARI State: ANDHRA PRADESH Pin : 534007 </p>	<p> Category : GENERAL(OC) Test : 104-Chemical Sciences Marks Obtained: <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">36</div> RANK <div style="border: 1px solid black; padding: 5px; text-align: center; width: 100px; margin: 5px auto;">901</div> </p>
---	--

Note :


 V. Lakshmi Durga

DIRECTOR, DO

DIRECTORATE OF ADMISSIONS
ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM
NANNAYACET - 2019 :: RANK CARD

Half Ticket No : 081040113 Application No : 103638

Name : PAVANI VADIGALLA RegNo : 203455

Gender : Female Category : BCD

Date of Birth : 05-03-1999

Father's Name : VENKATARAMANA

Address :

DoorNo : 1-30

Street : PRAKASHNAGAR

Town : BHOGAPURAM

City : PEDAVEGI MANDAL

District : WEST GODAVARI

State : ANDHRA PRADESH

Pin : 534007


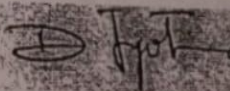
Test : 104-Chemical Sciences

Marks Obtained:

30

RANK


1659


V. Pavani

DIRECTOR, DOA
NANNAYACET-2019

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Correction in biodata should be brought to the notice of the Convener at the time of counseling.

PG COURSES
SIR C R REDDY COLLEGE, ELURU
THRICE ACCREDITED AT 'A' LEVEL BY NAAC
Opp TTD Kalyana Mandapam, Near RTC Bus Stand,
Eluru-534007, W.G.Dl. Ph:08812-232137

2019 - 21




NAME : Koppusetti Bhavani
COURSE : M.Sc Organic Chemistry
ROLL NO : 1985933010
F NAME : K. Satyanarayana
CONTACT NO : 9398722984
AADHAR NO : 949211009428

L. Venkateswara Rao
PRINCIPAL

PG COURSES
SIR C R REDDY COLLEGE, ELURU
THRICE ACCREDITED AT 'A' LEVEL BY NAAC
Opp TTD Kalyana Mandapam, Near RTC Bus Stand,
Eluru-534007, W.G.Dl. Ph:08812-232137

2019 - 21



NAME : Goriparthi Thirumala
COURSE : M.Sc Analytical Chemistry
ROLL NO : 1985822014
F NAME : G. Sivaiah
CONTACT NO : 9912196728
AADHAR NO : 412579718714

L. Venkateswara Rao
PRINCIPAL

Photo Gallery



NANNAYA CET PG ENTRANCE COACHING CHEMISTRY

Year: 2018-2019