



Vidya-Amrut Dnyan Pratishtan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist.:- Nashik (423208)
(Affiliated to Savitribai Phule Pune University, Pune)



Criterion-I:

Curricular Aspects

Key Indicator 1.4:

Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website



Vidya-Amrut Dnyan Pratishthan Shirsondi's

Arts, Science & Commerce College, Shirsondi

Shirsondi, Tal. Malegaon, Dist. Nashik 423 208

E-mail : va.srcollege.shirsondi@gmail.com

PRINCIPAL : Dr. Rajendra B. Dhande
(M.Com., M.Phil., Ph.D.)

ID.No. : PU / NS / ACS / 175 / 2018

Date: 23/01/2024

DECLARATION

This is to declare that our college has submitted the Self-Study Report (SSR) for NAAC. After verification of SSR, NAAC raised some queries in Data verification and Validation (DVV) **Metric ID 1.4.1**. The college resolved regarding queries and resubmit the document in DVV.

The information, reports, true copies of the supporting documents, numerical data etc. submitted/presented in the files is verified by Internal Quality Assurance Cell (IQAC) and it is correct as per the record.

This declaration is for the purpose of NAAC accreditation of HEI for The 1st cycle period 2018-19 to 2022-23.

Date: 23/01/2024

Place: Shirsondi



Content

1.4 Feedback System

QnM - 1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

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Feedback Form Committee

Introduction:

The feedback on curriculum and student Satisfaction on infrastructure and function of college collected from stakeholders – students, teachers, alumni and employers by the feedback committee. The feedback was also collected from graduating students in the form of Graduate exit feedback. The feedback reports were submitted to the appropriate bodies for the further action.

Objectives:

The objective of this exercise is to measure the impact of all the efforts of the institutions the various stakeholders. The institution intends to enhance its benefits to reach all the stakeholders. This feedback is collected and analysed through statistical tool and shared with various authorities in the institute and staff members. Based on the opinions of the stakeholders, further action has been taken.

K. Phule
Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
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Feedback Form Committee
Academic year 2018-2019

Sr.No	Name	Designation
1)	Dr. N. B. Khairnar	Chairman
2)	Mr. N. K. Daphal	Convener
3)	Miss. N.J. Bachhav	Member
4)	Miss. D.T. Pawar	Member
5)	Mr. V.S. Pawar	Non-Teaching Member



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi

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Feedback Form Committee
Academic year 2019-2020

Sr. No.	Name	Designation
1)	Dr. N. B. Khairnar	Chairman
2)	Miss. R. P. Ahire	Convener
3)	Miss. N.J. Bachhav	Member
4)	Mr. S. B. Harpade	Member
5)	Mr. N. K. Daphal	Member



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Arts, Science & Commerce College, Shirsondi
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Feedback Form Committee
Academic year 2020-2021

Sr. No	Name	Designation
1.	Dr. R. B. Dhande	Chairman
2.	Mr. S. B. Harpade	Convener
3.	Miss. M.P. Patil	Member
4.	Miss. N. J. Bachhav	Member
5.	Mr. N. B. Ahire	Member



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Arts, Science & Commerce College, Shirsondi
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Feedback Form Committee
Academic year 2021-2022

Sr.No	Name	Designation
1)	Dr. R. B. Dhande	Chairman
2)	Dr. U. J. Tupe	I.Q.A.C Coordinator
3)	Miss. M. P. Patil	Convener
4)	Miss. N. J. Bachhav	Member
5)	Mr. C. D. Pawar	Member



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Feedback Form Committee

Date: 01/03/2019

Notice

All members of the Feedback Form Committee of the college are hereby informed that the First meeting of the committee is scheduled on 06/03/2019 at 11.30 a.m. in the meeting room. All are requested to attend the meeting as per the schedule.

Agenda:

1. Responsibilities of Feedback committee.
2. Frequency of Feedback.
3. Discuss about the preparation of analysis report and action plan.

Sr. No	Name	Designation
1)	Dr. N. B. Khairnar	Chairman
2)	Mr. N. K. Daphal	Convener
3)	Miss. N.J. Bachhav	Member
4)	Miss. D.T. Pawar	Member
5)	Mr. V.S. Pawar	Non-Teaching Member


Chairman

Feedback Form Committee


Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
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Feedback Form Committee

Date: 01/02/2020

Notice

All members of the Feedback Form Committee of the college are hereby informed that the First meeting of the committee is scheduled on **05/02/2020** at 01.00 a.m. in the meeting room. All are requested to attend the meeting as per the schedule.

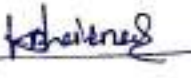
Agenda:

1. Frequency of Feedback.
2. Discuss about the preparation of analysis report and action plan.

Sr. No	Name	Designation
1.	Dr. N. B. Khairnar	Chairman
2.	Miss. R. P. Ahire	Convener
3.	Miss. N.J. Bachhav	Member
4.	Mr. S. B. Harpade	Member
5.	Mr. N. K. Daphal	Member


Chairman

Feedback Form Committee


Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Feedback Form Committee

Date: 05/02/2020

Minutes of Meeting

The first meeting of Feedback Form Committee of the college was held on 05/02/2020 at 01:00 PM in the Meeting Hall. There was discussion regarding different agenda as follows:

Minutes: - It was resolve that:

1. Discussion on previous meeting minutes.
2. Discussion about the preparation of analysis report and action plan.
3. At some level positive suggestion also been sought.

Sr. No	Name	Designation	Sign
1.	Dr. N. B. Khairnar	Chairman	
2.	Miss. R. P. Ahire	Convener	
3.	Miss. N.J. Bachhav	Member	
4.	Mr. S. B. Harpade	Member	
5.	Mr. N. K. Daphal	Member	

Chairman

Feedback Form Committee

Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Science & Commerce College, Shirsondi
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Feedback Form Committee

Date: 02/03/2021

Notice

All members of the Feedback Form Committee of the college are hereby informed that the First meeting of the committee is scheduled on 07/03/2021 at 10.30 a.m. in the meeting room. All are requested to attend the meeting as per the schedule.

Agenda:

1. Discuss on previous meeting minutes.
2. Discuss on Planning of Improvement in competitive exam facility for students and Arranging Parent meets.
3. Discuss about the preparation of analysis report and action plan.

Sr. No	Name	Designation
1.	Dr. R. B. Dhande	Chairman
2.	Mr. S. B. Harpade	Convener
3.	Miss. M.P. Patil	Member
4.	Miss. N. J. Bachhav	Member
5.	Mr. N. B. Ahire	Member


Chairman

Feedback Form Committee


Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Feedback Form Committee

Date: 07/03/2021

Minutes of Meeting

The first meeting of Feedback Form Committee of the college was held on 07/03/2021 at 10:30 PM in the Meeting Hall, Chairman of the committee gave warm welcome to all the members of the committee. There was discussion regarding different agenda as follows:

Minutes: - It was resolve that:

1. Discussion on previous meeting minutes.
2. Discussion on Planning of Improvement in competitive exam facility for students and Arranging Parent meets.
3. Discussion about the preparation of analysis report and action plan.

Sr. No	Name	Designation	Sign
1.	Dr. R. B. Dhande	Chairman	
2.	Mr. S. B. Harpade	Convener	
3.	Miss. M.P. Patil	Member	
4.	Miss. N. J. Bachhav	Member	
5.	Mr. N. B. Ahire	Member	

Chairman

Feedback Form Committee

Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



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Feedback Form Committee

Date: 04/01/2022

Notice

All members of the Feedback Form Committee of the college are hereby informed that the First meeting of the committee is scheduled on 08/01/2022 at 11.30 a.m. in the meeting room. All are requested to attend the meeting as per the schedule.

Agenda:

1. Responsibilities of Feedback committee.
2. Discuss about the students, parents and alumni suggestions who gave by feedback forms.
3. Discuss about the preparation of analysis report and action plan.

Sr. No	Name	Designation
1.	Dr. R. B. Dhande	Chairman
2.	Dr. U. J. Tupe	I.Q.A.C Coordinator
3.	Miss. M. P. Patil	Convener
4.	Miss. N. J. Bachhav	Member
5.	Mr. C. D. Pawar	Member


Chairman

Feedback Form Committee


Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
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Feedback Form Committee

Date: 08/01/2022

Minutes of Meeting

The first meeting of Feedback Form Committee of the college was held on 08/01/2022 at 11:30 PM in the Meeting Hall, Chairman of the committee gave warm welcome to all the members of the committee. There was discussion regarding different agenda as follows:

Minutes: - It was resolve that:

1. Discussion on Planning of Improvement in competitive exam facility for students.
2. Discussion about the preparation of analysis report and action plan.
3. Discuss about the students, parents and alumni suggestions who gave by feedback forms.

Sr. No	Name	Designation	Sign
1.	Dr. R. B. Dhande	Chairman	
2.	Dr. U. J. Tupe	I.Q.A.C Coordinator	
3.	Miss. M. P. Patil	Convener	
4.	Miss. N. J. Bachhav	Member	
5.	Mr. C. D. Pawar	Member	

Chairman

Feedback Form Committee

Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



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Arts, Science & Commerce College, Shirsondi
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Feedback Form Committee

Date: 01/04/2023

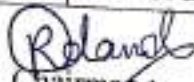
Notice

All members of the Feedback Form Committee of the college are hereby informed that the First meeting of the committee is scheduled on 07/04/2023 at 1.30 a.m. in the meeting room. All are requested to attend the meeting as per the schedule.

Agenda:

1. Responsibilities of Feedback committee.
2. Discuss on College should increase activities like workshops for personality development & communication skills.
3. Discuss about the preparation of analysis report and action plan.

Sr. No	Name	Designation
1.	Dr. R. B. Dhande	Chairman
2.	Dr. U. J. Tupe	I.Q.A.C Coordinator
3.	Miss. M. P. Patil	Convener
4.	Miss. N. J. Bachhav	Member
5.	Mr. C. D. Pawar	Member


Chairman

Feedback Form Committee


Principal


Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Feedback Form Committee

Date: 07/04/2023

Minutes of Meeting

The first meeting of Feedback Form Committee of the college was held on 07/04/2023 at 01:30 PM in the Meeting Hall, Chairman of the committee gave warm welcome to all the members of the committee. There was discussion regarding different agenda as follows:

Minutes: - It was resolve that:

1. Responsibilities of Feedback committee.
2. Discussion about the preparation of analysis report and action plan.
3. Discussion on College should increase activities like workshops for personality development & communication skills.

Sr. No	Name	Designation	Sign
1.	Dr. R. B. Dhande	Chairman	
2.	Dr. U. J. Tupe	I.Q.A.C Coordinator	
3.	Miss. M. P. Patil	Convener	
4.	Miss. N. J. Bachhav	Member	
5.	Mr. C. D. Pawar	Member	

Chairman

Feedback Form Committee

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
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Career Guidance and Competitive Exam Cell Committee

❖ Introduction:

The college has established Career Guidance and Competitive Exam Cell Committee in the academic year 2020-2021. Under this college organizing various guidance lectures .the major aim of this Committee is to provide information as well as guidance to the students of the college regarding the civil services.

❖ Aim:

The Main Aim of the Committee is to create awareness among students about their social and civil responsibilities and Counselling to students for the Civil Examination.

❖ Objectives:

- To Develop Good Administration
- To Prepare and Guide Students For High Level Examination Such as SET, NET, MPSC, UPSC, Banking, so on.
- To assist students in getting study material, books, relevant websites etc
- To arrange guest lectures on various topics by eminent personalities.
- To impart knowledge about various current affairs useful for exam preparation.



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Career Guidance and Competitive Exam Cell Committee
Academic year 2023-2024

Sr.No	Name	Designation
6)	Dr.R.B.Dhande	Chairman
7)	Dr. U.J.Tupe	I.Q.A.C Coordinator
8)	Miss. R.S.Deore	Convener
9)	Miss. D.T.Pawar	Member
10)	Mr. S.M. Pawar	Member
11)	Mr. V.S. Pawar	Non-Teaching Member



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Career Guidance and Competitive Exam Cell Committee
Academic year 2022- 2023

Sr.No	Name	Designation
6)	Dr.R.B.Dhande	Chairman
7)	Dr. U.J.Tupe	I.Q.A.C Coordinator
8)	Miss. M.P. Patil	Convener
9)	Miss. D.T.Pawar	Member
10)	Mr. G. S .Nikam	Member
11)	Mr. V.S. Pawar	Non-Teaching Member



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Career Guidance and Competitive Exam Cell Committee
Academic year 2021-2022

Sr.No	Name	Designation
1.	Dr.R.B.Dhande	Chairman
2.	Dr. U.J.Tupe	I.Q.A.C Coordinator
3.	Miss. M.P. Patil	Convener
4.	Miss. N. J. Bachhav	Member
5.	Mr. V.S. Pawar	Non-Teaching Member



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Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
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Career Guidance and Competitive Exam Cell Committee
Academic year 2020-2021

Sr.No	Name	Designation
1)	Dr.R.B.Dhande	Chairman
2)	Miss.M.P.Patil	Convener
3)	Miss. N .J .Bachhav	Member
4)	Mr. V.S. Pawar	Non-Teaching Member



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
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Date: 10/02/2022

Notice

All Students of the college hereby inform you that the competitive cell and Student development Cell our college is organized one day seminar on "**Carrier Opportunities in Competitive Exam**" on

Date 15/02/2022 Tuesday from 10:00 am to 11:00am. The resource person of the seminar Mr Aanand Ahire, Ahire academy, Ashokstambh Nasik. The Student Kindly attend the seminar.


Placement Cell


Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



THE AHIRE'S ACADEMY NASHIK

UPSC/MPSC/NET/SET/POLICE/ARMY

Director: Dr. Anand Ahire.

Address: Ahire Career Academy Ashok Stambh.

Contact details- 7387386492

RESUME

Name: **Dr. Anand Ahire**

Mobile No: 7387386492

E-mail: Anandahire88@gmail.com

Sr No	Course	University / Board	Passing Year
1.	SSC	Maharashtra State Board	2003
2.	HSC	Maharashtra State Board	2005
3.	B.A. (Marathi)	Savitribai Phule Pune University	2008
4.	M.A. (Marathi)	Mumbai	2010
5.	B.Ed. (Marathi)	Mumbai	2011
6.	NET/SET (Jrf)	UGC Delhi	2013
7.	PHD.	Mumbai University	2016
8.	D.Litt.	America	2017
9	D.Litt.	Nepal	2023

Personal Profile:-

- Name** – Dr. Anand Ahire
Date of Birth - 05 July 1988
Gender - Male
Mother Tongue - Marathi
Marital Status - Married
Language Known - Marathi, Hindi & English
Hobbies - Playing, Cricket, Reading, Music Listening
Dream - Become one of the best professor and motivational speaker
Address - 1001 B wing Belissimo Roongta, Beside Bali Mandir, Nashik
Other activities - **President: Akhil Bharti Marathi Sahitya Sammelan North Maharashtra**

Declaration:-

I hereby declare that the above written particulars are true to the best of my knowledge and brief.

Place :- Nashik

Date :-



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Date: 15/02/2022

Report on

“Carrier Opportunities in Competitive Exam”

Vidya-Amrut Dnyan Pratishthan's Arts, Science, and Commerce College, Shirsondi, Tal:- Malegaon, Dist:-Nasik. The competitive cell organized a special lecture on “carrier opportunities in competitive exam” on 15/02/2022 between 10:00am to 11:00am Mr. Aanad Ahire owner of Ahire Academy, Ashokstambh, Nasik was resource person for the seminar.

The program was hosted by Miss. Jagruti Pawar and an introduction of the resource person is given by lecturer of Miss. Dipali Pawar Mr. Aanad Ahire, Aanad academy .who consult the students on various aspects of effective resource management ,including Expectations, time, and selection of career goals. They provide valuable insight regarding various competitive examination. He also explain the opportunities in competitive exam and also provided information about related books to be referred for such examination He assured all the students to guide in future also if need The honorable Principal of our college, **Dr.R.B.Dhande** motivated the students to dreams big and to invest 100% of their time and effort to convert their dreams into goals .The seminar is organized by the convener of competitive exam cell Miss. Mohini Patil. The vote of thanks delivered by Mrs. Nilakshi Bacchav, lecturer of geography Department.

After end of program, he also addressed all the queries of students .the program has been attended by a total 100+ participants including teachers ,students and others and they have actively participant in it. overall program is very effective and knowledgeable.



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Arts, Science & Commerce College, Shirsondi
Tal: - Malegaon, Dist: - Nashik 423208.
(Affiliated to Savitribai Phule Pune University, Pune)



Date: 08/09/2022

Notice

All Students of the college hereby inform you that the competitive cell and Students development Cell of our college is organized one day seminar on "Strategy to Success in Competitive Exam" On Date 12/09/2022, Monday from 11:00 AM to 12:00 AM. The Resource Person of the seminar is **Mr. Parag Desale**, The Infinity Academy, Nasik. All Students kindly attend the seminar.


Placement Cell


Principal

Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik



Vidya-Amrut Dnyan Pratishthan's
**Arts, Science & Commerce College,
Shirsondi**



Tal: - Malegaon, Dist: - Nashik 423208
*(Affiliated to Savitribai Phule Pune University,
Pune)*

Date: 12/09/2022

Report on
**“Strategy to Success in Competitive
Exam”**

Vidya-Amrut Dnyan Pratishthan's Arts, Science, and Commerce College, Shirsondi Tal- Malegaon, Dist.: -Nasik. The competitive exam cell organized a special lecture on “Strategy to Success in Competitive Exam.” on 12/09/2022 between 11:00am to 12:00 am Mr.Parag Desale, of infinity Academy, Nashik was resource person for the Seminar.

The program was hosted by **Mrs.Nilakshi Bachhav** lecturer of geography and an introduction of the resource person is given by **Miss.Dipali Pawar**. Mrs. Desale elaborated on strategy to success in competitive exam using numerous example IAS Officer.as well as addressing the opportunities in competitive exam. Sir told that hard work and dedication are keys to crack all type of competitive exam,you can achieve success with proper planning. Sir explain in detail strategy to success and also give tips for preparation like time management, work on weak area, stay updated with current affairs etc. The honorable principal of our college **Dr.R.B.Dhande** guide to students about exam and also told information about related book .The IQAC Coordinator and vice principal **Dr.U.J.Tupe** motivated to student to competitive and other exams. Dr.R.B.Dhande give special guidance to success of program. The Program is organized by the convener of Competitive Exam Cell Miss. Mohini Patil. The vote of thanks deliver by **Mr.Chetan Pawar**, Lecture of chemistry Department.

Overall, program is quite good and informative for students. Expert lecture helped to get acquaintedwith syllabus, eligibility and other criteria's for competitive examination. The program attended by total80+ participant including teacher, students and other staff.

RESUME

Name : Desale Parag Arun [BE(Computer)]

Mobile No:744788 9001/9404952075

E-mail: parag.desale6@gmail.com

Objective :

Seeking to achieve a responsible position in a reputed Organization where I could apply all my knowledge with available resources and can be part in the growth of the Organization.

Academic Qualifications :

Qualification	Board/University	Year of Passing	Percentage (%)
BE. Computer	N.M.U,Jalgaon	July 2009	60 %
H.S.C.	Nashik	Feb-2004	64.67 %
S.S.C.	Nashik	March-2002	67.33 %

Experience :

- Experience of **14** years in Competitive Exam (ASTITVA ACADEMY., MOTIVATIONAL ACADEMY Nashik ,VIDARBH IAS ACADEMY ,AMRAVATI).
- Teaching Experience **10** years.
- 4 Times Qualified for UPSC Main
5 Times Qualified for MPSC Main

Subject Speciality

- 1) History
- 2) Current Affairs
- 3) Political Science
- 4) CAST Environment
- 5) Environment

Other Subject:-

- 1) Economics
- 2) Science
- 3) Science and Technologies

Strong Points :

- ✓ Team Player with excellent relationship management.
- ✓ I can motivate myself as well as team members.
- ✓ Willingness to learn.
- ✓ Hard work is my passion and I can sincerely put myself into the assignments given to me.

Hobbies:

- Reading, Walking / Running, Playing Cricket

Personal Profile :

s

Name : Desale Parag Arun
Father's name : Desale Arun Bajiravo
Date of Birth : 24-09-1985
Gender : Male
Mother-Tongue : Marathi
Marital Status : Married
Languages Known : English, Marathi and Hindi
Address : [N-41-VB-12-12 Near Gargi College Savata
Nagar,Cidco,Nashik Pin code-422008]

Declaration:

I hereby declare that the above written particulars are true to the best of my knowledge and brief.

Place: Nashik

Date:

Guest Lecture Report: “Handwriting Skills”

[Skill development]

Date: [14/03/2022]

Venue:

Organized by: [VADP's Art Science and Commerce College Shirsondi]

Introduction: The guest lecture on the topic of “How to Improve Best Handwriting” by Miss ‘Dhanashri Pawar’ was conducted with great enthusiasm and engagement. The lecture aimed to provide valuable insights and practical tips on enhancing handwriting skills.

Speaker Profile: Ms. Dhanashri Pawar, an accomplished calligrapher and handwriting expert, brought a wealth of knowledge and experience to the session. Also She was completed her education in Masters of Chemical Science. Her passion for the subject was evident, creating an engaging and interactive environment for the attendees.

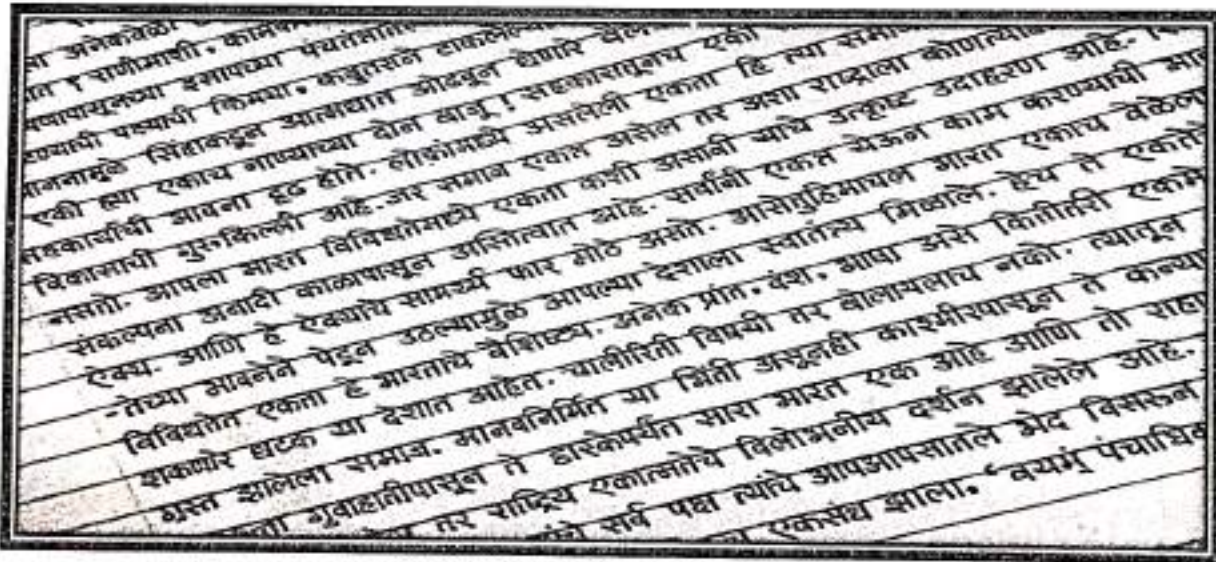
Key Points Covered:

1. **Understanding the Basics:** Miss Pawar began by emphasizing the importance of understanding the basic principles of handwriting, such as letter formation, spacing, and consistency. She highlighted that a strong foundation is essential for any handwriting improvement journey.
2. **Posture and Grip:** The speaker demonstrated the correct posture and grip for effective handwriting. Attendees were encouraged to adopt a comfortable and relaxed posture, ensuring that the hand and arm movements are free and unhindered.
3. **Practice Techniques:** Various practical exercises and techniques were introduced to help participants practice and refine their handwriting. Miss Pawar emphasized the significance of regular practice, dedicating time each day to develop muscle memory and improve overall writing fluency.

4. **Mindful Writing:** Mindfulness in writing was a key theme throughout the lecture. Miss Pawar discussed how being mindful of each stroke and paying attention to details can significantly contribute to the improvement of handwriting.
5. **Personalized Strategies:** The speaker highlighted the importance of recognizing individual challenges and tailoring strategies accordingly. Participants were encouraged to identify specific areas of improvement and focus on those aspects during their practice sessions.
6. **Utilizing Technology:** Miss Pawar also discussed how technology can be leveraged to aid handwriting improvement. She recommended various apps and tools designed to enhance writing skills and track progress.

Interactive Session: The lecture included a highly interactive Q&A session where participants had the opportunity to seek personalized advice and clarification on specific handwriting concerns. Miss Pawar responses were insightful, fostering a collaborative learning environment.

Conclusion: In conclusion, Ms. Dhanashri Pawar guest lecture on improving handwriting skills was both informative and inspiring. Attendees left with practical tips, a deeper understanding of the art of handwriting, and a renewed motivation to enhance their writing abilities. The event was a success, and the participants expressed gratitude for the valuable insights provided by the esteemed guest speaker.



Daily practice routine photos shred by Miss Dhanashri with students to improve them:

नवे शैक्षणिक घोरण आणि समाज

'शैक्षणिक घोरण' हा खरे तर प्राचीन काळापासून कायमच समाजाच्या चर्चेत असलेला विषय. बदलत्या काळानुसार शिक्षणाने स्वरूप बदलत राहिले. गेली अनेक वर्षे सध्याच्या शिक्षण पद्धतीत बदल होण्यासाठी काही नवे बदल आवश्यक असल्याची भरन बोलुन दाखवली जात होती. त्यानंतर अवघ्या चौतिस वर्षांनंतर राष्ट्रीयत्व आणि विद्वत्त्ववाद यांची सांगड घातणाऱ्या मोदी सरकारद्वारे नवे शैक्षणिक घोरण जाहीर करण्यात येत आहे. या घोरणाबद्दल चर्चा आणि टिकाही सुरू झाल्या आहेत. त्यानुसार घोरण चर्चेची अयोध्य याची नतांतरे लक्षात घेणे आवश्यक आहे.

शिक्षणक्षेत्रातून अनेक आव्हाने आहेत. हे घोरण या आव्हानांच्या कसोटीवर उतरले सिद्ध व्हावे या उद्देशाने त्याची रचना करण्याचा प्रयत्न करण्यात आला आहे. यात अनेक मोठे बदल करण्यात आलेले आहेत. पाचवीपर्यंत मातृभाषेतून शिक्षण सक्तीचे करण्यावर भर द्यायला लागणारे हे घोरण राठाविषासुन विज्ञान विषय इंग्रजीतून करून 'मातृभाषेतून शिक्षणाचा' अजेंडा का निरवते हे हे कळत नाही. त्याचबरोबर मातृभाषेतून शिक्षण सांगणारे परंतु इंग्रजीला पाठबळ देणारे नवे शैक्षणिक घोरण इंग्रजी माध्यमांच्या खासगी शाळांच्या बाबतीत कोणती मुमिका ठेवणार हे घोरणात स्पष्ट झालेले नाही. यांना त्या पुरोधांसाठी असा को. बोर्ड परिशांचे महत्व कमी करून विद्यार्थ्यांना तणावमुक्त ठेवण्यासाठी लागलेले नवे घोरण विद्यार्थ्यांना जीवणातील तणाव आणि संघर्ष पचवणे कसे शिकवेल हे याबाबत शंका आहे. प्राथमिक, माध्यमिक, उच्च स्तरावरिल शाळांच्या खासगीकरणबद्दल हे घोरण कोणतीही मुमिका दाखवत नाही, मगजेय अस्पष्टपणे हे घोरण खासगीकरणाला पाठबळ देणारे आहे. असा समज होत आहे. ऑनलाईन शिक्षणावर भर देणारे घोरण ग्रामीण आणि सर्वसामान्य विद्यार्थी जीवनाचा विचार न करण्याची उदासिनता दाखवते. भारतासारख्या कृषीसंपन्न देशात कृषी शिक्षणाची निवडक फेरफार करून ओळवण केली गेली ही बाब दुर्लक्षित करून चालणार नाही. घोरणातील अनेक अस्पष्ट बाबीमुळे नुसते कल्पनांचे किल्ले बांधून चालणार नाही. तर कायदाची तटबंदीसुद्धा बांधावी लागेल. अन्यथा यावर आणखी नवी संस्था जन्माला येत नसेल. इतका या घोरणात वाव आहे.

या घोरणाबद्दलचा सामक्या अजेंडा बाबुला ठेवून त्याकडे केवळ शैक्षणिक चर्चेपासून पाहिले जावे आणि समाजहिताची अपेक्षा ठेवून तात्त्विक टिका करण्याचे विचार हे समाजातील प्रत्येक व्यक्तीने मांडले पाहिजेत. तसेच मांडले गेलेले तर्कसुद्ध विचार आणि यद्वागणती लेखही विचारात घेण्याची लवचिकता शासनाचे दाखवणे गरजेचे आहे. कारण कोणतेही घोरण हे कामदावर आदर्श असते. परंतु खरे यशा मात्र त्याच्या अंमलबजावणीतून अविचार होण्यापासून परिणामावर अवलंबून असते हेही तितकेच खरे !

स्वातंत्र्याच्या ७५ व्या वर्षानंतर स्वराज्याचा अर्थ

“ केवळ इतिहासात रमणे हा मानवी घात आहे.
इतिहासाचे जतन, संवर्धन आणि संगोपण हे
अमृत मानवी समाजाचे लक्षण आहे.
तर इतिहासाच्या अभ्यास करून, त्याची वर्तमानाशी
सांगड घालत जिद्द आणि कठोर परिश्रमाच्या
बळावर उतम भविष्यकाल घडवणे, हे नवंमेरी
प्रतिभेच्या सुशिक्षित आणि सुसंस्कृत मानवी
समाजाचे प्रेरणादायी लक्षण आहे.”

“स्वराज्य हा माझा जन्मसिद्ध अधिकार आहे, आणि तो मी मिळवणारच.” या
दिडरो वर्षांपूर्वी इतिहासात लुप्त झालेल्या ओळी. स्वराज्याची मागणी लोकांपर्यंत सातत्याने
व हट्टाने पोहचविण्याचे काम टिळकाशिवाय दुसऱ्या कोणत्याही व्यक्तीने सातत्याने केले नाही.
आज स्वातंत्र्याच्या अमृत महोत्सवानंतर टिळकांनी सांगितलेले आणि मागितलेले स्वराज्य
आणि आज आपल्या पदरी आलेले स्वराज्य यात कमालीची विवेचना आहे. अमृत महोत्सवा-
च्या मंगल उत्सवानंतर आज स्वराज्य कुठे दिशत नाही कारण आताची पिढी कॉन्व्हेंट मध्ये
जाऊन शिदाण घ्यायला लागली. सेमी इंग्लिश किंवा पुर्णपणे इंग्रजी माध्यमाच्या शाळा काढून
परकीय समाज आणि संस्कृतीचा ठसा बालननावर पडतोय. राध्याची येथील विद्यापीठे ज्ञान
निर्मितीची केंद्रे नसून केवळ ज्ञान हस्तांतराची साधने झाली आहेत. आज आपण अनोख्या आ-
र्थिक संकटातून परिभ्रमण करत आहोत. गरजेच्या वापरातील वस्तु विदेशी मोल्सा मधून
घेत आहोत. जात, धर्म, पंथ, भाषा, प्रात ही वाटाची कारणे आज आपण तयार केली.
स्निगाकडे पाहण्याचा दृष्टिकोन, पैसा आणि संपत्ती भाबडरुचे समाजाचे विचार, ही सर्व
परिस्थिती पाहता आपण राम राज्याच्या अथवा स्वराज्याच्या दिशेने जाण्यासाठी यथित
भ्रूषणावह नाही. महापुरुषांचे कार्यक्रम सांगते करून नाघत बसण्याची ही विधित परंपरा
आपण खंडीत करायला इवी. कारण आज नाचणाऱ्या नाही तर वाचणाऱ्या समाजाची गरज आहे.

Resource person Details

Name of Resource Person:- Miss. Dhanashri

S. PawarContact No.:- 9579425526

Email Id: - dhanashrip182@gmail.com



Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi.
Tal: - Malegaon, Dist: - Nashik 423208.



Date: 20/04/2023

Department of Chemistry

Organizing


CHEMIAD-2023 Competition

For F.Y./S.Y/T.Y. B.Sc. Students

Notice

This is inform to all F.Y./S.Y./T.Y./B.Sc students that the Department of chemistry of college organize "CHEMIAD -2023 competition examination" on Wednesday 26/04/2023 at 12:30 pm at the department of chemistry. All Students kindly enroll their name.

Contact: - Mr.M.D. Borse - 7387442477


Head of Department
Head
Dept. of Chemistry
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon (Nashik)


Principal
Principal
Arts, Science & Commerce College
Shirsondi, Tal. Malegaon Dist. Nashik

Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi.
Tal: - Malegaon, Dist: - Nashik- 423208.
DEPARTMENT OF CHEMISTRY
CHEMIAD EXAM

Date- 16/04/2023

Class - F.Y.B.Sc

ATTENDANCE REPORT

Sr.No.	Name of Candidate	Sign
	Nikam Komal dhasmaraj	<u>Nikam</u>
	Mulwar Namrata Balu	<u>Mulwar</u>
	Salunke swati Raghunath	<u>Salunke</u>
	Borse sanjana Jayvant	<u>S. J. Borse</u>
	Ahize Jyva sahebrao	<u>Ahize</u>
	Borse Kalyani karabharai	<u>Karabharai</u>
	Borse Dipali uttam	<u>Borse</u>
	Lokhande Ashvini samadhan	<u>Lokhande</u>
	Deore Dhanashri Sanjay	<u>Deore</u>
	Pawar Shital Santosh	<u>Pawar</u>
	Nikam Rutuja Jibhau	<u>Nikam</u>
	Kangane Komal Ashok	<u>Kangane</u>
	Pratiksha Mahesh Jadhav	<u>Pratiksha</u>
	Kale Pallavi Sanjay	<u>Kale</u>
	Shewak Sushant Jitesh	<u>Shewak</u>
	Bachhav Gaurav Bapu	<u>Bachhav</u>
	Mayur Ravindra Bachhav	<u>Mayur</u>
	Rohit Vinod Bachhav	<u>Bachhav</u>
	Khomane Mayuri Pravin	<u>Khomane</u>
	Kawari Anshika Mulidhar	<u>Kawari</u>
	pande Gauri Dipak	<u>Pande</u>
	Jadhav Kavita Bherraj	<u>Jadhav</u>
	Kadnor Kirti Vishnu	<u>Kadnor</u>
	Suryawanshi Krishna Dilip	<u>Suryawanshi</u>
	Sanawane Kunal Ravindra	<u>Sanawane</u>
	Bachhav Sameer Pankaj	<u>Bachhav</u>
	Bhutnar Hanibhav Shantaram	<u>Bhutnar</u>
	Bachhav Santhak Kishor	<u>Bachhav</u>
	Umale Pradip Sukhdev	<u>Umale</u>

Bhabad om Shankar	Shankar
Gorse Sunil Arav Aron	Gorse
Chavhan Gourav Pofat	Chavhan
Wagh Darshan Subhash	Wagh
Waghrao Arav Parresh	Waghrao
Areg Nitin Peshkosh	Areg
Jadhav Mahesh Kailas	Jadhav
chavhan darshan dyayeshwar	chavhan
Jadhav mahesh kailas	Jadhav
more Manoj Govind	more
Pawas Ruklikesh Devidas	Pawas
Wagh Gorkh Pofat	Wagh
Tambe Digambar Pandit	Tambe
Euryawarshi Nishant Arav	Euryawarshi
Jayprakash Kamali Borse	Jayprakash
Pathan Shahbaz zakir	Pathan
Bachhav Vaishnavi Parmod	Bachhav
Jadhav Shunakar Balu	Jadhav
Ughade Sapana Santosh	Ughade
Bachhav Anuraj Bhagat	Bachhav
Ahirkar kavita manohar	Ahirkar
Savant Ieshwari shantaram	Savant
Gangurde Nikita chintaman	Gangurde
Pawar Pesham Kakasaheb Pawar	Pawar
Pawar Yamini Rajendra	Pawar
Salanakar vaishnavi Laxman	Salanakar

Vidya-Amrut Dnyan Pratishthan's
Arts, Science & Commerce College, Shirsondi.
Tal: - Malegaon, Dist: - Nashik- 423208.
DEPARTMENT OF CHEMISTRY
CHEMIAD EXAM

Date- 26/04/2023

Class: - S.Y.B.Sc

ATTENDANCE REPORT

Sr.No.	Name of Candidate	Sign
1)	Nikam Dipali Arun	
2)	Pawar Pratiksha Anjan	
3)	Pawar Kavaji Bhausaheb	
4)	Waghchoure Asha Shashikant	
5)	Salunke Aditee Prakash	
6)	Khoirnar Dipali Gorakh	
7)	Abire Farina Bhausaheb	
8)	Deore Kalyani Prabhakar	K.P. Deore
9)	Sagar Anil Vilas	
10)	Yamgar Pratiksha Shiram	
11)	Thorse Nikita Pratap	
12)	Shewale Bhagyashree Vijay	
13)	Kale Mohini Samadhan	
14)	Pawar Pawar Anjali Khandu	
15)	Deore Rohit Khemraj	
16)	Deore Kunal Anil	
29)	Pagde Mahesh Shirish	
30)	Shinde Rahul Talshiram	
31)	Pawar Rupesh Ramdas	
32)	Dharmare Abhij Rajendra	
33)	Kumlesh Shivaji Pagde	
34)	Yogesh Karbhari - Shewale	
35)	Mahesh Babu Suryurashi	
36)	Yash Dipak Sonawane	
24)	Vadhbhai Sanjay Nagesh	
32)	Pawar Nikita Ravindra	
89)	Lokhande Komal Samadhan	
99)	Dukate Sopan Ramesh	
	Pawar Prajyoti Bhaat	

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Tal: - Malegaon, Dist: - Nashik- 423208.
DEPARTMENT OF CHEMISTRY
CHEMIAD EXAM

Date- 26/04/23

Class: - T.T. BSC

ATTENDANCE REPORT

Sr.No.	Name of Candidate	Sign
	Jayashri Suresh Sawant	Jayashri
6	Ahire Ashwini Papat	Ahire
	Pawar Kalyan Shreeram	KSPM
	Pawar Komal Namdev	Komal
	Vetal Vishnvi Bhausaheb	Vetal
	Pawar Pooja Rajendra	Pooja
	Khairnar Rohini Vishnu	Rohini
	Bachhav Vaibhav Vinod	Vaibhav
	Bachhav Nishant Bapu	Nishant
	Rathi Vaibhav	Rathi
	Ramgare Roshan	Ramgare
	Deore Doshan Dipak	Doshan
	Pawar Pawan Himmat	Pawar
	Nikam Pushpak Chantaram	Nikam
	Deore Doshan Dinkar	Doshan
	Bhujale Mayar Rajendra	Bhujale
	Ishwar Sahabrao Jadhav	Ishwar
	Bachhav Shubham Vishnu	Bachhav
	Deore Mahesh Prakash	Deore
	Pawar Abhishek Suresh	Pawar
	Nikam Abhijeet Bhosad	Nikam
	Magare Suyash Ramkrishna	Suyash
	Siddhesh V. Bagul	Siddhesh
	Nemnar Uddhar Anna	Nemnar
	Borse Vaibhav Sahurao	Borse
	Nikam Ganesh Rajesh	Nikam
	Gorkwad Rohit Dadoji	Gorkwad
	Borse Avinash Ramesh	Borse
	Pawar Datta Babaji	Pawar



NAME: ATSHWARYA SUNTI

MANDALIADE
MANDALIADE

COLLEGE: A. S. C. COLLEGE

SHIRSONDI.

CLASS: F.Y. Bsc.

ROLL NO: 40

PROJECT NAME: CHEMICAL

ENERGETICS

[2020-21]

CHEMICAL ENERGETICS

-
- short & long Answer questions.

Q.1 Explain the (a) Isolated (b) Closed system (c) Open system.

a) Isolated system :-

⇒ The system which does not allow either mass or energy from system to surroundings & vice versa. e.g.:- Medicine capsule of thermos Flask.

B) Closed system :-

The system as the one which no transfer of matter to or from the surrounding is possible but only energy can. eg the water taken in a beaker but now is closed by a cover & energy in the form of heat is supplied. Thus water, i.e. mass cannot be transferred from system of surrounding & vice versa.

c) open system :-

A system which can exchange both matter & energy with its surroundings is said to be

open system. For example:- If we take water in a beaker we can supply heat to it, thus we can exchange both heat & energy in the form of heat & matter i.e. water from system to surrounding & vice versa.

Q.2 Define:

a) Extensive property b) Intensive property.

a) Extensive property :-

It is defined as the property of a system is any property whose magnitude depends on the amount of substance present. e.g:- of such properties are total mass, volume & energy.

b) Intensive property :-

It is defined as the property of a system. whose value is independent of the total amount but depends instead on of intensive properties are pressure on of intensive properties are pressure, density, refractive index, & mass, volume or energy per mole.

Q.4 Distinguish between reversible process & irreversible process.

Reversible process	Irreversible process.
<ul style="list-style-type: none"> • It is a slow process which goes through various & smaller stages which maintains equilibrium between the system & the surroundings. • processes can take place either in forward direction or in backward direction. • process proceeds in smaller steps because the driving force is small. • Work done in a reversible process is greater than the work done in a irreversible process. • A reversible process can be brought back to 	<ul style="list-style-type: none"> • It is a comparatively fast process here no equilibrium is maintained between the surroundings. • processes can take place only in one direction. • process proceeds in larger steps in comparison with reversible process because there is definite driving force required for the progress of the process. • Work done in an irreversible process is always lower than the work done in an irreversible process. • An irreversible process cannot be brought

the initial state without making any change in the surroundings.

back to its initial states without making a change in making a change in the surroundings.

Q4) What is phase? Discuss homogeneous & heterogeneous system.

⇒ phase:- phase is defined as homogeneous, physically distinct, & mechanically separable portion of a system.

1) homogeneous phase:-

When a system contains only one phase is called homogeneous system.

For Example:- a pure liquid, a pure solid or gas, mixture of gaseous, & a true solution of solid in a liquid.

2) heterogeneous phase:-

In a system more than one single phase may be present. For example, ice in contact with water & water in contact with water in contact with vapour. ice, water & vapour constitute separated phases.

Q5) Writes notes on.

1) Isothermal process.

→ A process in which the temperature of the system remains constant at each step of the process is called an isothermal process.

2) Adiabatic process :-

→ A process in which no heat is absorbed or evolved by the system during any step (but there is a rise or fall in temperature) of the process is called an adiabatic process.

3) c) cyclic process :-

→ It is a process in which a system undergoes a series of changes + returns to its initial state. In this process, the change in internal energy, $\Delta E = 0$ & the change in enthalpy, $\Delta H = 0$.

4) Isobaric process :-

→ A process in which the pressure of the system remains constant during each step of the process is called an isobaric process. It means that the process is carried out at a constant pressure ($\Delta P = 0$).

Q.5) Isochoric process :-

→ A process in which the Volume of the system remains constant during each step of the process is called an Isochoric process. It means that the process is carried out at constant Volume ($\Delta V = 0$).

Q.6 Give limitations of First law of thermodynamics

- ⇒
- 1) When a quantity of one form of energy disappears, an equivalent quantity of energy in another form appears.
 - 2) Energy can neither be created nor be destroyed. It may be converted from one form to another.
 - 3) The energy of universe is constant.
 - 4) It is not possible for any machine to produce work without consuming energy.
 - 5) Total amount of energy of a system & surroundings always remains constant even if energies are of different forms.
 - 6) The energy of an isolated system is constant.
 - 7) It is highly impossible to construct a perpetual machine which produces work without consuming energy.
 - 8) The energy of the universe is constant.

Q.7 Write a note on bond energy.

→ Formation of a molecule takes place by combining two atoms of same element or different elements, i.e. H_2, Cl_2, O_2, HCl, HF , etc. polyatomic molecule is formed from combining atoms of two or more element. For simple diatomic molecule like H_2 the energy required to break a bond ($H-H$) is called the bond energy.

Q.8 Derive Kirchhoff's equation.

→ Consider a chemical reaction
consider reaction carry out constⁿ pressure
the of reaction at temp $T_1 = \Delta H_1$

the heat reaction $T_2 = \Delta H_2$

path I = reactant A get convert to be at same temp T_1 , then B heated to temp T_2
at first stage $A \rightarrow B$ at constⁿ at temp T_1
heat change ΔH_1 — (1)

at second stage $B \rightarrow B$ — (∵ from Temp $T_1 \rightarrow T_2$)

We know

$$C_p = \left(\frac{dH}{dT} \right)_p$$

integrated eqn

$$\int dH = \int_{T_1}^{T_2} c_p dT$$

$$= c_p [T]_{T_1}^{T_2}$$

$$= c_p (T_2 - T_1)$$

$$\therefore H (c_p)_B (T_2 - T_1) \text{ ————— } \textcircled{B}$$

$\therefore (c_p)_B = \text{Heat capacity product } \textcircled{B}$

\therefore Total enthalpy change reactn by path I

$$\Delta H_1 + c_p B (T_2 - T_1) \text{ ————— } \textcircled{C}$$

Path second (II)

Reaction is first heated to temp T_2 then converted to product B at T_2

at first stage $A \rightarrow A$ form $(T_1 - T_2)$ Heat absorbed during reaction.

$$= (c_p)_A (T_2 - T_1) \text{ ————— } \textcircled{D}$$

$\therefore (c_p)_A = \text{heat capacity of reactn } A$
at second stage

$$\text{enthalpy of reaction} = \Delta H_2 \text{ ————— } \textcircled{E}$$

Total entropy reaction by Path II.

$$\Delta H_2 + (c_p)_A (T_2 - T_1) \text{ --- (F)}$$

According to law conservation initial & final stage of reaction is same where go by path I & II.

∴ Total entropy change path I & by path II

$$\Delta H_1 + (c_p)_B (T_2 - T_1) = \Delta H_2 + (c_p)_A (T_2 - T_1)$$

rearrange eqn

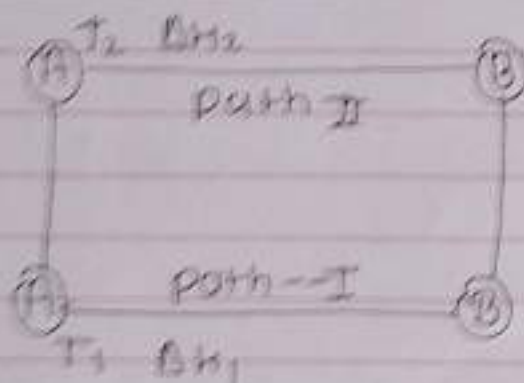
$$(c_p)_B (T_2 - T_1) - (c_p)_A (T_2 - T_1) = \Delta H_2 - \Delta H_1$$

$$(c_p)_B - (c_p)_A = (T_2 - T_1) = \Delta H_2 - \Delta H_1$$

$$\boxed{(c_p)_B = (c_p)_A = c_p}$$

$$\therefore \Delta c_p = (T_2 - T_1) = \Delta H_2 - \Delta H_1$$

$$\boxed{\Delta c_p = \frac{H_2 - H_1}{T_2 - T_1}}$$



Q.9 state & explain third law of thermodynamic

⇒ The entropy of perfectly crystalline solid may taken as zero temp

$$ds = \frac{dq}{T} \quad \text{--- (1)}$$

rearrange eqn But $C_p = \frac{dq}{dT} \therefore dq = C_p \cdot dT$

$$ds = C_p \frac{dT}{T} \quad \text{--- (2)}$$

$$\int_{s=s_0}^{s=s} ds = \int_{T=T_0}^T C_p \frac{dT}{T}$$

According to 3rd law

put $s_0 = 0$

$$sT = \int_0^T C_p \frac{dT}{T}$$

$$sT = C_p \ln T \\ = C_p 2.303 \log_{10} T$$

When heat capacity can not be measured with accuracy below temp of 150 K.

The curve extra patterned to get value of 0 Kelvin betn range of 0 to 15K

the heat capacity often by
Debye T^3

$$\therefore c_p = dT^3$$

where a constⁿ for each substⁿ

\therefore the value of c_p at T

$$\therefore a = \frac{c_p}{T^3}$$

integrated eqⁿ & split up

$$\therefore \Delta S = \int_0^{T_1} c_p \frac{dT}{T} + \int_{T_1}^T c_p \frac{dT}{T}$$

$$\text{rearranged eqn } \int_0^T \frac{c_p}{T} dT = (T_1 - T) c_p$$

$c_p \ln T$ this eqⁿ third law

Good