

**SNJB (Jain Gurukul's)**  
**K.K.H. Abad Arts, S.M.G. Lodha Commerce & S.P.H. Jain Science College**  
**Neminagar, Chandwad-423101, Dist.-Nashik, Maharashtra.**



Establishment  
27/11/1928

(Affiliated to Savitribai Phule Pune University) Id. No.PU/NS/AC/015/1970

(02556) Off. 252125 Res.252126 Tel. Fax:02556-252125

• P. O. Box No.: 6 • E-mail : [alccchandwad@yahoo.co.in](mailto:alccchandwad@yahoo.co.in)

• Website : [www.acschandwadcollege.com](http://www.acschandwadcollege.com)

**Best College Award by Savitribai Phule Pune University (2015-16)**

**1.1.2:**

Name of Course: **Certificate Course in Chemical and Pharmaceutical Analysis**  
(2017-18 & 2018-19)

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*S. N. J. B's*  
***K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.***  
***SCIENCE COLLEGE.***  
***CHANDWAD (NASHIK)***

***Department of Chemistry***

***Certificate Course in Chemical and Pharmaceutical***  
***Analysis***

***Academic Year 2017-18***

Date: 26 /04/2017

To:

IQAC Co-Ordinator ,

SNJB's KKHA Arts, SMGL Commerce, SPHJ Science College, Chandwad.

Subject: About permission to start Certificate Course in Chemical and Pharmaceutical Analysis

Dear Sir,

Department of Chemistry has designed new Certificate Course in Chemical and Pharmaceutical Analysis. This course will provide both theoretical and practical knowledge to the students. The total course intake capacity will be fifteen students. The duration of this course will be 10 days (60 hrs) This will be our first batch and we have decided to start this course from 19/06/2017. Please grant me the permission for the same.



Dr. Valmik S. Aware

Co-Ordinator, Certificate Course

Thank You



Dr. Arvind M. Patil

HOD, Dept. of Chemistry



PRINCIPAL

K.K.H.A. Arts SMGL Comm. & SPHJ  
Science (Senior) & S.P.D.S. Arts,  
Comm. Science (Junior) College,  
Chandwad, Dist. Nashik - 423 101

Date: 26 /04/2017

To:

Principal,

SNJB's KKHA Arts, SMGL Commerce, SPHJ Science College, Chandwad.

Subject: About permission to start Certificate Course in Chemical and Pharmaceutical Analysis

Dear Sir,

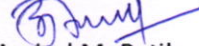
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Dr. Valmik S. Aware

Co-Ordinator, Certificate Course

Thank You



Dr. Arvind M. Patil

HOD, Dept. of Chemistry



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Est.

Dt.27/11/1928

/IQAC /ALJC/201

Principal : Dr. G. H. Jain

Date: 28/04/2017

To  
Dr. V. S. Aware,  
PG Department of Chemistry.

Dear Sir,

With reference to the meeting of College Development and IQAC committee it is decided that you are appointed as a Coordinator for the Certificate Course in Chemistry 'Chemical and Pharmaceutical Analysis'. You are assigned this duty other than the regular curriculum. You are responsible for the overall administration as well as smooth conduct of the course.

Place: Chandwad

Date: 28/04/2017

Dr. G. H. Jain

**PRINCIPAL**

**K.K.H.A. Arts SMGL Comm. & SPHJ**  
**Science (Senior) & S.P.D.S. Arts,**  
**Comm. & Science (Junior) College,**  
**Chandwad, Dist. Nashik - 423 101**

*S. N. J. B's*  
**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**  
**CHANDWAD (NASHIK)**

Date: 28/04/2017

To,

1. **Dr. V.S. Aware-Chairman & Course Coordinator**  
Assistant Professor, Department of Chemistry
2. **Dr. A. M. Patil- Member**  
HOD, Assistant Professor, Department of Chemistry
3. **Mr. S.P.Khairnar-Member**  
Assistant Professor, Department of Chemistry
4. **Dr. R.S. Sancheti-Member**  
Assistant Professor, Department of Chemistry
5. **Miss. M.A. Todarwal**  
Assistant Professor, Department of Chemistry
6. **Dr. P..S. Kharkar**  
Associate Professor, NMIMS Mumbai

**Subject:** Invitation to attend the meeting of Board of Studies of Certificate Course of Chemical and Pharmaceutical Analysis

Dear Sir,

I am writing this to invite all members to attend meeting of Board of Studies which is held on 28/04/2017 at 4.30 pm, in the Department of Chemistry.

**Agenda**

1. Preparation of syllabus
2. To discuss any other requirements of the course with the permission of chairmen

Thanking You,

Yours faithfully



Course Coordinator

Date: 28.04.17

Minutes of BOS Meeting

The meeting of BOS for certificate course on 'Chemical and Pharmaceutical Analysis' is held on Friday , 28/04/17 at 4.30 pm in the Department of Chemistry, SNJB's KKHA Arts, SMGL Commerce & SPHJ Science College, Neminagar , Chandwad. Following members were present.

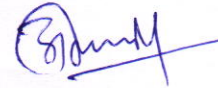
1. **Dr. G.H. Jain –Chairman**



2. **Dr. V.S. Aware-Chairman & Course Coordinator**  
Assistant Professor, Department of Chemistry



3. **Dr. A. M. Patil- Member**  
HOD, Assistant Professor, Department of Chemistry



4. **Mr. S.P.Khairnar-Member**  
Assistant Professor, Department of Chemistry



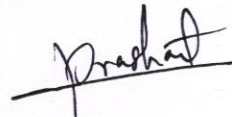
5. **Dr. R.S. Sancheti-Member**  
Assistant Professor, Department of Chemistry



6. **Miss. M.A. Tadarwal**  
Assistant Professor, Department of Chemistry



7. **Dr. P..S. Kharkar**  
Associate Professor, NMIMS Mumbai



As per agenda of the meeting the members of BOS has finalized the syllabus, draft of the same is enclosed herewith for implementation.

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Est.

Dt.27/11/1928

/IQAC /ALJC/201

**Principal : Dr. G. H. Jain**

Date: 26/04/2017

To  
Dr. A. M. Patil,  
Head, Department of Chemistry.

Dear Sir

With reference to the meeting of IQAC you are appointed as a Member of Board of Studies for Certificate course in Chemistry 'Chemical and Pharmaceutical Analysis'. You are assigned the duty of Curriculum designing as per the guidelines.

Place: Chandwad

Date: 26/04/2017

Dr. G. H. Jain  
**PRINCIPAL**

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Science (Senior) & S.P.D.S. Arts,  
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Dt.27/11/1928

Principal : Dr. G. H. Jain

Date: 26/04/2017

/IQAC /ALJC/201

To,  
Mr. S. P. Khairnar,  
PG Department of Chemistry.

Dear Sir

With reference to the meeting of IQAC you are appointed as a Member of Board of Studies for Certificate course in Chemistry 'Chemical and Pharmaceutical Analysis'. You are assigned the duty of Curriculum designing as per the guidelines.

Place: Chandwad

Date: 26 / 04 / 2017

Dr. G. H. Jain

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**Est.**

**Dt.27/11/1928**

**/IQAC /ALJC/201**

**Principal : Dr. G. H. Jain**

**Date: 28/04/2017**

To,  
Mrs. M. A. Todarwal,  
PG Department of Chemistry.

Dear Sir

With reference to the meeting of IQAC you are appointed as a Member of Board of Studies for Certificate course in Chemistry 'Chemical and Pharmaceutical Analysis'. You are assigned the duty of Curriculum designing as per the guidelines.

Place: Chandwad

Date: 28/04/2017

**Dr. G. H. Jain**  
**PRINCIPAL**

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Est.

Dt.27/11/1928

**Principal : Dr. G. H. Jain**

/IQAC /ALJC/201

Date: 26 /04/2017

To  
Dr. R. S. Sancheti,  
PG Department of Chemistry.

Dear Sir

With reference to the meeting of IQAC you are appointed as a Member of Board of Studies for Certificate course in 'Chemical and Pharmaceutical Analysis'. You are assigned the duty of Curriculum designing as per the guidelines.

Place: Chandwad

Date: 26 /04 /2017

Dr. G. H. Jain

**PRINCIPAL**

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**S. N. J. B's**  
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**CHANDWAD (NASHIK)**

**Course:SCPA**  
**Chemical and Pharmaceutical Analysis (30Hrs)**

1. *General Introduction*
2. *Sampling of solid, Liquid, and Gases: Defination, Types of samples, Sampling plan ,quality of sample, sample registration etc.*
3. *Sample Preparation methods:*
4. *Intrumental methods of analysis: Classification, advantages of instrumental methods, the limitations, sensitivity, accuracy, detection limit etc.*
  - i) *PH-Metry*
  - ii) *Colorimetry*
  - iii) *UV-Spectrophotometer*
  - iv) *Spectroflurometer*
  - v) *Polarimeter*
  - vi) *Potentiometer*
  - vii) *Conductivity meter*
5. *Thermal Methods of Analysis: Introduction, Theory, and application of TGA, DSC, DTA etc.*
6. *Chromatographic Methods of Analysis: Liquid chromatography, Partition, Ion exchange, paper, Thin layer chromatography, Column, Gel chromatography, GC, GC-MS, HPLC etc.*
7. *Titrimetric methods of Analysis:*

## Time Table 2017-2018

TIME	SUN	MON	TUE	WED	THU	FRI	SAT
<b>Theory</b>							
8.30 am		(VSA)	(VSA)	(VSA)	(VSA)	(VSA)	
9.30 am		(RSS)	(RSS)	(RSS)	(RSS)	(RSS)	
10.30 am		(AMP)	(AMP)	(AMP)	(AMP)	(AMP)	
11.30- 12.00 am	BREAK						
<b>Practical</b>							
11.00 am -1.30 pm		(VSA)	(VSA)	(AMP)	(AMP)	(RSS)	(RSS)

VSA= Dr. V.S. Aware

RSS= Dr. R.S. Sancheti

AMP= Dr. A.M.Patil



Dr. Valmik Aware

Co-Ordinator



Dr. Arvind M. Patil

(HOD)

*S. N. J. B's*

*K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.*

*CHANDWAD (NASHIK)*

**Objective of the course:**

- 1) To develop skill required for the chemical and pharmaceutical product.
- 2) To develop theoretical and practical knowledge about the chemical analysis.
- 3) To increase awareness among the students about the instruments required for chemical analysis.

*S. N. J. B's*

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*CHANDWAD (NASHIK)*

### **Outcome of the course:**

1. Students will become capable to design, carry out, record and analyse the results of chemical analysis experiments.
2. Students will become capable to use modern instrumentation and classical techniques, to design experiments, and to properly record the results of their experiment.
3. Are able to use modern instrumentation and classical techniques, to design experiments, and to properly record the results of their experiment.
4. Student will become capable to join different chemical and pharmaceutical industry as QC chemist /Analytical chemist

## Student's List (2017-18)

Sr. No.	Student Name	College Registration No.	College Member ID
01	Kasar Akash Anil	5962	7680
02	Shirsath Prashant Ramesh	5964	7683
03	Jagtap Dinesh Arjun	5942	7651
04	Jadhav Chetan Nimba	5943	7652
05	Gharte Jogeshwar Janardan	5960	7678
06	Gosavi Rajyogi Nimba	5965	7684
07	Shaikh Shiba Arif	5740	6960
08	Shirsath Harshal Mukund	5733	6903
09	Bothe Sonali Rambhau	5735	6905
10	Choudhari Gopal Arun	5966	7685
11	Deore Gayatri Trambak	5736	6906
12	Deore Rahul Suresh	5961	7679
13	Gangurde Vishal Shravan	5803	7407
14	Khangal Mayuri Shamrao	5739	6944
15	Shinde Shraddha Kailas	5751	6997



*S. N. J. B's*  
*K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.*  
*CHANDWAD (NASHIK)*

*Date: 16/06/2017*

***NOTICE***

***Certificate Course***

This is to inform all students that Department of Chemistry is organizing a certificate course in **Chemical and Pharmaceutical Analysis** since 19/06/2017 to 01/07/2017. Please refer Time table displayed on notice board.



Principal



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

Sr.no.	Student Name	19/06/17	20/06/17	21/06/17	22/06/17	23/06/17	24/06/17
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01	Kasar Akash Anil	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
02	Shirsath Prashant Ramesh	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
03	Jagtap Dinesh Arjun	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
04	Jadhav Chetan Nimba	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
05	Gharate Jogeshwar Janardan	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
06	Gosavi Rajyogi Nimba	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
07	Shaikh Shiba Arif	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
08	Shirsath Harshal Mukund	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
09	Bothe Sonali Rambhau	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
10	Choudhari Gopal Arun	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
11	Deore Gayatri Trambak	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
12	Deore Rahul Suresh	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
13	Gangurde Vishal Shravan	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
14	Khangal Mayuri Shamrao	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	
15	Shinde Shraddha Kailas	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	

Dr. Anand V.S.

*(Signature)*

*(Signature)*

Subject Teacher

Course Co-ordinator

Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

Sr.no.	Student Name	26/06/17	27/06/17	28/06/17	29/06/17	30/06/17
		Monday	Tuesday	Wednesday	Thursday	Friday
01	Kasar Akash Anil	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
02	Shirsath Prashant Ramesh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
03	Jagtap Dinesh Arjun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
04	Jadhav Chetan Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
05	Gharate Jogeshwar Janardan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
06	Gosavi Rajyogi Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
07	Shaikh Shiba Arif	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
08	Shirsath Harshal Mukund	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
09	Bothe Sonali Rambhau	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	Choudhari Gopal Arun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	Deore Gayatri Trambak	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	Deore Rahul Suresh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	Gangurde Vishal Shravan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	Khangal Mayuri Shamrao	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	Shinde Shraddha Kailas	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Dr. Anwar V.S.

*[Signature]*

Subject Teacher

Course Co-ordinator

*[Signature]*

Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDHWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

Amp

19 20 21 22 33

Sr.no.	Student Name	Monday	Tuesday	Wednesday	Thursday	Friday
01	Kasar Akash Anil	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
02	Shirsath Prashant Ramesh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
03	Jagtap Dinesh Arjun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
04	Jadhav Chetan Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
05	Gharate Jogeshwar Janardan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
06	Gosavi Rajyogi Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
07	Shaikh Shiba Arif	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
08	Shirsath Harshal Mukund	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
09	Bothe Sonali Rambhau	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	Choudhari Gopal Arun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	Deore Gayatri Trambak	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	Deore Rahul Suresh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	Gangurde Vishal Shravan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	Khangal Mayuri Shamrao	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	Shinde Shraddha Kailas	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

*[Signature]*

Subject Teacher

*[Signature]*

Course Co-ordinator

*[Signature]*

Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

26

27

28

29

30

Sr.no.	Time	Student Name	Monday	Tuesday	Wednesday	Thursday	Friday
01		Kasar Akash Anil	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
02		Shirsath Prashant Ramesh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
03		Jagtap Dinesh Arjun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
04		Jadhav Chetan Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
05		Gharate Jogeshwar Janardan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
06		Gosavi Rajyogi Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
07		Shaikh Shiba Arif	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
08		Shirsath Harshal Mukund	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
09		Bothe Sonali Rambhau	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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11		Deore Gayatri Trambak	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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13		Gangurde Vishal Shravan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14		Khangal Mayuri Shamrao	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15		Shinde Shraddha Kailas	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

*[Signature]*

Subject Teacher

*[Signature]*

Course Co-ordinator

*[Signature]*

Head of the Department

Amp



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

PSS

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

Sr.no.	Time	Student Name	19/06/17	20/06/17	21/06/17	22/06/17	23/06/17
			Monday	Tuesday	Wednesday	Thursday	Friday
01	Kasar Akash Anil		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
02	Shirsath Prashant Ramesh		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
03	Jagtap Dinesh Arjun		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
04	Jadhav Chetan Nimba		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
05	Gharate Jogeshwar Janardan		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
06	Gosavi Rajyogi Nimba		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
07	Shaikh Shiba Arif		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
08	Shirsath Harshal Mukund		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
09	Bothe Sonali Rambhau		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	Choudhari Gopal Arun		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	Deore Gayatri Trambak		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	Deore Rahul Suresh		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	Gangurde Vishal Shravan		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	Khangal Mayuri Shamrao		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	Shinde Shraddha Kailas		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

*[Signature]*  
Subject Teacher

*[Signature]*  
Course Co-ordinator

*[Signature]*  
Head of the Department



S. N. J. B.'s

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory Course)

PSS

Sr.no.	Student Name	26/06/17	27/06/17	28/06/17	29/06/17	30/06/17
	Time	Monday	Tuesday	Wednesday	Thursday	Friday
01	Kasar Akash Anil	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
02	Shirsath Prashant Ramesh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
03	Jagtap Dinesh Arjun	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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05	Gharate Jogeshwar Janardan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
06	Gosavi Rajyogi Nimba	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
07	Shaikh Shiba Arif	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
08	Shirsath Harshal Mukund	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
09	Bothe Sonali Rambhau	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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11	Deore Gayatri Trambak	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	Deore Rahul Suresh	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	Gangurde Vishal Shravan	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	Khangal Mayuri Shamrao	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	Shinde Shraddha Kailas	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

*[Signature]*

Subject Teacher

*[Signature]*

Course Co-ordinator

*[Signature]*

Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Practical Course)

pract -  
common

Name of The Practical:		Monday	Tuesday	Wednesday	Thursday	Friday
Sr.no.	Student Name	Time	Time	Time	Time	Time
01	Kasar Akash Anil	Present	Present	Present	Present	Present
02	Shirsath Prashant Ramesh	Present	Present	Present	Present	Present
03	Jagtap Dinesh Arjun	Present	Present	Present	Present	Present
04	Jadhav Chetan Nimba	Present	Present	Present	Present	Present
05	Gharate Jogeshwar Janardan	Present	Present	Present	Present	Present
06	Gosavi Rajyogi Nimba	Present	Present	Present	Present	Present
07	Shaikh Shiba Arif	Present	Present	Present	Present	Present
08	Shirsath Harshal Mukund	Present	Present	Present	Present	Present
09	Bothe Sonali Rambhau	Present	Present	Present	Present	Present
10	Choudhari Gopal Arun	Present	Present	Present	Present	Present
11	Deore Gayatri Trambak	Present	Present	Present	Present	Present
12	Deore Rahul Suresh	Present	Present	Present	Present	Present
13	Gangurde Vishal Shravan	Present	Present	Present	Present	Present
14	Khangal Mayuri Shamrao	Present	Present	Present	Present	Present
15	Shinde Shraddha Kailas	Present	Present	Present	Present	Present

Subject Teacher

Course Co-ordinator

Head of the Department

① Dr. Anare vs.

② Dr. Pail A-M.

③ Dr. Sancheti R.S.





S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S. P. H. J. SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Practical Course)

Name of The Practical:		Monday	Tuesday	Wednesday	Thursday	Friday
Sr.no.	Student Name					
01	Kasar Akash Anil	<i>Prakash</i>	<i>Prakash</i>	<i>Prakash</i>	<i>Prakash</i>	<i>Prakash</i>
02	Shirsath Prashant Ramesh	<i>Prashant</i>	<i>Prashant</i>	<i>Prashant</i>	<i>Prashant</i>	<i>Prashant</i>
03	Jagtap Dinesh Arjun	<i>Dinesh</i>	<i>Dinesh</i>	<i>Dinesh</i>	<i>Dinesh</i>	<i>Dinesh</i>
04	Jadhav Chetan Nimba	<i>Chetan</i>	<i>Chetan</i>	<i>Chetan</i>	<i>Chetan</i>	<i>Chetan</i>
05	Gharate Jogeshwar Janardan	<i>Jogeshwar</i>	<i>Jogeshwar</i>	<i>Jogeshwar</i>	<i>Jogeshwar</i>	<i>Jogeshwar</i>
06	Gosavi Rajyogi Nimba	<i>Rajyogi</i>	<i>Rajyogi</i>	<i>Rajyogi</i>	<i>Rajyogi</i>	<i>Rajyogi</i>
07	Shaikh Shiba Arif	<i>Shiba</i>	<i>Shiba</i>	<i>Shiba</i>	<i>Shiba</i>	<i>Shiba</i>
08	Shirsath Harshal Mukund	<i>Harshal</i>	<i>Harshal</i>	<i>Harshal</i>	<i>Harshal</i>	<i>Harshal</i>
09	Bothe Sonali Rambhau	<i>Sonali</i>	<i>Sonali</i>	<i>Sonali</i>	<i>Sonali</i>	<i>Sonali</i>
10	Choudhari Gopal Arun	<i>Gopal</i>	<i>Gopal</i>	<i>Gopal</i>	<i>Gopal</i>	<i>Gopal</i>
11	Deore Gayatri Trambak	<i>Gayatri</i>	<i>Gayatri</i>	<i>Gayatri</i>	<i>Gayatri</i>	<i>Gayatri</i>
12	Deore Rahul Suresh	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>
13	Gangurde Vishal Shravan	<i>Vishal</i>	<i>Vishal</i>	<i>Vishal</i>	<i>Vishal</i>	<i>Vishal</i>
14	Khangal Mayuri Shamrao	<i>Mayuri</i>	<i>Mayuri</i>	<i>Mayuri</i>	<i>Mayuri</i>	<i>Mayuri</i>
15	Shinde Shraddha Kailas	<i>Shraddha</i>	<i>Shraddha</i>	<i>Shraddha</i>	<i>Shraddha</i>	<i>Shraddha</i>

Subject Teacher

Course Co-ordinator

Head of the Department

- ① ~~Dr. Anare V.S.~~
- ② ~~Dr. Patel A.M.~~
- ③ ~~Dr. Sancheti R.S.~~

**S.N.J.B.Ashram's**  
**K.K.H.A. Arts, S.M.G.L.Commerce & Science College, Chandwad. Dist.Nashik**

**Evaluation for Certificate Course Chemical & Pharmaceutical Analysis**  
**(2017-18)**

Sr no.	Student Name	Test (20 Marks)	Practical (10Marks)	Viva (10 marks)	Home Assignments ( 10 Marks)	Total Marks (out of 50)
01	Kasar Akash Anil	14	06	05	07	32
02	Shirsath Prashant Ramesh	14	07	08	06	35
03	Jagtap Dinesh Arjun	16	06	07	08	37
04	Jadhav Chetan Nimba	16	06	07	07	36
05	Gharte Jogeshwar Janardan	14	08	06	07	35
06	Gosavi Rajyogi Nimba	18	07	08	07	40
07	Shaikh Shiba Arif	12	07	07	08	33
08	Shirsath Harshal Mukund	18	08	08	07	41
09	Bothe Sonali Rambhau	15	07	08	08	39
10	Choudhari Gopal Arun	10	08	06	05	29
11	Deore Gayatri Trambak	12	07	08	08	35
12	Deore Rahul Suresh	14	07	07	08	36
13	Gangurde Vishal Shravan	16	08	08	08	40
14	Khangal Mayuri Shamrao	16	07	06	08	37
15	Shinde Shraddha Kailas	12	08	07	08	35

S.N.J.B.Ashram v.s.  
AO

**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**

**CHANDWAD (NASHIK)**

Date: 02/07/17

**“Certificate”**

It is certified that Dr. Valmik S. Aware from Department of Chemistry has completed successfully Certificate Course in Chemical and Pharmaceutical Analysis (19/06/2017 to 01/07/2017). I congratulate him for the successful completion of the course.



**PRINCIPAL**  
K.K.H.A. Arts SMGL Comm. & SPHJ  
Science (Senior) & S.P.D.S. Arts,  
Comm. & Science (Junior) College,  
Chandwad, Dist. Nashik - 423 101

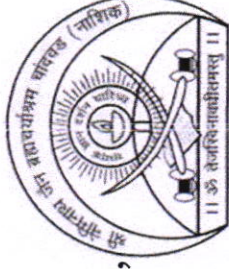
Shri Neminath Jain Brahmacharyashram's

**K.K.H. Abad Arts, S.M.G. Lodha Commerce & S.P.H. Jain Science College,**

Neminagar Chandwad, Dist. Nashik 423 101.

"BEST COLLEGE AWARD 2015-16 of Savitribai Phule Pune University"

Re-accredited by NAAC with 'B' Grade



28/11/1928

## **CERTIFICATE OF COMPLETION**

This certificate is presented to

Mr. /Ms.

of M.Sc. II Organic Chemistry

in recognition of successfully completing a 60 contact hours Certificate Course on

### **Chemical and Pharmaceutical Analysis**

from 19<sup>th</sup> June 2017 to 1<sup>st</sup> July 2017.

Dr. V.S.Aware

(Course Co-ordinator)

Dr. A. M. Patil

(Head, Dept. Of Chemistry)

Dr. G. H. Jain

(Principal)

## Report of completion of course

The course is designed in such way that will enable students to gain knowledge and expertise in the field of pharmaceutical analysis. This course is helpful in the carrier of students in pharmaceutical industry and provides excellent foundation for future research degree. The said course is supportive to the students to their post graduate education. The course is completed successfully in 60 hrs (10 days) and the course has provided sound backgrounds about theory of the available instruments and necessary fundamental training.

The syllabi of this course include seven sections:

First section increased awareness and importance among the students about analysis in pharmaceutical industry which increased the curiosity among the students and made clear objective about the course.

Second section provided sampling knowledge about of solid, liquid and gaseous chemicals. This section also provides how to manage large no. of samples and their registration.

Third section provided theoretical and practical knowledge about sampling methods.

Section four and five helps student to enhance their theoretical background about various instruments important in pharmaceutical industry. The training of available instruments like PH-Metry, Colorimetry, Polarimeter, and Conductivity meter is also provided to students.

Section six provided theoretical knowledge about different chromatographic methods. Practical knowledge about ion exchange chromatography, Thin Layer Chromatography, Column chromatography is also provided.

Section seven helps students to gain knowledge about different titrimetric analysis. The theory about different kind of titrations was taught with experiments.

This course theory along with practicals was finished within 12 days. Then the student's feedback took in order to get inputs from students for future improvements in the course. After satisfactory feedback the certificate to the concerned students were delivered.

*S.N.J.B.Ashram's*  
*K.K.H.A. Arts, S.M.G.L.Commerce & Science College, Chandwad. Dist.Nashik*

**Test for Certificate Course in Chemical & Pharmaceutical Analysis**

**Marks: 20**

**Date: 1<sup>st</sup> July 2017**

**Tick marks the correct answer: (Each question will carry 2 marks)**

- 1) In spectrofluorometer compound absorb radiation in.....region  
A) IR B) UV C) Both UV & IR D) None of the above
- 2) Spectrofluorometer is used to carry out .....analysis  
A) Qualitative B) Quantitative C) Both qualitative & Quantitative D) None of the above
- 3) In UV-Visible technique.....is measured  
A) Wavelength B) delta value C) Molecular Weight D) All of the above
- 4) RT (Retention time) is measured in .....Technique.  
A) UV-Visible B) IR C) HPLC D) TLC
- 5) In colorimetry techniques .....is measured  
A) Transmittance B) Fluorescence C) Absorbance D) Luminescence
- 6) The pH of the solution can be measured by the.....  
A) Polarimeter B) Potentiometer C) Conductivity meter D) pH-meter
- 7) Metal ions can be separated by .....,  
A) Ion Exchange Chromatography B) TLC C) HPLC d) None of the above
- 8) DRS is closely related with .....  
A) IR B) UV-Vis. C) HPLC D) All of the above
- 9) In Fluorescence absorbs light and then emit light of .....wavelength.  
A) Smaller B) Longer C) Equal D) None of the above
- 9) Visible spectrum of light is formed in the range.....nm.  
A) 400-760 B) 100-200 C) 800-1000 D)1000-1500



**S. N. J. B's**

**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.  
CHANDWAD (NASHIK)**

***Department of Chemistry***

***Certificate Course in Chemical and Pharmaceutical  
Analysis***

***Academic Year 2018-19***

Date: 25/04/2018

To:

IQAC Co-Ordinator,

SNJB's KKHA Arts, SMGL Commerce, SPHJ Science College, Chandwad.

Subject: About permission to start Certificate Course in Chemical and Pharmaceutical Analysis

Dear Sir,

Department of Chemistry want to continue Certificate Course in Chemical and Pharmaceutical Analysis this year also. This course will provide both theoretical and practical knowledge to the students. The total course intake capacity will be fifteen students. The duration of this course will be 12 days (60 hrs). This will be our second batch and we have decided to start this course from 18/06/2018. Please grant me the permission for the same.



Dr. Valmik S. Aware

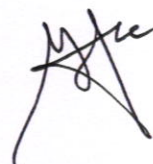
Co-Ordinator, Certificate Course

Thank You



Dr. Arvind M. Patil

HOD, Dept. of Chemistry



**PRINCIPAL**

**K.K.H.A. Arts SMGL Comm. & SPHJ  
Science (Senior) & S.P.D.S. Arts,  
Comm. & Science (Junior) College,  
Chandwad, Dist. Nashik - 423 101**



Date: 25/04/2018

To:

Principal,

SNJB's KKHA Arts, SMGL Commerce, SPHJ Science College, Chandwad.

Subject: About permission to start Certificate Course in Chemical and Pharmaceutical Analysis

Dear Sir,

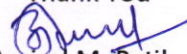
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Dr. Valmik S. Aware

Co-Ordinator, Certificate Course

Thank You



Dr. Arvind M. Patil

HOD, Dept. of Chemistry



**PRINCIPAL**

K.K.H.A. Arts, SMGL Comm. & SPHJ  
Scienc... S.P.D.S. Arts,  
Comm... (K.K.H.A.) College,  
Ch... - 423 101

**S. N. J. B's**  
**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**  
**CHANDWAD (NASHIK)**


Date: 27/04/2018

To,

1. **Dr. V.S. Aware-Chairman & Course Coordinator**  
Assistant Professor, Department of Chemistry



2. **Dr. A. M. Patil- Member**  
HOD, Assistant Professor, Department of Chemistry



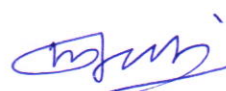
3. **Mr. S.P.Khairnar-Member**  
Assistant Professor, Department of Chemistry



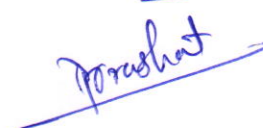
4. **Dr. R.S. Sancheti-Member**  
Assistant Professor, Department of Chemistry



5. **Miss. M.A. Tadarwal**  
Assistant Professor, Department of Chemistry



6. **Dr. P..S. Kharkar**  
Associate Professor, NMIMS Mumbai



**Subject:** Invitation to attend the meeting of Board of Studies of Certificate Course of Chemical and Pharmaceutical Analysis

Dear Sir,

I am writing this to invite all members to attend meeting of Board of Studies which is held on 28/04/2017 at 4.30 pm, in the Department of Chemistry.

**Agenda**

1. Preparation of syllabus
2. To discuss any other requirements of the course with the permission of chairmen

Thanking You,

Yours faithfully

Course Coordinator

**S. N. J. B's**

*S. N. J. B's*  
**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**  
**CHANDWAD (NASHIK)**

Date: 27/04/2018

To,

1. **Dr. V.S. Aware-Chairman & Course Coordinator**  
Assistant Professor, Department of Chemistry
2. **Dr. A. M. Patil- Member**  
HOD, Assistant Professor, Department of Chemistry
3. **Mr. S.P.Khairnar-Member**  
Assistant Professor, Department of Chemistry
4. **Dr. R.S. Sancheti-Member**  
Assistant Professor, Department of Chemistry
5. **Miss. M.A. Tadarwal**  
Assistant Professor, Department of Chemistry
6. **Dr. P..S. Kharkar**  
Associate Professor, NMIMS Mumbai

**Subject:** Invitation to attend the meeting of Board of Studies of Certificate Course of Chemical and Pharmaceutical Analysis

Dear Sir,

I am writing this to invite all members to attend meeting of Board of Studies which is held on 28/04/2017 at 4.30 pm, in the Department of Chemistry.

**Agenda**

1. Preparation of syllabus
2. To discuss any other requirements of the course with the permission of chairmen

Thanking You,

Yours faithfully



Course Coordinator

**S. N. J. B's**  
**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**  
**CHANDWAD (NASHIK)**

**Course:SCPA**  
**Chemical and Pharmaceutical Analysis (30Hrs)**

1. *General Introduction*
2. *Sampling of solid, Liquid, and Gases: Defination, Types of samples, Sampling plan ,quality of sample, sample registration etc.*
3. *Sample Preparation methods:*
4. *Intrumental methods of analysis: Classification, advantages of instrumental methods, the limitations, sensitivity, accuracy, detection limit etc.*
  - i) *PH-Metry*
  - ii) *Colorimetry*
  - iii) *UV-Spectrophotometer*
  - iv) *Spectroflorimeter*
  - v) *Polarimeter*
  - vi) *Potentiometer*
  - vii) *Conductivity meter*
5. *Thermal Methods of Analysis: Introduction, Theory, and application of TGA, DSC, DTA etc.*
6. *Chromatographic Methods of Analysis: Liquid chromatography, Partition, Ion exchange, paper, Thin layer chromatography, Column, Gel chromatography, GC, GC-MS, HPLC etc.*
7. *Titrimetric methods of Analysis:*

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*CHANDWAD (NASHIK)*

**Objective of the course:**

- 1) To develop skill required for the chemical and pharmaceutical product.
- 2) To develop theoretical and practical knowledge about the chemical analysis.
- 3) To increase awareness among the students about the instruments required for chemical analysis.

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*CHANDWAD (NASHIK)*

### **Outcome of the course:**

1. Students will become capable to design, carry out, record and analyse the results of chemical analysis experiments.
2. Students will become capable to use modern instrumentation and classical techniques, to design experiments, and to properly record the results of their experiment.
3. Are able to use modern instrumentation and classical techniques, to design experiments, and to properly record the results of their experiment.
4. Student will become capable to join different chemical and pharmaceutical industry as QC chemist /Analytical chemist

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**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**  
**CHANDWAD (NASHIK)**

***Date: 16/06/2018***

***NOTICE***

***Certificate Course***

This is to inform all the students that Department of Chemistry is organizing a certificate course in **Chemical and Pharmaceutical Analysis** since 18/06/2018 to 30/06/2018. Please refer time table displayed on notice board.

**Principal**



**PRINCIPAL**  
K.K.H.A. Arts SMGL Comm. & SPHJ  
Science (Senior) & S.P.D.S. Arts,  
Comm. & Science (Junior) College,  
Chandwad, Dist. Nashik - 423 101

## Time Table 2018-2019

TIME	SUN	MON	TUE	WED	THU	FRI	SAT
<b>Theory</b>							
8.30 am		(VSA)	(VSA)	(VSA)	(VSA)	(VSA)	
9.30 am		(RSS)	(RSS)	(RSS)	(RSS)	(RSS)	
10.30 am		(AMP)	(AMP)	(AMP)	(AMP)	(AMP)	
11.30 12.00 am	BREAK						
<b>Practical</b>							
11.00 am -1.30 pm		(VSA)	(VSA)	(AMP)	(AMP)	(RSS)	(RSS)

VSA= Dr. V.S. Aware

RSS= Dr. R.S. Sancheti

AMP= Dr. A.M. Patil



Dr. Valmik Aware

Co-Ordinator



Dr. Arvind M. Patil

(HOD)



## Student List 2018-19

Sr.No.	Student Name	College Registration No.	College Member ID
Sr.no.	Student Name		
01	Gawali Sunil Rajendra	6228	9714
02	Sonawane Amol Kailas	6148	9461
03	Mengal Mahendra Ananda	6226	9712
04	Navle kaveri Bhagvat	6196	9650
05	Aher Yogita Pramod	6202	9663
06	Deore Nikita Kailas	6230	9733
07	Nikam Pramod Bhausahab	6116	9329
08	Shejwal Sagar Bapu	6175	9533
09	Wagh Samadhan Balasaheb	6267	9851
10	Shinde Aswini Shivaji	6170	9521
11	Kuyte Vishal Keshav	6178	9538
12	Kasar Anand Ganesh	6185	9558
13	Khatal Aswini Mothabhau	6273	9859
14	Sonawane Pallavi Dilip	6203	9664
15	Deokar Dipak Balasaheb	6245	9791



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Practical Course)

Name of The Practical:		18/6/18	19/06/18	20/06/18	21/06/18	22/06/18	23/06/18
Sr.no.	Student Name	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01	Gavli Sunil	<u>Sunil</u>	<u>Sunil</u>	<u>Sunil</u>	<u>Sunil</u>	<u>Sunil</u>	<u>Sunil</u>
02	Sonawane Amol Kailas	<u>Amol</u>	<u>Amol</u>	<u>Amol</u>	<u>Amol</u>	<u>Amol</u>	<u>Amol</u>
03	Mengal Mahendra Ananda	<u>Mengal</u>	<u>Mengal</u>	<u>Mengal</u>	<u>Mengal</u>	<u>Mengal</u>	<u>Mengal</u>
04	Navle kaveri	<u>Kaveri</u>	<u>Kaveri</u>	<u>Kaveri</u>	<u>Kaveri</u>	<u>Kaveri</u>	<u>Kaveri</u>
05	Aher Yogita Pramod	<u>Yogita</u>	<u>Yogita</u>	<u>Yogita</u>	<u>Yogita</u>	<u>Yogita</u>	<u>Yogita</u>
06	Deore Nikita Kailas	<u>Nikita</u>	<u>Nikita</u>	<u>Nikita</u>	<u>Nikita</u>	<u>Nikita</u>	<u>Nikita</u>
07	Nikam Pramod Bhausahab	<u>Pramod</u>	<u>Pramod</u>	<u>Pramod</u>	<u>Pramod</u>	<u>Pramod</u>	<u>Pramod</u>
08	Shejwal Sagar Bapu	<u>Shejwal</u>	<u>Shejwal</u>	<u>Shejwal</u>	<u>Shejwal</u>	<u>Shejwal</u>	<u>Shejwal</u>
09	Wagh Samadhan Balasaheb	<u>Samadhan</u>	<u>Samadhan</u>	<u>Samadhan</u>	<u>Samadhan</u>	<u>Samadhan</u>	<u>Samadhan</u>
10	Shinde Aswini Shivaji	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>
11	Kuyte Vishal Keshav	<u>Vishal</u>	<u>Vishal</u>	<u>Vishal</u>	<u>Vishal</u>	<u>Vishal</u>	<u>Vishal</u>
12	Kasar Anand Ganesh	<u>Anand</u>	<u>Anand</u>	<u>Anand</u>	<u>Anand</u>	<u>Anand</u>	<u>Anand</u>
13	Khatal Aswini Mothabhau	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>	<u>Aswini</u>
14	Sonawane Pallavi Dilip	<u>Pallavi</u>	<u>Pallavi</u>	<u>Pallavi</u>	<u>Pallavi</u>	<u>Pallavi</u>	<u>Pallavi</u>
15	Deokar Dipak Balasaheb	<u>Dipak</u>	<u>Dipak</u>	<u>Dipak</u>	<u>Dipak</u>	<u>Dipak</u>	<u>Dipak</u>

Course Co-ordinator

Head of the Department

Subject Teacher

- ① Dr. Awane V.S.
- ② Dr. Patil A.M.
- ③ Dr. Sancheti R.S.



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Practical Course)

Name of The Practical:		28/06/18	28/06/18	29/06/18	29/06/18	29/06/18	30/06/18
Sr.no.	Student Name	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01	Gavli Sunil	Present	Present	Present	Present	Present	Present
02	Sonawane Amol Kailas	Present	Present	Present	Present	Present	Present
03	Mengal Mahendra Ananda	Present	Present	Present	Present	Present	Present
04	Navle kaveri	Present	Present	Present	Present	Present	Present
05	Aher Yogita Pramod	Present	Present	Present	Present	Present	Present
06	Deore Nikita Kailas	Present	Present	Present	Present	Present	Present
07	Nikam Pramod Bhausahab	Present	Present	Present	Present	Present	Present
08	Shejwal Sagar Bapu	Present	Present	Present	Present	Present	Present
09	Wagh Samadhan Balasaheb	Present	Present	Present	Present	Present	Present
10	Shinde Aswini Shivaji	Present	Present	Present	Present	Present	Present
11	Kuyte Vishal Keshav	Present	Present	Present	Present	Present	Present
12	Kasar Anand Ganesh	Present	Present	Present	Present	Present	Present
13	Khatal Aswini Mothabhau	Present	Present	Present	Present	Present	Present
14	Sonawane Pallavi Dilip	Present	Present	Present	Present	Present	Present
15	Deokar Dipak Balasaheb	Present	Present	Present	Present	Present	Present

Course Co-ordinator

Head of the Department

- ① Dr. Anand R.S.
- ② Dr. Pahi A.M.
- ③ Dr. Soncheti R.S.



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory)

	Time	18/06/18	19/06/18	20/06/18	21/06/18	22/06/18	23/06/18	26/06/18	27/06/18	28/06/18	29/06/18
Sr.no.	Student Name	P	P	P	P	Absent	P	P	Absent	P	
01	Gavli Sunil	P	P	P	P	Absent	P	P		P	Absent
02	Sonawane Amol Kailas	P	P	P	P	P	P	P		P	
03	Mengal Mahendra Ananda	Absent	P	Absent	P	P	P	P	Absent	P	
04	Navle kaveri	P	P	P	P	P	P	P		P	
05	Aher Yogita Pramod	P	P	P	P	P	P	P		P	
06	Deore Nikita Kailas	P	P	P	P	P	P	P		P	
07	Nikam Pramod Bhausaheb	P	Absent	P	P	P	P	P		Absent	
08	Shejwal Sagar Bapu	P	P	P	P	P	P	P		P	
09	Wagh Samadhan Balasaheb	P	P	P	P	P	P	P		P	
10	Shinde Aswini Shivaji	Absent	P	P	P	P	Absent	P		P	
11	Kuyte Vishal Keshav	P	P	P	P	Absent	P	P		P	
12	Kasar Anand Ganesh	P	P	P	P	P	P	P	Absent	Absent	Absent
13	Khatal Aswini Mothabhau	P	P	P	Absent	P	P	P		Absent	
14	Sonawane Pallavi Dilip	P	P	P	P	P	P	P		P	
15	Deokar Dipak Balasaheb	P	P	P	P	Absent	P	P		P	

Subject Teacher

Course Co-ordinator

Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.


CHANDWAD (NASHIK)

Department of Chemistry


Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory)

	Time	18-06-18	19/06/18	20/06/18	21/06/18	22/06/18	25/06/18	26/06/18	27/06/18	28/06/18	29/06/18
Sr.no.	Student Name										
01	Gavli Sunil	P	P	P	P	P	P	P	P	P	P
02	Sonawane Amol Kailas	P	P	P	P	P	P	P	F	P	P
03	Mengal Mahendra Ananda	A	A	A	P	P	P	P	A	P	P
04	Navle kaveri	P	P	P	P	P	P	P	P	P	P
05	Aher Yogita Pramod	P	P	P	P	P	P	P	P	P	P
06	Deore Nikita Kailas	P	P	P	P	P	P	P	P	P	P
07	Nikam Pramod Bhausaheb	P	A	P	P	P	P	P	F	A	P
08	Shejwal Sagar Bapu	P	P	P	P	P	P	P	F	P	P
09	Wagh Samadhan Balasaheb	P	P	P	P	P	P	P	F	P	P
10	Shinde Aswini Shivaji	A	P	P	P	P	A	P	F	P	P
11	Kuyte Vishal Keshav	P	P	P	P	A	P	P	P	P	P
12	Kasar Anand Ganesh	P	P	P	P	P	P	P	A	A	A
13	Khatal Aswini Mothabhau	P	P	P	A	P	P	P	P	P	P
14	Sonawane Pallavi Dilip	P	P	P	P	P	P	P	F	P	P
15	Deokar Dipak Balasaheb	P	P	P	P	A	P	P	F	P	P

  
Subject Teacher

  
Course Co-ordinator

  
Head of the Department



S. N. J. B's

K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.

CHANDWAD (NASHIK)

Department of Chemistry

Certificate Course in Chemical and Pharmaceutical Analysis

Attendance Record (Theory) June

	Time	18-06-18	19-06-18	20-06-18	21-06-18	22-06-18	25-06-18	26-06-18	27-06-18	28-06-18	29-06-18
Sr.no.	Student Name					A			A		
01	Gavli Sunil	P	P	P	P	A	P	P	P	P	P
02	Sonawane Amol Kailas	P	P	P	P	P	P	P	P	P	P
03	Mengal Mahendra Ananda	A	P	A	P	P	P	P	A	P	P
04	Navle kaveri	P	P	P	P	P	P	P	P	P	P
05	Aher Yogita Pramod	P	P	P	P	P	P	P	P	P	P
06	Deore Nikita Kailas	P	P	P	P	P	P	P	P	P	P
07	Nikam Pramod Bhausahab	P	A	P	P	P	P	P	P	A	P
08	Shejwal Sagar Bapu	P	P	P	P	P	P	P	P	P	P
09	Wagh Samadhan Balasaheb	P	P	P	P	P	P	P	P	P	P
10	Shinde Aswini Shivaji	A	P	P	P	P	A	P	P	P	P
11	Kuyte Vishal Keshav	P	P	P	P	A	P	P	P	P	P
12	Kasar Anand Ganesh	P	P	P	P	P	P	P	A	A	A
13	Khatal Aswini Mothabhau	P	P	P	A	P	P	P	P	P	P
14	Sonawane Pallavi Dilip	P	P	P	P	P	P	P	P	P	P
15	Deokar Dipak Balasaheb	P	P	P	P	A	P	P	P	P	P

*R. Sane*

Subject Teacher

*Dr. Banchetti R.S.*

*(Signature)*

Course Co-ordinator

*(Signature)*

Head of the Department

**S.N.J.B.Ashram's**  
**K.K.H.A. Arts, S.M.G.L.Commerce & Science College, Chandwad. Dist.Nashik**

**Test for Certificate Course in Chemical & Pharmaceutical Analysis**

**Marks: 20**

**Date: 30<sup>th</sup> June 2018**

**Tick marks the correct answer: (Each question will carry 2 marks)**

- [1] The acidity & alkalinity of the solution can be measured by .....
- (A) Conductivity meter (B) Potentiometer (C) pH meter (D) Colorimeter
- [2] Fluorescence quantum yield is measured in .....technique.
- (A) UV-Spectrophotometer (B) Spectrofluorometer (C) IR (D) HPLC
- [3] TGA is used to measure .....properties of material with increase in temperature.
- (A) Chemical (B) Physical (C) Both Chemical & Physical (D) None of the above
- [4] DSC means.....
- (A) Diffused Scanning calorimetry (B) Differential Scanning Calorimetry  
(C) Differential Scattered Calorimetry (D) None of the above
- [5] Which metal lamp is used in colorimetry
- (A) Iron (B) Tungsten (C) Sodium (D) Potassium
- [6] More retention time of organic compound in HPLC means compound is.....
- (A) Polar (B) Non Polar (C) Aromatic (D) Aromatic
- [7] In Beer's law .....Vs Concentration is measured.
- (A) Temperature (B) Absorbance (C) Transmittance (D) Volume
- [8] Isolation of compounds is possible by .....technique.
- (A) HPLC (B) TGA (C) IR (D) Potentiometer
- [9] Photomultiplier tube is used in
- (A) Uv-Vis. Spectroscopy (B) IR (C) Colorimetry (D) Polarimeter
- [10] Polarimeter measures .....of the substance
- (A) Color (B) Angle of rotation (C) Temperature (D) Absorbance

**S.N.J.B.Ashram's**  
**K.K.H.A. Arts, S.M.G.L.Commerce & Science College, Chandwad. Dist.Nashik**

**Evaluation for Certificate Course Chemical & Pharmaceutical Analysis**  
**(2018-19)**

Sr no.	Student Name	Test (20 Marks)	Practical (10 marks)	Viva (10 marks)	Home Assignments (10 Marks)	Total Marks (out of 50)
01	Gawali Sunil Rajendra	14	07	06	08	35
02	Sonawane Amol Kailas	16	08	07	07	38
03	Mengal Mahendra Ananda	16	07	06	07	36
04	Navle kaveri Bhagvat	14	08	07	06	35
05	Aher Yogita Pramod	16	08	08	07	37
06	Deore Nikita Kailas	16	07	07	08	38
07	Nikam Pramod Bhausahab	14	04	04	06	30
08	Shejwal Sagar Bapu	14	06	05	07	32
09	Wagh Samadhan Balasaheb	16	06	07	05	34
10	Shinde Aswini Shivaji	14	07	06	05	32
11	Kuyte Vishal Keshav	14	06	04	09	33
12	Kasar Anand Ganesh	16	07	08	04	35
13	Khatal Aswini Mothabhou	12	07	06	08	33
14	Sonawane Pallavi Dilip	12	09	08	08	37
15	Deokar Dipak Balasaheb	18	08	07	07	40

Dr. A. W. A. v. s.





**K. K. H. A. ARTS & S. M. G. L. COMMERCE & S.P.H.J.SCIENCE COLLEGE.**

**CHANDWAD (NASHIK)**

Date: 02/07/18

**“Certificate”**

It is certified that Dr. Valmik S. Aware from Department of Chemistry has Co-ordinated and completed successfully Certificate Course in Chemical and Pharmaceutical Analysis (18/06/2018 to 30/06/2018). I congratulate him for the successful completion of the course.



PRINCIPAL  
K.K.H. A. Arts, Comm. & S.P.H.J  
Science, & S.P.D.S. Arts,  
Comm. & Science (Junior) College,  
Chandwad, Dist. Nashik - 423 101

Shri Neminath Jain Brahmacharyashram's  
**K.K.H. Abad Arts, S.M.G. Lodha Commerce & S.P.H. Jain Science College,**

Neminagar Chandwad, Dist. Nashik 423 101.

"BEST COLLEGE AWARD 2015-16 of Savitribai Phule Pune University"

Re-accredited by NAAC with 'B' Grade



28/11/1928

## CERTIFICATE OF COMPLETION

This certificate is presented to

Mr. /Ms.

of M.Sc. II Organic Chemistry

in recognition of successfully completing a 60 contact hours Certificate Course on

### Chemical and Pharmaceutical Analysis

from 18<sup>th</sup> June 2018 to 30<sup>th</sup> June 2018.

Dr. V.S.Aware

(Course Co-ordinator)

Dr. A. M. Patil

(Head, Dept. Of Chemistry)

Dr. G. H. Jain

(Principal)



## Report of completion of course

The course is designed in such way that will enable students to gain knowledge and expertise in the field of pharmaceutical analysis. This course is helpful in the carrier of students in pharmaceutical industry and provides excellent foundation for future research degree. The said course is supportive to the students to their post graduate education. The course is completed successfully in 60 hrs (10 days) and the course has provided sound backgrounds about theory of the available instruments and necessary fundamental training.

The syllabi of this course include seven sections:

First section increased awareness and importance among the students about analysis in pharmaceutical industry which increased the curiosity among the students and made clear objective about the course.

Second section provided sampling knowledge about of solid, liquid and gaseous chemicals. This section also provides how to manage large no. of samples and their registration.

Third section provided theoretical and practical knowledge about sampling methods.

Section four and five helps student to enhance their theoretical background about various instruments important in pharmaceutical industry. The training of available instruments like PH-Metry, Colorimetry, Polarimeter, and Conductivity meter is also provided to students.

Section six provided theoretical knowledge about different chromatographic methods. Practical knowledge about ion exchange chromatography, Thin Layer Chromatography, Column chromatography is also provided.

Section seven helps students to gain knowledge about different titrimetric analysis. The theory about different kind of titrations was taught with experiments.

This year IR & UV-Visible spectrophotometer were purchased and installed in central instrumentation facility. All students become familiar with both the instruments and are able to record and interpret the spectra.

This course theory along with practicals was finished within 12 days. (18<sup>th</sup> June -30<sup>th</sup> June 2018). Then the student's feedback took in order to get inputs from students for future improvements in the course. After satisfactory feedback the certificate to the concerned students were delivered.