



Manoharbhai Shikshan Prasarak Mandal Armori's

Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-Chandrapur 441205

Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)
www.rmgcollegenagbhid.in



SELF STUDY REPORT [SSR] CYCLE - II (2017-2022)

Criterion No – I

Metric No – 1.2.1

Metric Name - Number of certificate / value added courses offered and online courses of MOOC's, SWAYAM, NPTEL etc.



Manoharbai Shikshan Prasarak Mandal, Armori's
**RASHTRAPITA MAHATMA GANDHI ART'S & SCIENCE
COLLEGE, NAGBHID, DIST. CHANDRAPUR**
Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

Officiating Principal
Dr. G. D. Deshmukh
M. Sc., Ph.D., NET

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Letter No. RMGCN/ /2023

Date: / /2023

Declaration

This is to declare that the information, reports, true copies etc. given in this file as a supporting documents is verified by IQAC and found correct.

Dr. G. D. Deshmukh
Officiating Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



To,

Principal,
Rashtrapita Mahatma Gandhi Art's and
Science College, Nagbhid

Subject:- Permission for Organizing Certificate Course in Herbal Medicine

Respected Sir,

With Reference to the above subject, *Department of Botany* is planned to organize a *Certificate Course in Herbal Medicine* of our college. The details of the program are as follows:

Name of Course	Certificate Course in Herbal Medicine
Name of Coordinator	Dr. Vikas M. Mohture
Duration	3 Months
Tentative Schedule	05 January to 05 April
Intend Students	UG Students

Kindly request you to give the permission to conduct the Certificate Course.

Thanking You.



Your Faithfully
Dr. Vikas M. Mohture
Department of Botany,
R.M.G. Arts & Science College, Nagbhid

Verified and approved by:



Coordinator
IQAC
IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



Department of Botany

Website- www.rmgcollegenagbhid.in

E mail - botanyrmgcnagbhid@gmail.com

Notice

All the B.A. and B. Sc. Students are hereby informed that the Department of Botany is going to organize a Certificate course in Herbal Medicine. The interested students may contact the course coordinator for admission. The details of course is as follows

Name of Course	-	Certificate course in Herbal Medicine
Course Coordinator	-	Dr. V. M. Mohture
Duration	-	3 Months
Tentative schedule	-	01 January to 30 March
Intend students	-	UG Students
About Course	-	Key Points- <ul style="list-style-type: none">▪ Introduction to Medicinally important Plant▪ Herbs as raw materials▪ Herbal Nutraceutical▪ Plants in day today life▪ Nutritive and medicinal value of some fruits

Outcome-

- This course provides the necessary background for students to begin to incorporate herbal medicines into their practice, particularly in regards to their therapeutic properties, efficacy (or lack thereof), and safety concerns, including quality control and potential adverse effects.
- This course gives the knowledge of locally available medicinal plants.
- With the help of this course, students can formulate new medicines. He/She can further elaborate that formula at local level or industrial level.
- He/ She can patent his formula.

NAAC Coordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid

Dr. V. M. Mohture
Course Coordinator



Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



Manoharbhil Shikshan Prasarak Mandal Armori's
**Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-
 Chandrapur - 441 205**

Accredited by NAAC 'B' Grade
 (Affiliated to Gondwana University, Gadchiroli)
Certificate Course in Herbal Medicine
 2021 - 2022

Attendance Sheet

Sr. No.	Name of Student	01/01/2022	08/01/2022	15/01/2022	22/01/2022	29/01/2022	05/02/2022	12/02/2022	26/02/2022	05/03/2022	12/03/2022	19/03/2022	26/03/2022			
1	Ruchika Anandrao Nirgude	P	P	P	A	P	P	P	P	A	P	P	P			
2	Jagruti Umakant Panse	A	P	P	P	P	P	P	A	P	P	P	A			
3	Aswini Sanjay Ramteke	P	P	P	P	P	P	A	P	P	P	P	P			
4	Pragati Jitendra Ramteke	A	P	P	P	P	P	P	P	P	P	A	P			
5	Rajina Ravindra Sahare	P	P	P	P	P	P	P	A	P	P	P	A			
6	Parag Harihar Satpute	P	P	P	P	P	P	P	P	P	P	P	P			
7	Priti Srikrushna Shamkure	P	P	P	P	P	P	A	P	P	P	P	P			
8	Janhvi Kothiram Shende	A	P	P	P	P	P	P	P	P	A	P				
9	Bhagyashri Pemda Sidam	P	P	A	P	P	P	P	P	P	P	A				
10	Shimita Vikas Surpam	P	P	P	P	A	P	P	P	A	P	P				
11	Sweta Digambar Tonge	P	P	P	P	P	P	A	A	P	P	P	P			
12	Sakshi Pitambar Wankhede	A	A	P	P	P	P	P	P	P	P	P	P			
13	Aditya Shalikram Watgure	P	P	P	P	P	P	P	A	A	P	P				
14	Pallavi Yadao Bhakte	P	P	P	P	P	P	A	P	P	P	P				
15	Kavita Ramdas Gaikawad	A	P	P	P	P	P	P	P	P	P	P				
16	Sonali Vasanta Garmade	P	P	P	P	A	P	P	P	P	P	P				
17	Priyanka Purushottam Bankar	A	P	P	P	P	P	A	P	P	P	A				
18	Achal Bhagwan Kamdi	P	P	P	P	P	P	P	P	A	P	P				
19	Vaishnavi Rajeshwar Kayarkar	P	P	A	A	P	P	P	P	P	P	A				
20	Yogeshwari Ravindra Bhajbhujje	P	P	P	P	P	P	P	P	P	P	P				

IQAC Co-ordinator
 Rashtrapita Mahatma Gandhi
 Arts & Science College, Nagbhid

DR. VIKAS M. MOHITE
 COURSE CO-ORDINATOR
 ASSISTANT PROFESSOR
 R. M. G. ARTS AND SCIENCE COLLEGE
 NAGBHID, DIST. CHANDRAPUR

Principal
 Rashtrapita Mahatma Gandhi
 Arts & Science College,
 Nagbhid, Dist. Chandrapur



Manoharbai Shikshan Prasarak Mandal Armori's
Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur - 441 205


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Certificate Course in Herbal Medicine
2021 - 2022

Sr. No.	Name of Student	Obtained Grade	Certificate Issued
1	Ruchika Anandrao Nirgude	A	R Nirgude
2	Jagruti Umakant Panse	A	J Panse
3	Aswini Sanjay Ramteke	A	A Ramteke
4	Pragati Jitendra Ramteke	A+	P Ramteke
5	Rajina Ravindra Sahare	A+	R Sahare
6	Parag Harihar Satpute	A	P Satpute
7	Priti Srikrushna Shamkure	A+	P.S. shamkure
8	Janhvi Kothiram Shende	A	J Shende
9	Bhagyashri Pemda Sidam	A	B Sidam
10	Shimita Vikas Surpam	A	S Surpam
11	Sweta Digambar Tonge	A	S Tonge
12	Sakshi Pitambar Wankhede	A	S Wankhede
13	Aditya Shalikram Watgure	A	A Watgure
14	Pallavi Yadao Bhakte	A+	P. Y. Bhakte
15	Kavita Ramdas Gaikawad	A	K Gaikawad
16	Sonali Vasanta Garmade	A	S Garmade
17	Priyanka Purushottam Bankar	A	P Bankar
18	Achal Bhagwan Kamdi	A	A Kamdi
19	Vaishnavi Rajeshwar Kayarkar	A	V Kayarkar
20	Yogeshwari Ravindra Bhajbhujje	A	Y Bhajbhujje


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
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Manoharbai Shikshan Prasarak Mandal Armori's
**Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-
Chandrapur - 441 205**

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**Certificate Course in Herbal Medicine
2020 - 2021
Attendance Sheet**

Sr. No.	Name of Student	Date														
		06/02/2021	13/02/2021	20/02/2021	27/02/2021	06/03/2021	13/03/21	20/03/21	27/03/21	03/03/21	10/03/21	17/03/21	24/03/21			
1	Komal Kishor Chavan	P	P	P	P	A	A	P	P	P	P	P	P			
2	Bhagyashri Rakesh Gedam	A	P	P	P	P	P	P	P	A	P	P	P			
3	Akash Haridas Ghyar	P	P	A	P	P	A	A	P	P	P	P	P			
4	Dhanashri Anandrao Kurzekar	P	P	P	P	P	P	P	A	P	P	P	A			
5	Bhavesh Shankar Thakare	A	P	P	P	P	P	P	P	A	P	P	P			
6	Harshita Prabhakar Wadhai	P	P	P	P	P	P	A	P	P	P	P	P			
7	Payal Nandakar Meshram	A	P	P	P	P	P	P	P	P	P	P	P			
8	Rohini Vilas Bambole	P	P	P	P	P	A	A	P	P	P	P	P			
9	Dipak Arun Bankar	A	P	P	P	P	P	P	P	P	P	P	P			
10	Akansha Giridhar Amrutkar	P	P	P	A	P	P	P	A	P	P	P	P			
11	Dhanshri Anil Bahekar	A	A	P	P	P	P	P	P	P	P	A	P			
12	Ashvinee Vishwananth Bawankar	P	P	P	P	P	P	P	P	A	P	P	P			
13	Maheshwari Madhukar Bhojar	A	P	P	P	P	A	A	P	P	P	P	P			
14	Khushbhu Suresh Bhure	A	A	P	P	P	P	P	P	P	P	P	P			
15	Priya Nanaji Chauke Sneha	P	P	P	P	P	P	P	P	P	P	P	P			
16	Sneha Narendra Dadmal	P	P	P	P	P	A	A	P	P	P	P	P			


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid


Course Co-ordinator
DR. VIKAS M. MOHTURE
ASSISTANT PROFESSOR
R. M. G. ARTS AND SCIENCE COLLEGE
NAGBHID, DIST. CHANDRAPUR


Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur



Manoharbhai Shikshan Prasarak Mandal Armori's
Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur - 441 205
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Certificate Course in Herbal Medicine
2020 - 2021

Sr. No.	Name of Student	Obtained Grade	Certificate Issued
1	Komal Kishor Chavan	A+	
2	Bhagyashri Rakesh Gedam	A+	
3	Akash Haridas Ghyar	A+	
4	Dhanashri Anandrao Kurzekar	A+	
5	Bhavesh Shankar Thakare	A+	
6	Harshita Prabhakar Wadhai	A+	H.P. Wadhai
7	Payal Nandakar Meshram	A	
8	Rohini Vilas Bambole	A	
9	Dipak Arun Bankar	A+	
10	Akansha Giridhar Amrutkar	A+	
11	Dhanshri Anil Bahekar	A+	
12	Ashvinee Vishwananth Bawankar	A+	
13	Maheshwari Madhukar Bhojar	A+	
14	Khushbhu Suresh Bhure	A	
15	Priya Nanaji Chauke Sneha	A	
16	Sneha Narendra Dadmal	A	S.N. Dadmal

Dr. V. M. Mohitkar
Course Co-ordinator.

IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur





Manoharbhai Shikshan Prasarak Mandal Amruti's
Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur - 441 205
Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

Certificate Course in Herbal Medicine
2019 - 2020
Attendance Sheet

Sr. No.	Name of Student	2020													
		04/01	11/01	18/01	25/01	01/02	08/02	15/02	22/02	29/02	07/03	14/03	21/03	28/03	
1	Shital Vikas Shambharkar	P	P	A	P	P	P	P	A	P	P	P	P	P	
2	Durga Anandrao Dadmal	P	P	P	P	P	P	P	P	P	A	P	P	P	
3	Pornima Subhash Randhaye	A	P	P	P	P	P	P	P	A	P	P	P	A	
4	Neha Manohar Shinde	P	P	P	P	A	P	P	P	P	P	P	P	P	
5	Vaibhav Gurudas Gaikwad	A	P	P	P	P	P	P	P	A	A	P	P	P	
6	Manisha Rajendra Khade	P	P	P	P	P	P	P	P	P	A	P	P	P	
7	Vaishnavi Mahadeorao Kohale	A	P	P	P	P	P	P	P	P	P	P	P	P	
8	Rasana Giridhar Pillewan	P	P	P	P	P	A	P	P	P	P	P	P	P	
9	Puja Ashok Nagose	A	P	P	P	P	P	P	P	P	A	A	P	P	
10	Ajay Dattaprabhu Uke	A	P	P	P	P	P	P	P	P	P	P	P	P	
11	Amit Dhanraj Ambade	P	P	A	P	P	P	P	P	P	A	P	P	P	
12	Virendra Santosh Amrutkar	A	P	P	A	P	P	P	A	P	P	P	P	P	
13	Pratik Nilkanth Chandekar	P	P	P	P	P	P	P	A	P	P	P	P	P	
14	Laxmi Anmol Chanekar	P	P	P	P	P	P	P	P	P	P	P	P	P	
15	Vaishnavi Arvind Naktode	A	P	P	P	P	P	P	P	P	A	P	P	P	
16	Gajabhe Yugesh Vitthal	P	A	P	P	P	P	P	P	P	A	P	P	P	


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid


Course Co-ordinator
DR. VIKAS M. MOHTURE
ASSISTANT PROFESSOR
R. M. G. ARTS AND SCIENCE COLLEGE
NAGBHID, DIST. CHANDRAPUR.


Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur



Manoharabhai Shikshan Prasarak Mandal Armori's
Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur - 441 205

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Certificate Course in Herbal Medicine
2019 - 2020

Sr. No.	Name of Student	Obtained Grade	Certificate Issued
1	Shital Vikas Shambharkar	A+	
2	Durga Anandrao Dadmal	A+	
3	Pornima Subhash Randhaye	A+	
4	Neha Manohar Shinde	A+	
5	Vaibhav Gurudas Gaikwad	A	
6	Manisha Rajendra Khade	A	
7	Vaishnavi Mahadeorao Kohale	A+	
8	Rasana Giridhar Pillewan	A	
9	Puja Ashok Nagose	A+	
10	Ajay Dattaprabhu Uke	A+	
11	Amit Dhanraj Ambade	A+	
12	Virendra Santosh Amrutkar	A+	
13	Pratik Nilkanth Chandekar	A	
14	Laxmi Anmol Chanekar	A+	
15	Vaishnavi Arvind Naktode	A+	
16	Gajabhe Yugesh Vitthal	A	

Dr. V. M. Mohtyre
Course coordinator

IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur





Manoharbhai Shikshan Prasarak Mandal Armori's
**Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-
 Chandrapur - 441 205**
 Accredited by NAAC 'B' Grade
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**Certificate Course in Herbal Medicine
 2018 - 2019
 Attendance Sheet**

Sr. No.	Name of Student	2019											
		05/01/2019	12/01/2019	19/01/2019	26/01/2019	02/02/2019	09/02/2019	16/02/2019	23/02/2019	08/03/2019	15/03/2019	22/03/2019	29/03/2019
1	Aishwarya Pradip Tarvekar	P	P	A	P	P	P	P	A	P	P	P	P
2	Dileshwari Ruplal Tembhare	A	P	P	P	P	P	P	P	P	P	A	P
3	Dipali Dewanand Ambade	P	P	P	P	P	A	P	P	P	P	P	P
4	Jayshree Ramesh Kamdi	P	P	A	P	P	P	P	P	P	P	P	A
5	Kalyani Ashok Nandapure	P	P	A	P	P	P	P	A	P	P	P	A
6	Mamata Ramdasji Hemane	P	A	P	P	P	A	A	P	P	P	P	A
7	Nisha Yashvant Kosamshile	P	P	P	P	P	P	P	P	P	P	P	P
8	Prajakta Akash Kurzekar	P	P	P	P	A	P	P	P	P	P	P	P
9	Priyanka Naresh Khulsinge	A	P	P	P	P	P	P	A	P	P	A	P
10	Rajani Manohar Chilbule	P	P	P	P	P	P	P	P	P	P	P	P
11	Rakhi Namdeo Nagapure	A	A	P	P	P	P	P	P	P	P	P	P
12	Rima Kewalram Mendhe	P	P	A	P	P	P	P	P	P	P	P	P
13	Sarika Prabhakar Supare	P	P	P	P	A	P	P	P	P	A	P	P
14	Shiwanee Chintaman Mulewar	A	P	P	P	P	P	P	A	P	P	P	P
15	Sonam Dadaji Uikey	P	P	A	P	P	P	P	P	P	P	P	P
16	Tanaya Sudhakar Lanjewar	P	P	P	A	P	P	P	P	P	P	P	A
17	Ujjwala Sham Kamdi	P	P	P	P	P	P	P	A	P	P	P	P
18	Karan Ekanath Dable	P	P	P	P	P	P	P	A	P	P	P	P


IQAC Co-ordinator
 Rashtrapita Mahatma Gandhi
 Arts & Science College, Nagbhid


Course Co-ordinator
 DR. ANIKAS M. MOHTURE
 RASHTRAPITA MAHATMA GANDHI
 ARTS & SCIENCE COLLEGE,
 NAGBHID, DIST. CHANDRAPUR


Principal
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Nagbhid, Dist-Chandrapur - 441 205
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Certificate Course in Herbal Medicine
2018-2019

Sr. No.	Name of Student	Obtained Grade	Certificate Issued
1	Aishwarya Pradip Tarvekar	A+	<i>Aishwarya Tarvekar</i>
2	Dileshwari Ruplal Tembhare	A+	<i>Dileshwari Tembhare</i>
3	Dipali Dewanand Ambade	A+	<i>Dipali Ambade</i>
4	Jayshree Ramesh Kamdi	A+	<i>Jayshree Kamdi</i>
5	Kalyani Ashok Nandapure	A+	<i>Kalyani Nandapure</i>
6	Mamata Ramdasji Hemane	A+	<i>Mamata Hemane</i>
7	Nisha Yashvant Kosamshile	A+	<i>Nisha Kosamshile</i>
8	Prajakta Akash Kurzekar	A+	<i>Prajakta Kurzekar</i>
9	Priyanka Naresh Khulsinge	A+	<i>Priyanka Khulsinge</i>
10	Rajani Manohar Chilbule	A+	<i>Rajani Chilbule</i>
11	Rakhi Namdeo Nagapure	A+	<i>Rakhi Nagapure</i>
12	Rima Kewalram Mendhe	A+	<i>Rima Mendhe</i>
13	Sarika Prabhakar Supare	A+	<i>Sarika Supare</i>
14	Shiwanee Chintaman Mulewar	A+	<i>Shiwanee Mulewar</i>
15	Sonam Dadaji Uikey	A+	<i>Sonam Uikey</i>
16	Tanaya Sudhakar Lanjewar	A+	<i>Tanaya Lanjewar</i>
17	Ujjwala Sham Kamdi	A+	<i>Ujjwala Kamdi</i>
18	Karan Ekanath Dable	A+	<i>Karan Dable</i>

V.M. Montone
Dr. V.M. Montone
Course Coordinator



Principal
Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

IQAC Co-ordinator
IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



Manoharabhai Shikshan Prasarak Mandal Armori's
**Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-
 Chandrapur - 441 205**

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Certificate Course in Herbal Medicine
 (Duration 3 Months)

Name of Course	Theory	Practical	Internal Assessment	Total
Herbal Medicine	50 Marks	30 Marks	20 Marks	100

Internal Assessment:
 Based on Collection of Plants, overall attendance and performance of the student.

Table: Conversion of Marks to Grade

Score (Out of 100)	Grade
100 to 76	A ⁺ : Outstanding
75 to 61	A : Very Good
60 to 46	B : Good
45 to 35	C : Satisfactory
Below 35	D : Fail

NOTE:

1. EXAMINATION will be conducted by the college and the grades will be given to the student accordingly.


 IQAC Co-ordinator
 Rashtrapita Mahatma Gandhi
 Art's & Science College, Nagbhid




 Principal
 Rashtrapita Mahatma Gandhi
 Art's & Science College,
 Nagbhid, Dist. Chandrapur

Certificate Course in Herbal Medicine

(Duration 3 Months)

Unit – I: **(06 Hours)**
 Introduction to Medicinally important Plant parts: Fruits, Leaves, Stem and its modifications (underground and aerial), Roots.
 Study of some medicinally important families with reference to the systematic position. Diagnostic features and medicinal uses only: Meliaceae, Myrtaceae, Apiaceae, Asclepiadaceae, Solanaceae, Lamiaceae, Euphorbiaceae, Zingiberaceae, Musaceae and Poaceae.

Unit – II: **(06 Hours)**
Herbs as raw materials:
 Definition of herb, herbal medicine, herbal medicinal product, herbal drug preparation. Source of herbs, selection, identification and authentication of herbal materials. Processing of herbal raw material, basic principles involved in Ayurveda, Siddha, Unani and Homeopathy.
 Preparation and standardization of Ayurvedic formulations (Aristas and Asawas, Ghutika, Churna, Lehya and Bhasma).

Unit – III: **(06 Hours)**
Herbal Nutraceuticals:
 General aspects, Market, growth, scope and types of products available in the market. Health benefits and role of herbal nutraceuticals in ailments like Diabetes, Cardiovascular diseases, Cancer, Irritable bowel syndrome and various Gastro intestinal diseases.

Unit IV: **(06 Hours)**
 Plants in day today life – *Ocimum sanctum*, *Centella asiatica*, *Solanum trilobatum*, *Cassia auriculata*, *Aloe vera*. Nutritive and medicinal value of some fruits (Guava, Sapota, Orange, Mango, Banana, Lemon, Pomegranate) and vegetables (*Moringa*, *Solanum nigrum*, Cabbage).

Laboratory Exercises:

1. Identification and Medicinal value of locally available medicinal plants.
2. Morphology of the useful plant parts.
3. To study the methods of disease diagnosis and Herbal formulations by Aboriginal peoples.
4. To prepare crude herbal drugs of locally available plants.
5. To prepare herbal formulations at laboratory scale.
6. To perform preliminary phytochemical screening of crude drugs.
7. To identify herbal drug sources based on morphological characters and microchemical tests.
8. To visit nearby herbal drug production unit.


References:

1. Gokhale, S.S., C.K.Kokate and A.P. Purohit (1994) Pharmacognosy. Nirali Prakashan. Pune.
2. Tyagi, Dinesh Kumar (2005) Pharma Forestry. Field Guide to Medicinal Plants. Atlantic Publishers and Distributors, New Delhi.
3. Publishers and Distributors, New Delhi.
4. Farooqi, A.A., and B.S. Sreeramu (2004). Cultivation of Medicinal and Aromatic Crops. University Press (India) Pvt. Ltd., Hyderabad.
5. Singh & Jain (1985) Taxonomy of Angiosperms. Rastogi Publications, Meerut.
6. Ethnobiology – R.K.Sinha & Shweta Sinha – 2001. Surabhe Publications – Jaipur.
7. Tribal medicine – D.C. Pal & S.K. Jain 1998, Naya Prakash, 206, Bidhan Sarani, Calcutta – 700 006.
8. Contribution to Indian ethnobotany – S.K. Jain 1995, 3rd edition, Scientific publishers, P.B.No. 91, Jodhpur, India.
9. A Manual of Ethnobotany – S.K.Jain, 1995, 2nd edition.
10. Pharmacognosy, S.B.Gokhale, Dr.C.K. Kokate, A.P. Purohit
11. Publisher: Nirali Prakasham, Pune.
12. Herbs that Heal, Acharya Vipul Rao – Diamond Pocket Books, New Delhi.
13. Practical Pharmacognosy. Dr.C.K. Kokate et al.
14. Phytochemical methods, Horborne.
15. An Introduction to Medicinal Botany and Pharmacognosy – N.C. Kumar, Emkay Publications, Delhi.
16. Publications, Delhi.


Dr. V.M. Mishra
Course Coordinator

Course Outcome

- This course provides the necessary background for students to begin to incorporate herbal medicines into their practice, particularly in regards to their therapeutic properties, efficacy (or lack thereof), and safety concerns, including quality control and potential adverse effects.
- This course gives the knowledge of locally available medicinal plants.
- With the help of this course, students can formulate new medicines. He/She can further elaborate that formula at local level or industrial level.
- He/ She can patent his formula.


Dr. V.M. Mohite
Course Co-ordinator 2



IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid





Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

Manoharabhai Shikshan Prasarak Mandal Armor's

Rashtrapita Mahatma Gandhi Arts & Science College,

Nagbhid, Dist-Chandrapur

Accredited by NAAC 'B' Grade

(Affiliated to Gondwana University, Gadchiroli)



CERTIFICATE

This is to certify that, Mr. / Ms. _____
of B.A. / B. Sc. _____ has successfully completed the prescribed
"Certificate course in Herbal Medicine" from _____ to _____
He/ She has secured _____ grade.

Coordinator
Dr. V. M. Mohare



Principal

Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur



To,
Principal,
Rashtrapita Mahatma Gandhi Art's and
Science College, Nagbhid

Subject:- Permission for Organizing Certificate Course

Respected Sir,

With Reference to the above subject, *Department of Zoology* has proposed to organize a *Certificate Course in Bird Identification and Basic Ornithology* in our college. The details of the program are as follows:

Name of Course	Certificate Bird Identification and Basic Ornithology
Name of Coordinator	Dr.Ganpat D. Deshmukh
Duration	3 Months
Tentative Schedule	1 November to 1 February
Intend Students	UG Students

Kindly request you to give the permission to conduct the Certificate Course.

Thanking You.



Your Faithfully

Dr. Ganpat D. Deshmukh

Department of Zoology,

R.M.G. Arts & Science College, Nagbhid

Verified and approved by:



Coordinator



IQAC Co-ordinator

Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



Principal

Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**

Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology

Enrolment for Session 2020-2021

Attendance Sheet

Sr.No.	Name of the Student	Class	November-2020					Dec-2020					Jan-2021					Feb-2021				
			15Nov	20Nov	25Nov	30Nov	5Dec	12Dec	19Dec	26Dec	2Jan	5Jan	12Jan	19Jan	26Jan	2Feb	5Feb	12Feb	19Feb	26Feb		
1.	Mr. Lalit Diwakar Deshmukh	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
2.	Mr. Vaibhav Ashok Deshmukh	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
3.	Ms. Asvinta Bhaskar Dhone	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
4.	Ms. Divya Mukharu Ghollar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
5.	Ms. Vaishnavi Shrikrushna Hemne	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
6.	Ms. Ashvina Santosh Ikhar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
7.	Ms. Mousami Ashok Jambhule	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
8.	Ms. Diksha Ramkrishna Kamdi	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
9.	Mr. Karan Prakash Karudkar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
10	Ms. Neha Bhaurao Kawadkar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
11	Ms. Kalyani Prakash Kawale	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
12	Ms. Payal Tikaram Kawale	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
13	Ms. Diksha Narendra Kule	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
14	Ms. Vidya Dayaram Madankar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
15	Ms. Anjana Kevalram Madavi	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
16	Ms. Prachi H. Nannaware	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
17	Mr. Sushant Tularam Kawale	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		

(Signature)
Course Coordinators




(Signature)
Prof. Chandrakant
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chhatrapur

(Signature)
IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chhatrapur

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**
Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology
Enrolment for Session 2020-2021
Attendance Sheet

Sr.No.	Name of the Student	Class	Signature
1.	Mr. Lalit Diwakar Deshmukh	B.Sc.III	<i>Lalit Deshmukh</i>
2.	Mr. Vaibhav Ashok Deshmukh	B.Sc.III	<i>Vaibhav Deshmukh</i>
3.	Ms. Asvinta Bhaskar Dhone	B.Sc.III	<i>Asvinta Dhone</i>
4.	Ms. Divya Mukharu Ghollar	B.Sc.III	<i>Divya Ghollar</i>
5.	Ms. Vaishnavi Shrikrushna Hemne	B.Sc.III	<i>Vaishnavi Hemne</i>
6.	Ms. Ashvina Santosh Ikhar	B.Sc.III	<i>Ashvina Ikhar</i>
7.	Ms. Mousami Ashok Jambhule	B.Sc.III	<i>Mousami Jambhule</i>
8.	Ms. Diksha Ramkrishna Kamdi	B.Sc.III	<i>Diksha Kamdi</i>
9.	Mr. Karan Prakash Karudkar	B.Sc.III	<i>Karan Karudkar</i>
10.	Ms. Neha Bhaurao Kawadkar	B.Sc.III	<i>Neha Kawadkar</i>
11.	Ms. Kalyani Prakash Kawale	B.Sc.III	<i>Kalyani Kawale</i>
12.	Ms. Payal Tikaram Kawale	B.Sc.III	<i>Payal Kawale</i>
13.	Ms. Diksha Narendra Kule	B.Sc.III	<i>Diksha Kule</i>
14.	Ms. Vidya Dayaram Madankar	B.Sc.III	<i>Vidya Madankar</i>
15.	Ms. Anjana Kevalram Madavi	B.Sc.III	<i>Anjana Madavi</i>
16.	Ms. Prachi H. Nannaware	B.Sc.III	<i>Prachi Nannaware</i>
17.	Mr. Sushant Tularam Kawale	B.Sc.III	<i>Sushant Kawale</i>


Course Co-ordinator


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**

Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology
Enrolment for Session 2021-2022

Sr.No.	Name of the Student	Class	Nov-2021						Dec-2021				Jan-2022				Feb-2022			
			10	15	20	25	30	8	15	30	6	15	30	5	10	18	28			
1.	Ms. Trupti Leksham Gaydhane	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
2.	Ms. Maithili Dilip Ghotekar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
3.	Ms. Isha Arun Jambhule	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
4.	Ms. Sima Ravindra Kamdi	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
5.	Ms. Achal Bhagvan Kamdi	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
6.	Ms. Nikita Ramesh Kamdi	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
7.	Ms. Ravina Vijay Kannake	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
8.	Ms. Vaishnavi Rajeshwar Kayarkar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
9.	Ms. Kalyani Rajendra Kove	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
10.	Ms. Kajal Suresh Magare	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
11.	Ms. Jagruti Jagruti Maraskolhe	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
12.	Ms. Trupti Kishore Meshram	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
13.	Ms. Mira Asaram Nagrikar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
14.	Ms. Archana Ashok Nandapure	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
15.	Ms. Pranali H. Nannaware	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
16.	Ms. Aishwarya Gajanan Naukarkar	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
17.	Mr. Chetna Suresh Ninave	B.Sc.III	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			

[Signature]
Course Coordinator



[Signature]
Principal

Rashtrapita Mahatma Gandhi
- Arts & Science College,
Nagbhid, Dist. Chandrapur

[Signature]
ICAC Co-ordinator
Rashtrapita Mahatma Gandhi
College of Arts and Science
Nagbhid

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**
Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology
Enrolment for Session 2020-2021
Result

Sr.No.	Name of the Student	Obtained Grade	Certificate issued
1.	Mr. Lalit Diwakar Deshmukh	A+	<i>Deshmukh</i>
2.	Mr. Vaibhav Ashok Deshmukh	A+	<i>Vaibhav</i>
3.	Ms. Asvinta Bhaskar Dhone	A	<i>Asvinta</i>
4.	Ms. Divya Mukharu Ghollar	A+	<i>Divya</i>
5.	Ms. Vaishnavi Shrikrushna Hemne	A+	<i>Vaishnavi</i>
6.	Ms. Ashvina Santosh Ikhar	A+	<i>Ashvina</i>
7.	Ms. Mousami Ashok Jambhule	A	<i>Mousami</i>
8.	Ms. Diksha Ramkrishna Kamdi	A+	<i>Diksha</i>
9.	Mr. Karan Prakash Karudkar	A+	<i>Karudkar</i>
10	Ms. Neha Bhaurao Kawadkar	A++	<i>Neha</i>
11	Ms. Kalyani Prakash Kawale	A	<i>Kawale</i>
12	Ms. Payal Tikaram Kawale	A+	<i>Kawale</i>
13	Ms. Diksha Narendra Kule	A	<i>Diksha</i>
14	Ms. Vidya Dayaram Madankar	A+	<i>Madankar</i>
15	Ms. Anjana Kevalram Madavi	A+	<i>Anjana</i>
16	Ms. Prachi H. Nannaware	A+	<i>Nannaware</i>
17	Mr. Sushant Tularam Kawale	A+	<i>Sushant</i>

[Signature]
Course Coordinator

[Signature]
IQAC Co-ordinator

Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



[Signature]
Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**
Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology
Enrolment for Session 2021-2022
Attendance Sheet

Sr.No.	Name of the Student	Class	Signature
1.	Ms. Trupti Lekhram Gaydhane	B.Sc.III	<i>T Gaydhane</i>
2.	Ms. Maithili Dilip Ghotekar	B.Sc.III	<i>M Ghotekar</i>
3.	Ms. Isha Arun Jambhule	B.Sc.III	<i>I Jambhule</i>
4.	Ms. Sima Ravindra Kamdi	B.Sc.III	<i>S Kamdi</i>
5.	Ms. Achal Bhagvan Kamdi	B.Sc.III	<i>A Bhagvan Kamdi</i>
6.	Ms. Nikita Ramesh Kamdi	B.Sc.III	<i>N Kamdi</i>
7.	Ms. Ravina Vijay Kannake	B.Sc.III	<i>R Kannake</i>
8.	Ms. Vaishnavi Rajeshwar Kayarkar	B.Sc.III	<i>V Kayarkar</i>
9.	Ms. Kalyani Rajendra Kove	B.Sc.III	<i>K Kove</i>
10.	Ms. Kajal Suresh Magare	B.Sc.III	<i>K Magare</i>
11.	Ms. Jagruti Jagruti Maraskolhe	B.Sc.III	<i>J Maraskolhe</i>
12.	Ms. Trupti Kishore Meshram	B.Sc.III	<i>T Meshram</i>
13.	Ms. Mira Asaram Nagrikar	B.Sc.III	<i>M.A. Nagrikar</i>
14.	Ms. Archana Ashok Nandapure	B.Sc.III	<i>A Nandapure</i>
15.	Ms. Pranali H. Nannaware	B.Sc.III	<i>P Nannaware</i>
16.	Ms. Aishwarya Gajanan Naukarkar	B.Sc.III	<i>A Naukarkar</i>
17.	Mr. Chetna Suresh Ninave	B.Sc.III	<i>C Ninave</i>


Course Coordinator



IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid





Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

**CERTIFICATE COURSE IN BIRD IDENTIFICATION
AND BASIC ORNITHOLOGY**
Rashtrapita Mahatma Gandhi College of Arts and Science Nagbhid
Department of Zoology
Enrolment for Session 2021-2022
Attendance Sheet

Sr.No.	Name of the Student	Obtained Grade	Certificate Issued
1.	Ms. Trupti Lekhram Gaydhane	A	Tamale
2.	Ms. Maithili Dilip Ghotekar	A+	Maithili
3.	Ms. Isha Arun Jambhule	A+	Ishambhule
4.	Ms. Sima Ravindra Kamdi	A+	S. Kamdi
5.	Ms. Achal Bhagvan Kamdi	A	A. Kamdi
6.	Ms. Nikita Ramesh Kamdi	A+	N. Kamdi
7.	Ms. Ravina Vijay Kannake	A	R. Kannake
8.	Ms. Vaishnavi Rajeshwar Kayarkar	A+	V. Kayarkar
9.	Ms. Kalyani Rajendra Kove	A+	K. Kove
10.	Ms. Kajal Suresh Magare	A+	K. Magare
11.	Ms. Jagruti Jagruti Maraskolhe	A+	J. Maraskolhe
12.	Ms. Trupti Kishore Meshram	A+	T. Meshram
13.	Ms. Mira Asaram Nagrikar	A	M. A. Nagrikar
14.	Ms. Archana Ashok Nandapure	A+	A. Nandapure
15.	Ms. Pranali H. Nannaware	A+	P. Nannaware
16.	Ms. Aishwarya Gajanan Naukarkar	A+	A. Naukarkar
17.	Mr. Chetna Suresh Ninave	A+	C. Ninave


Course Coordinator


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

BIRD IDENTIFICATION AND BASIC ORNITHOLOGY


Introduction

India hosts nearly eight percent of the globally known floral and faunal species while covering only 2.4 percent of the total land area of the world. But, at the same time, it is also home to nearly 18 percent of the global human population and in such a scenario pursuit of sustainable development is certainly a challenge. Birds are more popular and better studied than any other group of organism and consequently excellent indicator of health of ecosystem. The first Global Assessment from the Intergovernmental Science-Policy Panel on Biodiversity and Ecosystem Services (IPBES) concluded in 2019 that, from genes to species and ecosystems, humanity's common natural heritage, and ultimately its collective safety net, is declining fast. The report included an estimate (drawing on data from the International Union for the Conservation of Nature (IUCN) Red List, including BirdLife's assessments of extinction risk for all birds) that a shocking one million species may be currently threatened with global extinction. Not only do we risk losing a million unique and wondrous lifeforms, we also risk fundamentally impairing the biological processes that sustain our own existence. A healthy ecosystem is one that has both variety and abundance of life, and it is this richness that underpins ecosystem functions and delivers 'ecosystem services', such as pollination, water purification, carbon sequestration and storage, which in turn provide us with the food, water and clean air we need to live. Nature underpins the delivery of the Sustainable Development Goals. However, our systematic disregard for the environment is jeopardising progress towards sustainable development. Continued loss of nature threatens over half of global GDP as well as human lives and well-being, with the poorest and most vulnerable the first and hardest hit. This has been brought into sharp focus this year, with the roots of the current, devastating COVID-19 pandemic linked to our mismanagement of nature. While an economic and societal tragedy, COVID-19 presents an unprecedented opportunity to reset humanity's relationship with nature and to catalyse the transformative change necessary in our political, economic and financial systems. The UN-75 Global Dialogue reveals that people around the world overwhelmingly believe that climate and the environment will most affect humanity's future. The UN must recognise the value of nature, not just as the foundation of a healthy and resilient economy, but as the basis for human well-being, peace and security, and put nature at the core of its agenda. As we end the UN Decade on Biodiversity with nature in a poorer state than when the decade began, governments must reflect on the successes and failures of the last global plan on biodiversity documented in the Fifth Global Biodiversity Outlook. The post-2020 framework must this time succeed in putting nature on a path to recovery and securing a healthy, just and sustainable future for all, for the sake of both current and future generations. Birds can both illuminate the failures of recent targets and inform the requirements of new goals.

Department of Zoology, organizes certificate course on 'Bird identification and basic Ornithology' under the Green Skill Development Programme (GSDP). Duration of the course was approximately 4 weeks which was from 1st Dec. to 31st Dec. 2020, spanning about 100 Hrs. Green skills contribute to preserving or restoring environmental quality for sustainable future and include jobs that protect ecosystems and biodiversity, reduce energy and minimize waste and pollution. In line with the Skill India Mission of Hon'ble Prime Minister, Ministry of Environment, Forest & Climate Change (MoEF&CC) utilising the vast network and expertise of Dr. G.D. Deshmukh, Head, Department of Zoology, Ph.D. Supervisor, Gondwana University.


IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

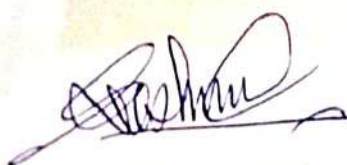
Objective - The programme endeavours to develop green skilled workers having technical knowledge and commitment to sustainable development, which will help in the attainment of the Nationally Determined Contributions (NDCs), Sustainable Development Goals (SDGs), National Biodiversity Targets (NBTs), as well as Waste Management Rules (2016). Being conspicuous, colourful and engaging, birds are popular. They are therefore an effective entry point for people to engage with the natural world and develop awareness of biodiversity and understanding of its value.

Opportunities - The candidates completing the Course(s) may be employed gainfully in the zoos/wildlife sanctuaries/national parks/ biosphere reserves/ wetland sites/ State Biodiversity Boards/Biodiversity Management Committees/Wildlife Crime Control Bureau; tourism (as Nature/Eco-tourist Guides).

Nationally determined contributions (NDCs) are at the heart of the Paris Agreement and the achievement of these long-term goals. NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. The Paris Agreement requests each country to outline and communicate their post-2020 climate actions, known as their NDCs. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

Time Schedule of the Certificate Course

Title of the component	Estimated Time (Hrs)
Introduction to the course	6
Bird classification and diversity	8
Adaptations In Birds	8
Birds and their habitat	8
Bird behaviour	2
Basics of instrumentation-Binocular-GPS-Camera	2
Bird Migration and flyways	2
How to observe birds	2
Bird identification	8
Birds and humans and culture	2
Threats to the birds	4
Bird conservation	6
Bird diversity of India	4
Threatened birds of India	4
Bird tourism as livelihood	4
Basics of IT Skills-Its application in bird watching	2
Field visits- wetlands and forest	24
Total	100



IQAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid




Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



Manoharbai Shikshan Prasarak Mandal Armori's

Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-Chandrapur

Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

CERTIFICATE

This is to certify that, Mr. / Ms. Achal Bhagwan Bhandi
of B.A. / B. Sc. III has successfully completed the prescribed
"Certificate course in Bird identification, from Nov-2021 to Feb-2022
and Basic Ornithology
He/ She has secured A+ grade.

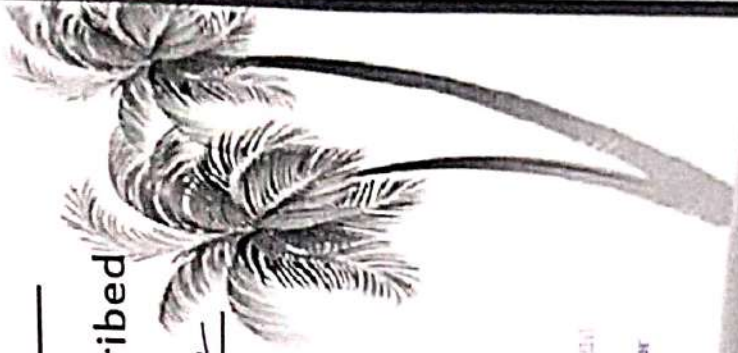



Coordinator


Principal



Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur



To,
Principal,
Rashtrapita Mahatma Gandhi Art's and
Science College, Nagbhid

Subject:- Permission for Organizing Certificate Course in Learn Fortran Programming for
Students

Respected Sir,

With Reference to the above subject, *Department of Physics and Skill
Development Committee* is planned to organize a *Certificate Course in Learn Fortran
Programming* for Students of our college. The details of the program are as follows:

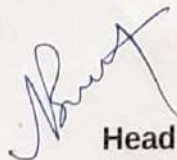
Name of Course	Certificate Course in Learn Fortran Programming
Name of Coordinator	Dr. Maneesh B. Matte
Duration	3 Months
Tentative Schedule	10 February to 10 May
Intend Students	UG Students

Kindly request you to give the permission to conduct the Certificate Course.

Thanking You.

Your Faithfully
Dr. Maneesh B. Matte
Head of Department of Physics,
R.M.G. Arts & Science College, Nagbhid

Verified and approved by:



Head

Department of Physics
Dr. M. B. Matte
Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist. Chandrapur



Convener

Skill Development
Dr. M. B. Matte
HOD, Dept of Physics
Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist. Chandrapur



Coordinator

IOAC
IOAC Co-ordinator
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur

Notice

All the students of the Rashtrapita Mahatma Gandhi Art's and Science College, Nagbhid are hereby informed that the Skill Development Committee in association with PHYSICS Department is organizing a Certificate Course in Learn Fortran Programming for Students. The details of the course are given below:

Name of Course	Certificate Course in Learn Fortran Programming
Duration	3 Months
Tentative Schedule	10 February to 10 May
Intend Students	UG Students
About the Course	<p>Objectives of the Course:-</p> <ol style="list-style-type: none">1. Analyze a complex computing problem2. Design, implement, and evaluate a computing-based solution3. An ability to apply mathematics to solving computing problems <p>Outcomes:-</p> <p>Our college is located in rural part of Chandrapur. Most of the students are from nearby villages. Today coding language is very essential and many part of computational doesn't work without coding.</p> <p>An ability to apply knowledge of computing and mathematics appropriate to the discipline. An ability to identify, formulate, and develop solutions to computational challenges. An ability to design, implement, and evaluate a computational system to meet desired needs within realistic constraints..</p>


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Principal
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Nagbhid, Dist. Chandrapur

Manoharbhai Shikshan Prasarak Mandal Armori's
Rashtrapita Mahatma Gandhi Art's and Science College,
Nagbhid, Dist:-Chandrapur (M.S.) 441205



Accredited by NAAC "B" Grade
(Affiliated to Gondwana University, Gadchiroli)


"Certificate Course in Learn Fortran Programming"

Session: 2021-2022

Department: Physics

List of Enrolled Students

S.No.	Name of the Students	Signature
1.	DEVENDRA B. KUMBHARE	D. B. Kumbhare
2.	VAIBHAO GULAB DESHMUKH	V. Deshmukh
3.	TEJAS DIGAMBAR KOLATE	T. Kolate
4.	ANAM SULEMAN DHAMANI	A. Dhamani
5.	ZARRIN FATIMA A IKHALAKH SHEIKH	Z. Sheikh
6.	AKANKSHA GHANSHYAM BULBULE	A. Bulbule
7.	MAYURI MORESHWAR SHENDE	M. Shende
8.	SHREYASH SHRIRAM GHYAR	S. Ghayar
9.	RUSHIKESH VILAS KUMBHARE	R. Kumbhare
10.	NANDKISHOR VASANTA BAWANE	N. Bawane
11.	RAJAT CHATRAPATI GAIKWAD	R. Gaikwad
12.	PAYAL RAMESH CHINCHOLKAR	P. Chincholkar
13.	SUMIT ANIL CHAUKE	S. Chauke
14.	MEGHA VASANT DAHARE	M. Dahare
15.	PRANAY NILKANTH KAYRKAR	P. Kayrkar


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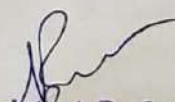
Certificate Course in Learn Fortran Programming

Session: 2021-2022

Department: Physics

Seminar Competition

S.No.	Name of the Students	Seminar Topic	Signature
1	DEVENDRA B. KUMBHARE	Do loop	D.B. Kumbhare
2	VAIBHAO GULAB DESHMUKH	Linux system	V. Deshmukh
3	TEJAS DIGAMBAR KOLATE	flow chart	T. Kolate
4	ANAM SULEMAN DHAMANI	Arrays in Fortran	A. Dhamani
5	ZARRIN FATIMA A IKHALAKH SHEIKH	The C-nuplet	Z. Sheikh
6	AKANKSHA GHANSHYAM BULBULE	Array	A. Bulbule
7	MAYURI MORESHWAR SHENDE	Allocatable Array	M. Shende
8	SHREYASH SHRIRAM GHYAR	Logical operators	S. Ghayar
9	RUSHIKESH VILAS KUMBHARE	GNU	R. Kumbhare
10	NANDKISHOR VASANTA BAWANE	Intrinsic function	N. Bawane
11	RAJAT CHATRAPATI GAIKWAD	Program structure	R. Gaikwad
12	PAYAL RAMESH CHINCHOLKAR	Windows system	P. Chincholkar
13	SUMIT ANIL CHAUKE	operating system	S. Chauke
14	MEGHA VASANT DAHARE	Mask arrays	M. Dahare
15	PRANAY NILKANTH KAYRKAR	The complex data typing	P. Kayrkar


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Certificate Course in Learn Fortran Programming

(Duration: 3 Months)

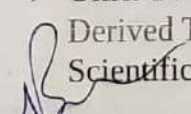
Session: 2021-2022

Department: Physics

Course Syllabus

Duration 3 Months

- **Unit:-I Introduction to Computing and Basic Fortran**
Introduction to Digital Computers, Operating Systems, Linux, Windows and other Operating Systems, Open Source Foundation and GNU, Programming and Problem Solving.
Introduction to Fortran, Data Types, Constants, and Variables, Operation and Intrinsic Functions, Expressions and Assignment Statements, Simple Input/Output, Program Structure Example: Simple Unit Conversion
- **Unit:-II. Control Constructs and Programming Units**
Logical Operators and Logical Expression, If Constructs, The Case Construct, Do Loops, Types of Programming Units, Main Program, External Procedures, Internal Procedures, Modules Subroutines, Functions, Scope of Variables, Recursion.
- **Unit:-III Arrays and Array Operations and Fortran I/O and External Files**
Arrays in Fortran, Array Processing, Array Constructors, Mask Array, Allocatable Arrays, Arrays Passed as Argument to Procedures, Functions Return Arrays, Elemental Procedure, Pure Procedure, Formatted Output, Formatted Input, File Processing
- **Unit:-IV User Defined Types and Structures and Graphics (Gnuplot)**
Derived Types, Type Bound Procedures, Polymorphism, The Gnuplot Scientific Graphic Library, Linking Fortran Programs to GnuPlot Graphic


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Library, Parameterized Data Types, The Complex Data Type, The Fortran Scientific Libraries, The Slatec library of scientific subroutines, The Linpack and Lapack Numerical Libraries

➤ **Laboratory Exercises:**

- Write a program which will convert a temperature of C degrees on the Celsius scale to the corresponding Fahrenheit temperature and display the Fahrenheit temperature.
- Write a program which writes out the square root of every whole number from 1 to 5. Check it to make sure it runs correctly.
- Write a program that accepts a, b and c from the keyboard and finds the roots of the quadratic equation $ax^2 + bx + c = 0$
- Write a program declaring a floating point matrix, I, with the dimensions [10×10] and initialise it with the identity matrix.
- Give a case-statement for the variable, a, printing 'a is 1' when a is 1, 'a is between 2 and 20' for values between 1 and 20 and prints 'a is not between 1 and 20' for all other values.
- Show expressions in Fortran calculating maximum, minimum, sum and product of the elements of an array.
- Write a program which reads a value, x, and calculates and prints the corresponding value $x/(1.+x)$. The case $x=-1$ should produce an error message and be followed by an attempt to read a new value of x.
- Write a main program and an internal function that returns the sum of two real numbers supplied as arguments.
- A program to calculate the hypotenuse of a triangle from the two sides as 3 and 4.
- **Software**

GNU Fortran

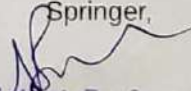
GFortran is the name of the GNU Fortran project, developing a free Fortran 95/2003/2008 compiler for GCC, the GNU Compiler Collection. GFortran is the standard compiler for this course.

➤ **References**

It is not essential to do any reading in advance of the course but the following references may be useful.

- "Modern Fortran in Practice", A. Markus. Cambridge University Press, 2012;
- "Modern Fortran", N. Clerman and W. Spector. Cambridge University Press, 2012;
- "Modern Fortran Explained: Incorporating Fortran 2018", M. Metcalf, J.Reid and M. Cohen. Oxford University Press, 2018;
- "Fortran 2018 with Parallel Programming", S. Ray. CRC Press, 2019;
- "Introduction to Programming with Fortran", I. Chivers and J. Sleightholme.

Springer,


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Certificate Course in Learn Fortran Programming

(Duration: 3 Months)

Session: 2021-2022

Department: Physics

Name of Course	Theory	Practical	Internal Assessment	Total
Fundamentals of Spectroscopy and Applications	50 Marks	30 Marks	20 Marks	100 Marks

Internal Assessment: Based on Graphical data interpretation, overall attendance and performance of the student.

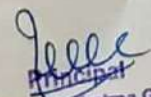
Score (Out of 100)	Grade
100 to 75	A*: Outstanding
74 to 60	A : Very Good
59 to 45	B : Good
44 to 35	C : Satisfactory
Below 35	D : Fail

NOTE:

1. Examination will be conducted by the college and the grades will be given to the student accordingly.


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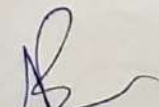
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**Certificate Course in Learn Fortran
Programming**

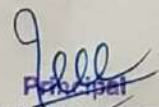
Session: 2021-2022

Department: Physics

S.No.	Name of the Students	Practice Test Marks: 50		Final Test Marks: 50	
		Marks	Signature	Marks	Signature
1.	DEVENDRA B. KUMBHARE	49	D.B. Kumbhare	43	D.B. Kumbhare
2.	VAIBHAO GULAB DESHMUKH	42	V. Deshmukh	41	V. Deshmukh
3.	TEJAS DIGAMBAR KOLATE	39	T. Kolate	40	T. Kolate
4.	ANAM SULEMAN DHAMANI	46	A. Dhamani	43	A. Dhamani
5.	ZARRIN FATIMA A IKHALAKH SHEIKH	47	Z. Sheikh	47	Z. Sheikh
6.	AKANKSHA GHANSHYAM BULBULE	40	A. Bulbule	40	A. Bulbule
7.	MAYURI MORESHWAR SHENDE	41	M. Shende	39	M. Shende
8.	SHREYASH SHRIRAM GHYAR	42	S. Ghayar	38	S. Ghayar
9.	RUSHIKESH VILAS KUMBHARE	48	R. Kumbhare	41	R. Kumbhare
10.	NANDKISHOR VASANTA BAWANE	38	N. Bawane	39	N. Bawane
11.	RAJAT CHATRAPATI GAIKWAD	49	R. Gaikwad	40	R. Gaikwad
12.	PAYAL RAMESH CHINCHOLKAR	36	P. Chincholkar	42	P. Chincholkar
13.	SUMIT ANIL CHAUKE	45	S. Chauke	47	S. Chauke
14.	MEGHA VASANT DAHARE	40	M. Dahare	43	M. Dahare
15.	PRANAY NILKANTH KAYRKAR	42	P. Kayrkar	38	P. Kayrkar


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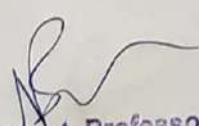
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Certificate Course in Learn Fortran Programming


Session: 2021-2022

Department: Physics

S.No.	Name of the Students	Practical Test Marks: 30		Internal Assessment Marks: 20	
		Marks	Signature	Marks	Signature
1.	DEVENDRA B. KUMBHARE	30	D.B. Kumbhare	20	D.B. Kumbhare
2.	VAIBHAO GULAB DESHMUKH	28	V. Deshmukh	20	V. Deshmukh
3.	TEJAS DIGAMBAR KOLATE	25	T. Kolate	20	T. Kolate
4.	ANAM SULEMAN DHAMANI	30	A. Dhamani	20	A. Dhamani
5.	ZARRIN FATIMA A IKHALAKH SHEIKH	29	Z. Sheikh	20	Z. Sheikh
6.	AKANKSHA GHANSHYAM BULBULE	28	A. Bulbule	20	A. Bulbule
7.	MAYURI MORESHWAR SHENDE	27	M. Shende	20	M. Shende
8.	SHREYASH SHRIRAM GHYAR	28	S. Ghayar	20	S. Ghayar
9.	RUSHIKESH VILAS KUMBHARE	29	R. Kumbhare	20	R. Kumbhare
10.	NANDKISHOR VASANTA BAWANE	22	N. Bawane	20	N. Bawane
11.	RAJAT CHATRAPATI GAIKWAD	30	R. Gaikwad	20	R. Gaikwad
12.	PAYAL RAMESH CHINCHOLKAR	23	P. Chincholkar	20	P. Chincholkar
13.	SUMIT ANIL CHAUKE	28	S. Chauke	20	S. Chauke
14.	MEGHA VASANT DAHARE	25	M. Dahare	20	M. Dahare
15.	PRANAY NILKANTH KAYRKAR	28	P. Kayrkar	20	P. Kayrkar


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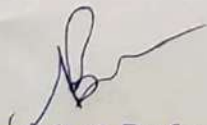
(Duration: 3 Months)

Session: 2021-2022

Department: Physics

Result

S.No.	Name of the Students	Obtained Grade	Certificate Issued
1	DEVENDRA BALKRUSHNA KUMBHARE	A ⁺	Yes
2	VAIBHAO GULAB DESHMUKH	A ⁺	Yes
3	TEJAS DIGAMBAR KOLATE	A ⁺	Yes
4	ANAM SULEMAN DHAMANI	A ⁺	Yes
5	ZARRIN FATIMA A IKHALAKH SHEIKH	A ⁺	Yes
6	AKANKSHA GHANSHYAM BULBULE	A ⁺	Yes
7	MAYURI MORESHWAR SHENDE	A ⁺	Yes
8	SHREYASH SHRIRAM GHYAR	A ⁺	Yes
9	RUSHIKESH VILAS KUMBHARE	A ⁺	Yes
10	NANDKISHOR VASANTA BAWANE	A ⁺	Yes
11	RAJAT CHATRAPATI GAIKWAD	A ⁺	Yes
12	PAYAL RAMESH CHINCHOLKAR	A ⁺	Yes
13	SUMIT ANIL CHAUKE	A ⁺	Yes
14	MEGHA VASANT DAHARE	A ⁺	Yes
15	PRANAY NILKANTH KAYRKAR	A ⁺	Yes


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Certificate Course in Learn Fortran Programming

(Duration: 3 Months)

Session: 2021-2022

Department: Physics

Certificate



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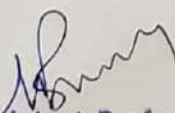
"Certificate Course in Learn Fortran Programming"

(DEPARTMENT: PHYSICS)

Certificate

This is to certify that, Mr. / Ms. _____
of B.Sc. _____ has successfully completed the prescribed "Certificate
course in _____" from _____ to _____
He/ She has secured _____ grade.

Dr. Maneesh B. Matte
(Head of Department)


Assistant Professor
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Arts & Science College
Nagbhid Dist.Chandrapur




Principal
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Certificate Course in Learn Fortran Programming

Session: 2021-2022

Department: Physics

Report of Certificate Course Submitted

To

Principal

Rashtrapita Mahatma Gandhi Art's and Science
College, Nagbhid, Dist:-Chandrapur (M.S.)

“Report of the Certificate Course in Learn Fortran Programming”

Department of Physics of Rashtrapita Mahatma Gandhi Art's and Science College, Nagbhid, Dist:-Chandrapur (M.S.) was organized 60 Days Certificate Course in Learn Fortran Prgramming from 28 Jan. to 4 March. 2021 for the session 2021-2022. Under the guidance of Honorable Principal, Dr. Anil N. Korpenwar and Dr. Maneesh B. Matte, Head, Physics was organized the course for UG students to apply knowledge of computing and mathematics. The course has been successfully organized offline mode. More than 15 students were registered and participated in this course. 50 + 30 + 10=100 Marks (Theory + Practical+ Assignments = 100 Marks) were the structure of the Course. Finally, Top Five participants and all exam passed students were awarded with certificates of completion of the course at the hands of respected Principal, Dr. Anil N. Korpenwar and Dr. Maneesh B. Matte, Head of Physics

Objectives of the Course:-

4. Analyze a complex computing problem
5. Design, implement, and evaluate a computing-based solution
6. An ability to apply mathematics to solving computing problems

Outcomes:-

Our college is located in rural part of Chandrapur. Most of the students are from nearby villages. Today coding language is very essential and many part of computational doesn't work without coding.


An ability to apply knowledge of computing and mathematics appropriate to the discipline.
An ability to identify, formulate, and develop solutions to computational challenges. An ability to design, implement, and evaluate a computational system to meet desired needs within realistic constraints.

Evidence of Success:

1. The course produced good effect on students
2. Students learnt coding and its usage in constitution of sentences
3. The source helped students to reduce fear about coding
4. Confidence and stage daring of the participant students were found to be increased

Problem Encountered and Resources Required:

Students self-participation was not very encouraging but, overall impact was very good
Only human resources were required.


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"Certificate Course in Fundamentals of Spectroscopy and Applications"

Session: 2021-2022

Department: Physics

Question Paper

Certificate Course in Learn Fortran Programming

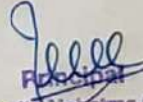
Time: 30 Minutes

Marks: 50

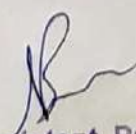
1. Which is interpreted language?
 - a) C++
 - b) C
 - c) MATLAB
 - d) Fortran
2. In compiled language, the translation to machine-language is performed incrementally at run-time.
 - a) True
 - b) False
3. The first widely-used high level language developed in 1957.
 - a) C
 - b) Java
 - c) Fortran
 - d) Cobol
4. A text file that contains our program is called as _____
 - a) Exe file
 - b) Doc file
 - c) Obj file
 - d) Source file
5. First statement in a fortran code is _____
 - a) include statement
 - b) import statement
 - c) program statement
 - d) @data statement
5. First statement in a fortran code is _____
 - a) include statement
 - b) import statement


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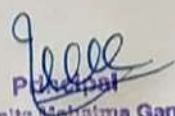



Principal
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- c) program statement
d) @data statement
7. The delimiter in a FORTRAN code.
a) Semicolon
b) Blank space
c) Colon
d) Comma
8. A program that reads the source code and converts it to a form usable by the computer.
a) Interpreter
b) Compiler
c) Linker
d) Assembler
9. A valid variable declaration in FORTRAN is _____
a) real :: Celsius
b) real Celsius;
c) Celsius real;
d) real : Celsius
10. In FORTRAN, the declarations of variables can be modified using the _____ parameter.
a) kind
b) make
c) select
d) change
11. COBOL stands for _____
a) Common Business Oriented Language
b) Common Business Object Language
c) Common Beneficial Oriented Language
d) Common Beneficial Object Language
12. What does fortran stands for?
a). For Translation
b)Formula Translator
c)For transcription
d)None of above
13. Fortran is the first widely-used high level language developed in
a) 1956
b) 1955
c) 1957
d) 1958
14. Fortran was developed by
A. John Backus
B. Rasmus Lerdorf
C. Tim Berners-Lee
D. Yukihiro "Matz" Matsumoto
15. What is called the first statement in a fortran code?


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Nagbhid, Dist. Chandrapur

- A. @data statement
- B. import statement
- C. include statement
- D. program statement

16. Which of the following is a valid variable declaration in FORTRAN?

- A. real Celsius;
- B. real :: Celsius
- C. Celsius real;
- D. None of above

17. The declarations of variables can be modified using the _____ parameter in FORTRAN.

- A. kind
- B. make
- C. select
- D. None of above

18. Which of the following is the delimiter in a FORTRAN code.

- A. Colon
- B. Comma
- C. Semicolon
- D. Blank space

19. Which is the invalid statement in FORTRAN?

- A. P + Q +
- B. Continue
- C. DO 10001 = 1,5
- D. Dimension X (30,20)

20. FORTRAN was developed by which company?

- A. Google
- B. IBM
- C. Apple
- D. Black berry

21. Fortran is specially used for

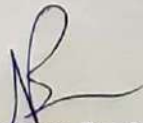
- A. Numeric Computation
- B. Scientific computing.
- C. Both Numeric & Scientific Computation
- D. None of above

22. FORTRAN supports

- A. Structured programming
- B. Array programming
- C. Modular programming
- D. All of the Above

23. What are the most commonly used versions of Fortran?

- A. Fortran 77
- B. Fortran 90
- C. Fortran 95
- D. All of the Above


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Nagbhid Dist.Chandrapur



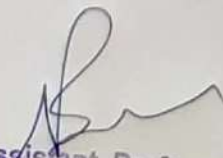

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24. Fortran files are indicated by names ending in

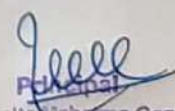
- A. ".f"
- B. ".F"
- C. ".for"
- D. All of the Above

25. Comments in Fortran are started with the

- A. !
- B. *
- C. //
- D. #


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Nagbhid Dist. Chandrapur




Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur

1.2.2

To,
Principal,
Rashtrapita Mahatma Gandhi Art's and
Science College, Nagbhid

Subject:- Permission for Organizing Certificate Course in Fundamentals of Spectroscopy and Applications for Students

Respected Sir,

With Reference to the above subject, **Department of Chemistry and Skill Development Committee** is planned to organize a *Certificate Course in Fundamentals of Spectroscopy and Applications* for Students of our college. The details of the program are as follows:

Name of Course	Certificate Course in Fundamentals of Spectroscopy and Applications
Name of Coordinator	Mr. Nilesh G. Gode
Duration	3 Months
Tentative Schedule	10 February to 10 May
Intend Students	UG Students

Kindly request you to give the permission to conduct the Certificate Course.

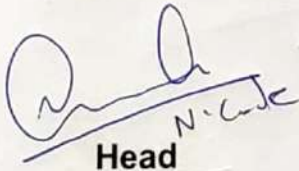
Thanking You.

Your Faithfully

Mr. Nilesh G. Gode

Head of Department of Chemistry,
R.M.G. Arts & Science College, Nagbhid

Verified and approved by:


Head

Department of Chemistry
Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist.Chandrapur


Convener

Skill Development

Dr. M.B. Malle
(HOD, Dept. of Physics.)

Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist.Chandrapur


Coordinator

IOAC
IOAC Co-ordinator
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



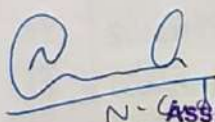

Principal

Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid

Notice

All the students of the Rashtrapita Mahatma Gandhi Art's and Science College, Nagbhid are hereby informed that the Skill Development Committee in association with CHEMISTRY Department is organizing a Certificate Course in Fundamentals of Spectroscopy and Applications for Students. The details of the course are given below:


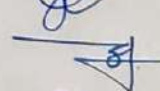
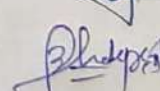
Name of Course	Certificate Course in Fundamentals of Spectroscopy and Applications
Name of Coordinator	Mr. Nilesh G. Gode
Duration	3 Months
Tentative Schedule	10 February to 10 May
Intend Students	UG Students
About the Course	Objectives of the Certificate Course:- <ol style="list-style-type: none">1. Basic fundamentals of Molecular Spectroscopy2. Analyzing Spectroscopic problems3. Basic fundamentals of Spectroscopy4. Applications of spectroscopic knowledge for analyzing unknown molecules Outcomes:- Our college is located in rural part of Chandrapur district. Most of the students are from nearby villages. In the current scenario, understanding of spectroscopy techniques and its applications is enormously essential in basic science as well as in research field. Spectroscopic information is needed for analyzing natural compounds and synthesized molecules in the laboratory. Students can learn numerous spectroscopic skills using this certificate course platform, which will surely enhance their employability.



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Nagbhid Dist. Chandrapur



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- 1)  - P. A. Khobragade - B.Sc. 2nd yr
- 2)  - Dr. Abul Nagpure - BSc - 1st Year
- 3)  - Mr. Prachal Dhak - BSc - 3rd year

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Nagbhid, Dist:-Chandrapur (M.S.) 441205



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"Certificate Course in Fundamentals of Spectroscopy and Applications"

Session: 2021-2022

Department: Chemistry

List of Enrolled Students

S.No.	Name of the Students	Signature
1.	CHETAN BHAKTAPRALHAD CHANDANKHEDE	
2.	DHANASHREE VASANT KAWALE	
3.	ELIZA ASHOK GAJBHIYE	
4.	GAYATREE BALKRUSHNA SAHARE	
5.	GUNJAN DIWAKAR BANKAR	
6.	KARTIK TULSHIDAS SATPAISE	
7.	KIRAN VILAS BUTLE	
8.	KOKILA PRAMOD BHOYAR	
9.	NUJAT MO.SABIR SHEIKH	
10.	PRADNYA PURUSHOTTAM BANKAR	
11.	RASHMI DEOCHAND RAMTEKE	
12.	RUCHITA RAMKRUSHNA GAJBHE	
13.	RUTIK VASANTRAO MASRAM	
14.	SAKSHI SANJAY GOTEPHODE	
15.	SHRAVANI ARVIND DESHMUKH	
16.	SHUBHANGI MORESHWAR WANJARI	
17.	SONALI DEVIDAS BHOYAR	
18.	TEJASHREE RAMESH YEWALE	
19.	TEJASWI PRABHAKAR DHOK	
20.	VINOD KHATU SAMARTH	

N. C. D. C.
Assistant Professor
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Nagbhid Dist. Chandrapur



Principal
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



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Certificate Course in Fundamentals of Spectroscopy and Applications

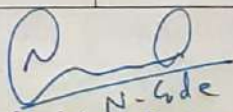
(Duration: 3 Months)

Session: 2021-2022

Department: Chemistry

Result

S.No.	Name of the Students	Obtained Grade	Certificate Issued
1.	CHETAN BHAKTAPRALHAD CHANDANKHEDE	A	Yes
2.	DHANASHREE VASANT KAWALE	A ⁺	Yes
3.	ELIZA ASHOK GAJBHIYE	A ⁺	Yes
4.	GAYATREE BALKRUSHNA SAHARE	A ⁺	Yes
5.	GUNJAN DIWAKAR BANKAR	A ⁺	Yes
6.	KARTIK TULSHIDAS SATPAISE	A ⁺	Yes
7.	KIRAN VILAS BUTLE	A ⁺	Yes
8.	KOKILA PRAMOD BHOYAR	A ⁺	Yes
9.	NUJAT MO.SABIR SHEIKH	A ⁺	Yes
10.	PRADNYA PURUSHOTTAM BANKAR	A ⁺	Yes
11.	RASHMI DEOCHAND RAMTEKE	A ⁺	Yes
12.	RUCHITA RAMKRUSHNA GAJBHE	A ⁺	Yes
13.	RUTIK VASANTRAO MASRAM	A	Yes
14.	SAKSHI SANJAY GOTEPHODE	A	Yes
15.	SHRAVANI ARVIND DESHMUKH	A ⁺	Yes
16.	SHUBHANGI MORESHWAR WANJARI	A ⁺	Yes
17.	SONALI DEVIDAS BHOYAR	A ⁺	Yes
18.	TEJASHREE RAMESH YEWALE	A ⁺	Yes
19.	TEJASWI PRABHAKAR DHOK	A ⁺	Yes
20.	VINOD KHATU SAMARTH	A ⁺	Yes


N. G. de

Assistant Professor
Rashtrapita Mahatma Gandhi
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Nagbhid Dist.Chandrapur




Principal

Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid



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Certificate Course in Fundamentals of Spectroscopy and Applications

Session: 2021-2022

Department: Chemistry

S.No.	Name of the Students	Practice Test Marks: 50		Final Test Marks: 50	
		Marks	Signature	Marks	Signature
1.	CHETAN BHAKTAPRALHAD CHANDANKHEDE	41	<u>Chetan</u>	32	<u>Chetan</u>
2.	DHANASHREE VASANT KAWALE	32	<u>Dhanashree</u>	45	<u>Dhanashree</u>
3.	ELIZA ASHOK GAJBHIYE	42	<u>E.A.Gajbhiye</u>	44	<u>E.A.Gajbhiye</u>
4.	GAYATREE BALKRUSHNA SAHARE	48	<u>Gahare</u>	43	<u>Gahare</u>
5.	GUNJAN DIWAKAR BANKAR	47	<u>Bankar</u>	47	<u>Bankar</u>
6.	KARTIK TULSHIDAS SATPAISE	44	<u>Satpaise</u>	49	<u>Satpaise</u>
7.	KIRAN VILAS BUTLE	50	<u>KButle</u>	50	<u>KButle</u>
8.	KOKILA PRAMOD BHOYAR	49	<u>K.P.Bhojar</u>	50	<u>K.P.Bhojar</u>
9.	NUJAT MO.SABIR SHEIKH	48	<u>Nuzat</u>	49	<u>Nuzat</u>
10.	PRADNYA PURUSHOTTAM BANKAR	41	<u>Bankar</u>	48	<u>Bankar</u>
11.	RASHMI DEOCHAND RAMTEKE	31	<u>Ramteke</u>	39	<u>Ramteke</u>
12.	RUCHITA RAMKRUSHNA GAJBHE	42	<u>Rujbe</u>	41	<u>Rujbe</u>
13.	RUTIK VASANTRAO MASRAM	28	<u>Rutik</u>	32	<u>Rutik</u>
14.	SAKSHI SANJAY GOTEPHODE	22	<u>Gotephode</u>	29	<u>Gotephode</u>
15.	SHRAVANI ARVIND DESHMUKH	37	<u>Shravani</u>	39	<u>Shravani</u>
16.	SHUBHANGI MORESHWAR WANJARI	49	<u>Shubhang</u>	47	<u>Shubhang</u>
17.	SONALI DEVIDAS BHOYAR	46	<u>Sonali</u>	47	<u>Sonali</u>
18.	TEJASHREE RAMESH YEWALE	43	<u>Tejashree</u>	43	<u>Tejashree</u>
19.	TEJASWI PRABHAKAR DHOK	41	<u>T.P.Dhok</u>	44	<u>T.P.Dhok</u>
20.	VINOD KHATU SAMARTH	50	<u>V.K.Samarth</u>	50	<u>V.K.Samarth</u>

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Nagbhid Dist Chandrapur



M. S.
Principal
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



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Certificate Course in Fundamentals of Spectroscopy and Applications

Session: 2021-2022

Department: Chemistry

S.No.	Name of the Students	Practical Test Marks: 30		Internal Assessment Marks: 20	
		Marks	Signature	Marks	Signature
1.	CHETAN BHAKTAPRALHAD CHANDANKHEDE	22		20	
2.	DHANASHREE VASANT KAWALE	30		20	
3.	ELIZA ASHOK GAJBHIYE	29		20	
4.	GAYATREE BALKRUSHNA SAHARE	30		20	
5.	GUNJAN DIWAKAR BANKAR	28		20	
6.	KARTIK TULSHIDAS SATPAISE	30		20	
7.	KIRAN VILAS BUTLE	30		20	
8.	KOKILA PRAMOD BHOYAR	29		20	
9.	NUJAT MO.SABIR SHEIKH	30		20	
10.	PRADNYA PURUSHOTTAM BANKAR	28		20	
11.	RASHMI DEOCHAND RAMTEKE	27		20	
12.	RUCHITA RAMKRUSHNA GAJBHE	24		20	
13.	RUTIK VASANTRAO MASRAM	21		20	
14.	SAKSHI SANJAY GOTEPHODE	23		20	
15.	SHRAVANI ARVIND DESHMUKH	30		20	
16.	SHUBHANGI MORESHWAR WANJARI	30		20	
17.	SONALI DEVIDAS BHOYAR	29		20	
18.	TEJASHREE RAMESH YEWALE	27		20	
19.	TEJASWI PRABHAKAR DHOK	29		20	
20.	VINOD KHATU SAMARTH	28		20	

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Certificate Course in Fundamentals of Spectroscopy and Applications

Session: 2021-2022

Department: Chemistry

Seminar Competition

S.No.	Name of the Students	Seminar Topic	Signature
1.	CHE TAN BHAKTAPRALHAD CHANDANKHEDE	Introduction of Electromagnetic Radiation	
2.	DHANASHREE VASANT KAWALE	Fundamentals of Spectroscopy	
3.	ELIZA ASHOK GAJBHIYE	Principle of Proton NMR Spectroscopy	
4.	GAYATREE BALKRUSHNA SAHARE	Principle of UV-Visible Spectroscopy	
5.	GUNJAN DIWAKAR BANKAR	Principle of Vibrational Spectroscopy	
6.	KARTIK TULSHIDAS SATPAISE	Principle of Rotational Spectroscopy	
7.	KIRAN VILAS BUTLE	Importance of Finger-Print Region	
8.	KOKILA PRAMOD BHOYAR	Factor Affecting Chemical Shift (δ) in NMR	
9.	NUJAT MO.SABIR SHEIKH	Applications of Proton NMR Spectroscopy	
10.	PRADNYA PURUSHOTTAM BANKAR	Applications of Vibrational Spectroscopy	
11.	RASHMI DEOCHAND RAMTEKE	Applications of Rotational Spectroscopy	
12.	RUCHITA RAMKRUSHNA GAJBHE	Applications of UV-Visible Spectroscopy	
13.	RUTIK VASANTRAO MASRAM	Analysis of Unknown Compounds using Spectroscopy	
14.	SAKSHI SANJAY GOTEPHODE	Investigation of Hydrogen Bonding Using Vibrational Spectroscopy	
15.	SHRAVANI ARVIND DESHMUKH	Rotational spectra of diatomic molecules	
16.	SHUBHANGI MORESHWAR WANJARI	Selection rules in Molecular Spectroscopy	
17.	SONALI DEVIDAS BHOYAR	Theory of Spin-Spin Splitting	
18.	TEJASHREE RAMESH YEWALE	Analysis of spectral problems	
19.	TEJASWI PRABHAKAR DHOK	Solvent used in UV-Visible Spectroscopy	
20.	VINOD KHATU SAMARTH	Woodward-Fischer Rule	

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Certificate Course in Fundamentals of Spectroscopy and Applications

Session: 2021-2022

Department: Chemistry

**Report of Certificate Course Submitted
To
Principal**

Rashtrapita Mahatma Gandhi Art's and Science
College, Nagbhid, Dist:-Chandrapur (M.S.)



Principal

Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid

N. C. W. D. C.

Assistant Professor

Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist.Chandrapur

“Report of the Certificate Course in Fundamentals of Spectroscopy and Applications”

Department of Chemistry of Rashtrapita Mahatma Gandhi Art's and Science College, Nagbhid, Dist:-Chandrapur (M.S.) was organized 3 Months Certificate Course in Fundamentals of Spectroscopy and Applications in the session 2021-2022. This certificate course was conducted for undergraduate students under the guidance of Mr. Nilesh G. Gode (Head of Department of Chemistry) and other faculty members of chemistry department (Dr. Atul S. Nagpure, Mr. Prachal P. Dhok and Mr. Premkumar A. Khobragade). The course has been successfully organized in offline mode. For certificate course 20 students were registered and participated. The certificate course was for total 100 marks with structure Theory (50 marks), Practical (30 marks) and Assignments (20 marks). Finally, top five participants and all exam passed students were awarded with certificates of completion of the course at the hands of respected Principal, Dr. Anil N. Korpenwar and Mr. Nilesh G. Gode.

Objectives of the Certificate Course:-

1. Basic fundamentals of Molecular Spectroscopy
2. Analyzing Spectroscopic problems
3. Basic fundamentals of Spectroscopy Applications of spectroscopic knowledge for investigating unknown molecules

Outcomes:-

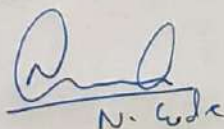
Our college is located in rural part of Chandrapur district. Most of the students are from nearby villages. In the current scenario, understanding of spectroscopy techniques and its applications is enormously essential in basic science as well as in research field. Spectroscopic information is needed for analyzing natural compounds and synthesized molecules in the laboratory. Students can learn numerous spectroscopic skills using this certificate course platform, which will surely enhance their employability.

Evidence of Success:

1. The course produced good effect on students.
2. Students acquired various skills on spectroscopy.
3. Confidence and stage daring of the students were found to be increased.

Problem Encountered and Resources Required:

Students self-participation was not very encouraging but, overall impact was very good only human resources were required.



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Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist.Chandrapur



Principal
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



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Certificate Course in Fundamentals of Spectroscopy and Applications

(Duration: 3 Months)

Session: 2021-2022

Department: Chemistry

Certificate



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Rashtrapita Mahatma Gandhi Arts & Science College,
Nagbhid, Dist-Chandrapur

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"Certificate Course in Fundamentals of Spectroscopy and Applications"
(Department: Chemistry)

Certificate

This is to certify that, Mr. / Ms. _____
of B.Sc. _____ has successfully completed the prescribed "Certificate
course in _____" from _____ to _____
He/ She has secured _____ grade.

Mr. Nilesh G. Gode
(Head of Department)

N. Gode

Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist.Chandrapur



Principal

Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



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Certificate Course in Fundamentals of Spectroscopy and Applications

(Duration: 3 Months)

Session: 2021-2022

Department: Chemistry

Name of Course	Theory	Practical	Internal Assessment	Total
Fundamentals of Spectroscopy and Applications	50 Marks	30 Marks	20 Marks	100 Marks

Internal Assessment: Based on Graphical data interpretation, overall attendance and performance of the student.

Table: Conversion of Marks to Grade

Score (Out of 100)	Grade
100 to 75	A ⁺ : Outstanding
74 to 60	A : Very Good
59 to 45	B : Good
44 to 35	C : Satisfactory
Below 35	D : Fail

NOTE:

1. Examination will be conducted by the college and the grades will be given to the student accordingly.

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Certificate Course in Fundamental of Spectroscopy and Applications

(Duration: 3 Months)

Session: 2021-2022

Department: Chemistry

❖ Syllabus of Certificate Course

➤ Unit: I (UV-Visible Spectroscopy)

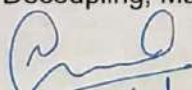
Absorption of UV-Visible Electromagnetic Radiation, Electronic Transition and Energy Levels, Isolated Chromophores C=C and C=O, The Beer-Lambert Law, Effect of Conjugation, UV spectra, Terminology of UV-Visible Spectroscopy, Selection rule: allowed and forbidden transition, Solvent used in UV-Visible Spectroscopy, Application: Effect of Geometrical and Constitutional factors, Woodward-Fieser Rules, The Octane rule, Application of (ORD and CD) and Octane Rule for Ketones.

➤ Unit: II (IR Spectroscopy)


Absorption in Infrared region, Molecular vibration -Complexity and Simplicity of IR spectra, Detection of some important functional group, Factor that complicate IR spectra and affect group frequencies, Systematic interpretation of IR spectra of Organic Compound via Specific Spectral Regions, and Fingerprint Region.

➤ Unit: III (H¹ NMR Spectroscopy)

¹H NMR Spectroscopy, α and β spin states, The ¹H NMR Spectrum, Working of NMR Spectrophotometers, factor influencing chemical shift, Chemical equivalent proton and Chemical shift Equivalent, Magnetic equivalence, theory of Spin-Spin Splitting, Spin Decoupling, Magnetic Resonance Imaging.


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Nagbhid Dist.Chandrapur



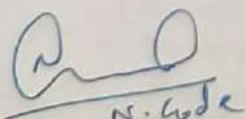

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➤ Unit: IV (Rotational Spectroscopy)

Introduction of Rotational spectroscopy, pure rotational spectra, diatomic rigid rotor molecules, effect of isotope substitution, rotational spectra of diatomic molecules, selection rules, analysis of spectral problems.

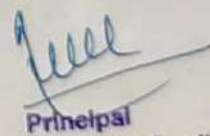
➤ Practical

- 1) Analysis and Identification of molecules from given UV-Visible Spectra.
- 2) Analysis and Identification of molecules from given Infrared Spectra.
- 3) Analysis and Identification of molecules from given ^1H NMR Spectra.
- 4) Analysis and Identification of molecules from given ^{13}C NMR Spectra.


N. Wade

Assistant Professor
Rashtrapita Mahatma Gandhi
Arts & Science College
Nagbhid Dist. Chandrapur





Principal
Rashtrapita Mahatma Gandhi
Art's & Science Collage, Nagbhid



Manoharbai Shikshan Prasarak Mandal Amori's
Rashtrapita Mahatma Gandhi Art's and Science
College, Nagbhid, Dist:-Chandrapur (M.S.) 441205

Accredited by NAAC "B" Grade
(Affiliated to Gondwana University, Gadchiroli)

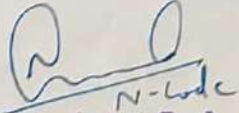
"Certificate Course in Fundamentals of Spectroscopy and Applications"

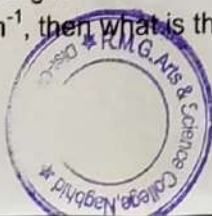
Session: 2021-2022

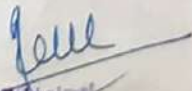
Department: Chemistry

Question Paper

- 1) Which molecule show pure rotational spectra?
 - (a) H_2 (gas)
 - (b) CO (gas)
 - (c) SO_3 (gas)
 - (d) CO_2 (gas)
- 2) What is the selection rule for **rotational spectroscopy**? ($J = \text{Rotational quantum number}$)
 - (a) $\Delta J = 0$
 - (b) $\Delta J = \pm 1$
 - (c) $\Delta J = \pm 1, \pm 2$
 - (d) $\Delta J = 0, \pm 1$
- 3) The essential criterion for a molecule to give rotational spectra is?
 - (a) Permanent dipole moment
 - (b) Gaseous phase
 - (c) $\Delta J = \pm 1$ rule of transition
 - (d) All of the above
- 4) Which statement is **true** about **Rigid rotor**.
 - (a) During rotational motion there is no change in the internuclear distance in diatomic molecule.
 - (b) During rotational motion there is significant change in the internuclear distance in diatomic molecule.
 - (c) During vibrational motion there is no change in the internuclear distance in diatomic molecule.
 - (d) During vibrational motion there is significant change in the internuclear distance in diatomic molecule.
- 5) The pure rotational spectrum of a gaseous NO molecule consist of series of equally spaced line separated by 232 m^{-1} , then what is the value of rotational constant (**B**)?
 - (a) $B = 232 \text{ m}^{-1}$

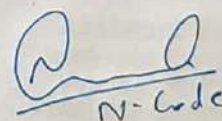

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Principal
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- (b) $B = 116 \text{ m}^{-1}$
- (c) $B = 58 \text{ m}^{-1}$
- (d) $B = 464 \text{ m}^{-1}$

- 6) Which radiation is absorbed by molecule during rotational energy transition in rotational spectroscopy?
- (a) Radiofrequency
 - (b) Infra red
 - (c) Microwave
 - (d) Visible
- 7) Among following electromagnetic radiation which possess **highest energy**?
- (a) X-rays
 - (b) Ultra-Violet
 - (c) Radio waves
 - (d) Cosmic rays
- 8) Rotational constant (**B**) value for ^{12}CO and ^{13}CO molecule is?
- (a) Value of **B** is same for both molecules.
 - (b) Value of **B** is higher for ^{12}CO than ^{13}CO .
 - (c) Value of **B** is lower for ^{12}CO than ^{13}CO .
 - (d) None of the above.
- 9) In rotational spectroscopy which statement is **true** about rotational spectrum?
- (a) The intensity of spectral lines increases with increasing rotational quantum number (**J value**), pass through the maximum and then decrease with increase in **J value**.
 - (b) The distance between spectral lines is *not constant*.
 - (c) The intensities of spectral lines increase continuously with increasing rotational quantum number (**J value**).
 - (d) Rotational energy levels are not degenerate.
- 10) Rotational spectroscopy of molecule is useful in determining?
- (a) Functional groups
 - (b) Bond length
 - (c) Strength of hydrogen bond
 - (d) Nuclei energy levels
- 11) Which molecule gives vibrational spectra?
- (a) N_2
 - (b) NO
 - (c) H_2
 - (d) F_2
- 12) What is the selection rule for the vibrational transition in a **simple harmonic oscillator**? ($V = \text{vibrational quantum number}$)
- (a) $\Delta V = 0$
 - (b) $\Delta V = \pm 1$
 - (c) $\Delta V = \pm 1, \pm 2$


N-Code

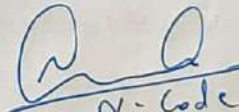
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Nagbhid Dist. Chandrapur




Principal
Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid

(d) $\Delta V = 0, \pm 1$

- 13) What is the selection rule for the vibrational transition in **Anharmonic Oscillator**? (V = vibrational quantum number)
- (a) $\Delta V = 0, \pm 1, \pm 2, \pm 3$ and so on
(b) $\Delta V = \pm 1$
(c) $\Delta V = \pm 1, \pm 2, \pm 3$ and so on
(d) $\Delta V = 0, \pm 1$
- 14) The important condition for a molecule to give vibrational spectra is?
- (a) Molecules need not to have permanent dipole moment, but it should show change in dipole moment in some modes of vibration.
(b) Molecule may be solid/liquid/gaseous.
(c) $\Delta V = \pm 1$ transition rule for simple harmonic oscillator.
(d) All of the above
- 15) Which light is absorbed by molecule during vibrational energy transition?
- (a) Radio waves
(b) Infra red
(c) Microwave
(d) Visible
- 16) A particular vibration in a polyatomic molecule is **IR active** if during vibration, there is a change in
- (a) Polarizability
(b) Dipole moment
(c) Potential energy
(d) Frequency
- 17) Total number of modes of vibration for H_2O molecule is?
- (a) 1
(b) 2
(c) 3
(d) 4
- 18) Arrange following carbonyl compounds in increasing **C=O stretching frequency**:
- (a) $RCOCl > RCOOR > RCOOH > RCONH_2$
(b) $RCOCl > RCOOH > RCOOR > RCONH_2$
(c) $RCOCl > RCONH_2 > RCOOH > RCOOR$
(d) $RCONH_2 > RCOCl > RCOOH > RCOOR$
- 19) Among following which statement is **wrong**?
- (a) Vibrational frequency of a bond increases with increase in force constant.
(b) Vibrational frequency of a bond increases with decrease in reduced mass.
(c) Carbonyl frequency of aldehyde is higher than that of ketone.
(d) Finger print region have a frequency range of $3000-2500\text{ cm}^{-1}$.


N-Code

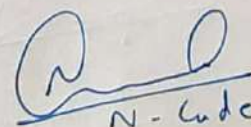
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Nagbhid Dist, Chandrapur


Principal

Rashtrapita Mahatma Gandhi
Arts & Science College, Nagbhid



- 20) Total number of **IR active** molecules among following:
 O_2 , Br_2 , NO , CO , PBr_3 , SO_2 , CO_3^{2-} , SF_4 , C_6H_6
(a) 4
(b) 5
(c) 6
(d) 7
- 21) What is the wavelength range for UV spectrum of light?
(a) 100 nm to 500 nm
(b) 200 nm to 800 nm
(c) (c) 300 nm to 1000 nm
(d) 400 nm to 1600 nm
- 22) The photon of wavelength 400 nm corresponds to _____ wave number.
(a) 20000 cm^{-1}
(b) 25000 cm^{-1}
(c) (c) 40000 cm^{-1}
(d) None of the above
- 23) An NMR transmitter consists of
(a) Frequency synthesizer, RF signal generator, transmitter controller and receiver
(b) CPU, RF signal generator, transmitter controller, and RF amplifier
(c) Frequency synthesizer, RF signal generator, and transmitter controller
(d) Frequency synthesizer, RF signal generator, transmitter controller, and RF amplifier
- 24) Why is DSS used instead of TMS as the 1H chemical shift reference for a biological sample?
(a) TMS can denature proteins
(b) The chemical shift of TMS is dependent on temperature
(c) DSS has a higher solubility in aqueous solution
(d) DSS is widely used in protein sample preparation
- 25) In a magnetic field, nuclear dipoles (nuclear spins with a spin quantum number of $1/2$)
(a) precess around the magnetic field direction randomly
(b) are motionless along the direction of the magnetic field
(c) do not exist
(d) precess around the magnetic field direction at the Larmor frequency


N. Cude

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Principal
Rashtrapita Mahatma Gandhi
Art's & Science College, Nagbhid

Value added course

Constitutional values and Fundamental duties.

To,

THE PRINCIPAL,

RASHTRAPITA MAHATMA GANDHI
ARTS AND SCIENCE COLLEGE, NAGBHID
DISTRICT CHANDRAPUR (M.S.) 441 205.

Subject: Permission for conducting "VALUE ADDITION COURSE" for Undergraduate students (B.A./B.Sc.).

Respected Sir,

With reference to above mentioned subject, **Dr. Babasaheb Ambedkar study centre** of our college is planned to conduct a "VALUE ADDITION COURSE" for undergraduate students, particularly for B.A. and B.Sc. in pursuance of the objectives outlined in the NEP-2020 and to develop good human beings.


Tentative Planning:

SN	Details information about the "VALUE ADDITION COURSE" 2021-2022	
1	Name of Coordinator	Dr. Rajendra N. Chavhan
2	Duration	Academic year-2021-2022
3	Tentative schedule	Sept 2021 – 31 st Dec. 2021.
4	Intend students	For degree students of the college (B.A./B.Sc.)
5	Distribution of certificates	1 st May 2022 (Maharashtra Din)

Value adding Courses:

1. Constitutional Values and Fundamental Duties

Requested you, kindly permit us for the same.


Course Coordinator


Principal
Rashtrapita Mahatma Gandhi
Arts & Science College,
Nagbhid, Dist. Chandrapur

ABOUT THE COURSE
FROM THE DESK OF HON'BLE PRINCIPAL OF THE COLLEGE
VALUE ADDITION COURSE
VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

VALUE ADDITION COURSES (VACS)

In pursuance of the objectives outlined in the National Education Policy 2020, the Value Addition Courses (VACs) seeks to fulfill the mandate of providing holistic education to students. As the NEP elucidates, "the purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values."

The Value Addition Courses will introduce students to the rich heritage of the nation as well as to important social concerns of the current times, helping them to make connections between what they learn and how they live. The courses have a sound theoretical base as well as appropriate hands-on components. At the same time, they clearly set out measurable and attainable Learning Outcomes. Knowledge, in essence, being integrated, these courses are essentially multidisciplinary in nature.

Designed to ignite the intellectual curiosity of the learners, the Value Addition courses will inspire and guide them in their journey of personal and professional development making them thoughtful, well-rounded, and creative individuals, with a sense of service and responsibility towards the Nation.

Date: 6th of June, 2021.


Principal
Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhd, Dist. Chandrapur

2021-2022

RMGC, Nagbhid

**RASHTRAPITA MAHATMA GANDHI ARTS AND SCIENCE COLLEGE,
NAGBHID, DIST-CHANDRAPUR (M.S.) INDIA 441205**

ACADEMIC YEAR-2021-2022

VALUE ADDITION COURSE

VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Notice

(For B.A./B.Sc. (Undergraduate) student of the college)


This is to inform you that, our college has started **VALUE ADDING COURSE** to develop good human beings, A student who pursues any undergraduate programme (B.A. and B.Sc.) in the University and its Colleges can offer a pool of **VALUE ADDITION COURSES**, from which he has to choose one to study in the first Semester.

So, Admission started, please enroll for the same. Limited seats available.

Value adding Courses:

Constitutional Values and Fundamental Duties

Date: 6th of June, 2021.


Principal
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Nagbhid, Dist. Chandrapur

**RASHTRAPITA MAHATMA GANDHI ARTS AND SCIENCE COLLEGE,
NAGBIHD, DIST-CHANDRAPUR (M.S.) INDIA 441205**

ACADEMIC YEAR-2021-2022

VALUE ADDITION COURSE

VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Grade distribution, Eligibility and Pre-requisites of the Course

Course title	Grade	Grade distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Constitutional values and fundamental duties	A	A	0	A	UG appear	Nil

Learning Objectives:

The Learning Objectives of this course are as follows:

- Enrich students with knowledge and relevance of the Constitution.
- Develop awareness about Duties and Values .
- Inculcate a sense of Constitutionalism in thought and action.

Learning outcomes:

The Learning Outcomes of this course are as follows:

- Understand the Constitution and its relevance
- Appreciate the values and goals embedded in the Constitution.
- Recognize the importance of Fundamental Duties enshrined in the Constitution.
- Apply the spirit of fundamental values and duties in everyday national life.

SYLLABUS OF CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

UNIT- I

The Constitution of India - An Introduction----- (5 Periods)

- Federal Republic, Rule of Law, Separation of Powers
- Sovereignty, Socialism, Democracy
- Secularism and Sarva Dharma Sama Bhava

UNIT- II

Constitutional Values----- (5 Periods) ✓

- Justice: Social, Political, Economic
- Liberty: Thought, Expression, Belief, Faith, Worship
- Equality: Equality before law & equal application of laws
- Fraternity: Dignity, Unity and Integrity

UNIT- III

Fundamental Duties ----- (5 Periods)

- Reflecting on the ancient Indian notions of righteousness and duty consciousness
- Fundamental Duties- Article 51A [(a)- (k)]
- Legal status of Fundamental Duties - Judicial approach

Practical component (if any) - -----(15 Periods)

- Reflections on some of the constitutional values/ fundamental duties and its contemporary relevance in day-to-day national life through group discussions and projects.
- Conduct workshops to spread awareness on the Fundamental Duties and Values.
- Students are required to conduct a survey (minimum 25 respondents) on assessing the awareness of the constitutional duties amongst the citizens.
- Students may share their experiences on Fundamental Duties and Values in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential/recommended readings

- Preamble to the Constitution of India, 1950.
- The Constitution of India, Articles - 14, 19, 21.
- The Constitution of India, Fundamental Duties [Ar. 51 A (a)- (k)].

Suggested readings

- Durga Das Basu, et al., Introduction to the Constitution of India (LexisNexis, 26th edn, 2022).
- Leila Seth, We, the Children of India: The Preamble to Our Constitution (New Delhi, Puffin Books, Penguin Books India, 2010).

- Mahendra Pal Singh, V.N. Shukla's Constitution of India, (Eastern Book Company, Lucknow, 13th revised edn. 2017)
- Dr. B.R. Ambedkar Selected Speeches, (Prasar Bharati, New Delhi, 2019) available at: https://prasarbharati.gov.in/whatsnew/whatsnew_653363.pdf.


Assessment Methods

* Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination committee of RMGC, Nagbhid from time to time


Principal
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Art's & Science College,
Nagbhid, Dist. Chandrapur

Manoharbhaj Shikshan Prasarak Mandal, Armori's

RASHTRAPITA MAHATMA GANDHI ART'S & SCIENCE COLLEGE, NAGBHID, DIST.

CHANDRAPUR

Accredited by N.A.C.'B' Grade

(Affiliated to Gondwana University, Gadchiroli)



COURSE COMPLETION CERTIFICATE

This certificate is presented to

Ku. Achal Vijaysingh Bais

For completing the 4 month value adding course in
CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Hence certified.....

Principal of the College

Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

-1 Constitutional values and fundamental duties

COLLEGE NAME : RASHTRAPITA MAHATMA GANDHI ARTS & SCIENCE COLLEGE, NAGBHID

Add Course On Dr. Babasaheb Ambedkar Thought

Academic Year 2021-2022 (Duration - Jan to April 2022)

Batch - (1)

List Of Participants

Sr No	Name Of Student	Sign
1.	Khushi Ketan Amdawadi	<u>Khushi Amdawadi</u>
2.	Ashwini Vinod Bagelde	<u>Bagelde</u>
3.	Pratiksha Ramraj Bagmare	<u>Bagmare</u>
4.	shradha Shankar Bagmare	<u>Shradha</u>
5.	Achal Vijaysingh Bais	A.V. Bais
6.	Monali Ramchandra Banpurkar	<u>MB</u>
7.	Shejal Subhash Bawankar	<u>Shejal S.</u>
8.	Rohit Manohar Bhamburkar	<u>Rohit B.</u>
9.	Angadh Ishwar Bhardde	<u>Abhardde</u>
10.	Ishwari Laxman Borkar	<u>Borkar</u>
11.	Kesori Dipak Borkar	<u>Kesori</u>
12.	Payal Rajendra Chincholkar	<u>Payal</u>
13.	Sandesh Rajendra Chavhan	<u>S.Chavhan</u>
14]	Sumit Anil Chaudhary	<u>Sumit</u>
15]	Vishakha Rajeshwar Chaudhari	<u>V.Chaudhari</u>
16]	Vaishali Shankar Chaudhari	<u>V.Chaudhari</u>
17]	Shreyash Jagannath Chaudhari	<u>Shreyash</u>
18]	Rina Keshavnaji Chaudhari	<u>R.Chaudhari</u>
19]	Prati Kamalakar Chaudhari	<u>P.Chaudhari</u>
20]	Kristanand Niranjan Chaudhari	<u>K.Chaudhari</u>
21]	Abhishek Prakash Chaudhari	<u>Abhishek</u>
22]	Lalita Manohar Borkar	<u>Lalita</u>
23]	Megha Vasant Dahare	<u>Megha</u>
24]	Neha Ramesh Deshmukh	<u>Neha</u>
25]	Kesori Azeek Dhamani	<u>Kesori</u>
26]	Nayan Ramesh Fulcar	<u>Nayan</u>
27]	Charvi Anandrago Ganar	<u>C.A. Ganar</u>
28]	Dhamshri Dhanraj Ganvi'e	<u>D.D. Ganvi'e</u>
29]	Rajat Chhatrapati Gayakwad	<u>Rajad</u>

C-1 Constitutional Values and fundamental duties.

COLLEGE NAME : RASHTRAPITA MAHATMA GANDHI ARTS & SCIENCE COLLEGE, NAGBHID

Add Course On Dr. Babasaheb Ambedkar Thought

Academic Year 2021-2022 (Duration - Jan - to April 2022)

Batch - (2)

List Of Participants

Sr No	Name Of Student	Sign
1	Hanchitala Kanchana Kondalim	
2	Anjali Gangadhar Karkade	A. Karkade
3	Purva Homaji Karmarkar	P.H. Karmarkar
4	Poangy Nilkanth Kayarkar	
5	Vrushant Sunil Koram	V. Koram
6	Harshal Prashant Korekar	
7	Swaranjali Prakash Kumare	
8	Punam Vinayak Modari	P. Modari
9	Sneha Keeilay Malede	S. Malede
10	Nikita Arun mate	N. Mate
11	Nilam Someshwar Mohurle	
12	Priya Ramesh Motghare	
13	Puja Dakshin Tale	
14	Sakshi Ramesh Nayarkar	
15	Saloni Ganesh Naik	
16	Punam Prabhakar Nikure	P. Nikure
17	Megha Umaji Niwate	
18)	Arshada Samir Pathan	
19)	Sushma Suresh Pise	
20)	Pashani Pusushottam Ramteke	P.P. Ramteke
21)	Batiksha Rudip Sontakke	
22)	Vaishnavi' Sudhir Samarth	V. S. Samarth
23)	Mehwish Fatima Masud A. Sheikh	
24)	Chanda Tekadeji Shende	
25)	Rashmi Ramesh Shende	
26)	Harsha Subhash Shekri	H. S. Shekri
27)	Pranjali Raju Sontakke	P. R. Sontakke
28)	Jyoti Chandrabhan Sonwane	
29)	Sakshi Jivan Soyam	



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COLLEGE, NAGBHID, DIST. CHANDRAPUR**
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Officiating Principal
Dr. G. D. Deshmukh
M.Sc., NET., Ph.D.

STD: 07179
Office: 295404

Website: www.rmgcollegenagbhid.in

Email: - gdnagbhir72@gmail.com

nagbhid.rmgcollege@gmail.com

VALUE ADDING COURSE

VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Students Attendance:

SN		Sept-21	Oct-21	Nov-21	Dec-21
1	Khushi Amdawadi	P	P	P	P
2	Ashwini Bagade	P	P	A	A
3	Pratidha Bagade	P	P	P	P
4	Shraddha Bagmare	P	P	P	P
5	Achut V. Bais	P	P	P	P
6	Monali R. Bampurkar	P	P	P	P
7	Shejal S. Bansankar	P	P	P	P
8	Rohit M. Bhanarkar	P	P	P	P
9	Angadh I. Bharede	P	P	A	P
10	Ishwan L. Boskar	P	P	P	P
11	Payal Chincholkar	P	P	P	A
12	Sandesh R. Charkhan	P	P	P	P
13	Sumit A. Chauke	P	P	P	P
14	Vishakha R. Chaudhari	P	P	P	P
15	Vaishali S. Chaudhari	P	P	P	P
16	Shreyash Chaudhari	A	P	P	A
17	Rina K. Chaudhari	A	P	P	P
18	Krushnanand N. Chaudhari	A	P	P	P
19	Abhishek P. Chaudhari	P	P	P	A
20	Lalita M. Boskar	P	P	P	P
21	Megha V. Dahare	P	P	P	P
22	Neha R. Deshmukh	P	P	P	P
23	Kesur A. Dhamant	P	P	P	P
24	Shruti K. Dewade	P	P	P	P
25		P	P	P	P



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VALUE ADDING COURSE
VAC: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Students Attendance:

SN		Sept-21	Oct-21	Nov-21	Dec-21
1	Nayan R. Fukat	P	P	P	P
2	Charu A. Ganar	P	P	P	P
3	Dhomasbhi D. Ganvir	P	P	P	P
4	Rajat Chhatrapati Gayakwad	P	P	P	P
5	Vaishani A. Ghyar	P	P	P	P
6	Prapti R. Gurnule	P	P	P	P
7	Harehita K. Kadulkar	P	P	P	P
8	Anjali G. Karkade	P	P	P	P
9	Purva H. Karmakar	P	P	P	P
10	Pranay Melkanth Kayarkar	P	P	P	P
11	Vrushant S. Koram	P	P	P	P
12	Harshal P. Korekar	P	P	P	P
13	Swaranjali P. Kumare	P	P	P	P
14	Punam V. Madani	P	P	P	P
15	Sachal K. Malode	P	P	P	P
16	Milika A. Mate	P	P	P	P
17	Milam S. Mohurle	P	P	P	P
18	Pritya R. Motghare	P	P	P	P
19	Puja D. Mote	P	P	P	P
20	Sakshi R. Nagarikar	P	P	P	P
21	Saloni G. Patil	P	P	P	A
22	Punam P. Nalkure	P	A	A	P
23	Megha Khatwate	P	P	P	P
24	Arshala S. Pathan	P	P	P	P
25	Sushma Pise	P	P	P	P
26	Roshani P. Ramteke	P	P	P	P
27	Vaishani S. Samasth	P	P	P	P
28	Meharish Sheikh	P	P	P	P
29	Chamda T. Shende	P	P	P	P
30	Rashmi R. Shende	P	P	P	P
31	Harsha S. Shetki	P	P	P	P
					P

Value added course

Gandhian thoughts

To,

THE PRINCIPAL,

RASHTRAPITA MAHATMA GANDHI

ARTS AND SCIENCE COLLEGE, NAGBHID,

DISTRICT CHANDRAPUR (M.S.) 441 205.

Subject: Permission for conducting "VALUE ADDITION COURSE" for Undergraduate students (B.A./B.Sc.).

Respected Sir,

With reference to above mentioned subject, Mahatma Gandhi study centre of our college is planned to conduct a "VALUE ADDITION COURSE" for undergraduate students, particularly for B.A. and B.Sc. in pursuance of the objectives outlined in the NEP-2020 and to develop good human beings.

Tentative Planning:

SN	Details information about the "VALUE ADDITION COURSE" 2021-2022	
1	Name of Coordinator	Dr. Rajendra N. Chavhan
2	Duration	Academic year-2021-2022
3	Tentative schedule	Sept 2021 – 31 st Dec 2021.
4	Intend students	B.A./B.Sc.
5	Distribution of certificates	1 st May 2021 (Maharashtra Din)

Value adding Courses:

Gandhian Thoughts

Requested you, kindly permit us for the same



Course Coordinator
Dr. R. N. Chavhan

Permission Granted



~~Principal~~ Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

ABOUT THE COURSE
FROM THE DESK OF HON'BLE PRINCIPAL OF THE COLLEGE
VALUE ADDITION COURSE
VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

VALUE ADDITION COURSES (VACS)

In pursuance of the objectives outlined in the National Education Policy 2020, the Value Addition Courses (VACs) seeks to fulfill the mandate of providing holistic education to students. As the NEP elucidates, "the purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values."

The Value Addition Courses will introduce students to the rich heritage of the nation as well as to important social concerns of the current times, helping them to make connections between what they learn and how they live. The courses have a sound theoretical base as well as appropriate hands-on components. At the same time, they clearly set out measurable and attainable Learning Outcomes. Knowledge, in essence, being integrated, these courses are essentially multidisciplinary in nature.

Designed to ignite the intellectual curiosity of the learners, the Value Addition courses will inspire and guide them in their journey of personal and professional development making them thoughtful, well-rounded, and creative individuals, with a sense of service and responsibility towards the Nation.

Date: 6th of June, 2021.


Principal
Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur

6th June-2021

RMGC, Nagbhid

**RASHTRAPITA MAHATMA GANDHI ARTS AND SCIENCE COLLEGE,
NAGBHID, DIST-CHANDRAPUR (M.S.) INDIA 441205**

ACADEMIC YEAR-2021-2022

VALUE ADDITION COURSE

VAC: GANDHIAN THOUGHT

Notice

(For B.A./B.Sc. (Undergraduate) student of the college)

This is to inform you that, our college has started **VALUE ADDING COURSE** to develop good human beings, A student who pursues any undergraduate programme (B.A./ B.Sc.) in the University and its Colleges can offer a pool of **VALUE ADDITION COURSES**, from which he has to choose one to study in the UG.

So, Admission started, please enroll for the same. Limited seats available.

Value adding Courses:

Gandhian Thought (VAC)

Date: 6th of June, 2021.



Principal

Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist Chandrapur

**RASHTRAPITA MAHATMA GANDHI ARTS AND SCIENCE COLLEGE,
NAGBHID, DIST-CHANDRAPUR (M.S.) INDIA 441205**

ACADEMIC YEAR-2021-2022

**VALUE ADDITION COURSE
GANDHIAN THOUGHT**

Course title	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Gandhian thought	A	A	0	A	UG appear	Nil

Course objectives

1. Seek inspiration from Gandhi's thoughts on education.
2. Analyze Gandhian education philosophy for moral and character development.
3. Understand Gandhi's idea of self-reliant education (**Swavalambi Shiksha**)
4. Relate Gandhi's educational thoughts to **NEP 2020**

Learning outcomes:

1. Value the Gandhian perspective on education.
2. Appreciate the significance of education in Indian languages
3. Evaluate the application of Gandhian thoughts in **NEP 2020**
4. Realize the principles of **NEP 2020** in vocational and skill-oriented education

SYLLABUS:

Unit-I- Gandhi's philosophy and education	No. Of lectures
<ul style="list-style-type: none"> ❖ Gandhi's philosophy on education ❖ Education for character building and moral development ❖ Education relating to health, hygiene, heritage and handicraft 	05
Unit-II- Gandhi's experiment in education	
<ul style="list-style-type: none"> ❖ Gandhi's educational ideas on the use of the Indian language as a medium of Instruction, Text Book and Teacher ❖ Gandhi's educational thought on elementary and Adult Education ❖ Gandhi's vision of higher education 	05
Unit-III- Gandhi's educational thought on skill and vocational education	
<ul style="list-style-type: none"> ❖ Rural development through skill and local need-based education ❖ Skill education in NEP 2020 and Gandhi ❖ Gandhi's idea of self-reliance (Swavalambi Shiksha) and its reflection in contemporary educational policy. 	05

TOTAL LECTURES REQUIRED	15
Practical/practice component -----(15 sessions of 2 hours each = 30 hours)	
<ul style="list-style-type: none"> ❖ Study tour/visits to Sevagram, Wardha (Bapu kuty) ❖ Regular visit to college main library to read related books, literature etc. ❖ Conduct programmes on Birth Annivarsary, Death Annivarsary and Swacchh Bharat Pakhwada ❖ Arrange workshop/seminar or other similar academic activities in relation to Gandhi's thought. ❖ Project on Gandhian thought. (Gandhi's work and philosophy) 	

Suggested reading:

1.

Essential reading:

1. Towards new education:- written by M. K. Gandhi edited by Baratan Kumaraappa.
2. "My experience with truth"- written by M. K. Gandhi
3. Our language problems:- written by M. K. Gandhi, Anand T. Hingorani ed. (Bombay:Bharatiya Vidya Bhavan), pp.53-55
4. Art and swadeshi: Munshi ram Manoharlal, Delhi, Kumarswamy Anand K. (1910)

Assessment Methods

• Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination committee of RMGC, Nagbhid from time to time.


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 Art's & Science College,
 Nagbhid, Dist. Chandrapur

Add Course On Mahatma Gandhian Thought

Academic Year 2021-2022 (Duration - Sept to Dec. 2021)

Batch - (1)

List Of Participants

Sr No	Name Of Student	Sign
1	Hemchitra Kanchana Kankulkar	Hemchitra
2	Anjali Gangadhar Karkade	A.Karkade
3	Purva Homaji Karmarkar	P.H.Karmarkar
4	Pranay Niksanth Karyekar	Pranay
5.	Vrushant Suresh Koram	V.Koram
6.	Harshal Prashant Kosekar	H.Kosekar
7	Souranjali Prakash Kumate	S.Kumate
8.	Punam Vinayak Madavi	P.Madavi
9.	Sneha Beilale Malode	S.Malode
10.	Nikita Anun mate	N.Mate
11.	Nilam Someshwar Mohurle	N.Mohurle
12.	Priya Ramesh Motghare	P.Motghare
13.	Puja Dattam Mule	P.Mule
14	sakshi Ramesh Nagarkar	S.Nagarkar
15.	saloni ganesh Naik	S.Naik
16	Punam Prabhakar Nikure	P.Nikure
17	Megha Umaji Niwate	M.Niwate
18.	Arshalee Samir Pathan	A.Pathan
19	sushma sureth Pise	S.Pise
20	Roshani Purushottam Panteke.	R.Panteke.
21	Vaishnavi Sudhir Samarth	V.S.Samarth
22	Mehwish Fatima Masud A. Sheikh	M.Sheikh
23	chanda Tukadaji Shende	C.Shende
24	Rashmi Ramesh Shende	R.Shende
25)	Harsha Subhash Shekri	H.S.Shekri
26)	Pranjali Raju Sontakke	P.R.Sontakke
27)	Pratiksha Badip Sontakke	P.Sontakke
28)	sakshi Ishwar Thakare	S.Thakare
29]	Prayati Prakash Thare	P.Thare

Add Course On Mahatma Gandhian Thought

Academic Year 2021-2022 (Duration-sept to Dec. 2021)

Batch-(2)

List Of Participants

Sr No	Name Of Student	Sign
1.	Khushi Ketan Amdawadi	<u>Hamdawadi</u>
2.	Ashwini Vinod Bagade	<u>Bagade</u>
3.	Pradiksha Ramraj Bagmare	<u>Bagmare</u>
4.	shradha shankar Bagmare	<u>SHR</u>
5.	Achal Vijaysingh Bais	A.V.Bais
6.	Monali Ramchandra Banpurkar	<u>MB</u>
7.	shejal subhash Bawankar	<u>ShejalB</u>
8.	Rohit Manohar Bhanarkar	<u>Bhanarkar</u>
9.	Angadh Ishwar Bherade	<u>Bherade</u>
10.	Ishwari Lakman Borkar	<u>Borkar</u>
11.	kesori Dipak Borkar	<u>kesori</u>
12.	Payal Rajendra chincholkar	<u>Alkar</u>
13.	Samdesh Rajendra Charhan	<u>Bharhan</u>
14]	sumit Anil chawke	<u>Chawke</u>
15)	Vishakha Rajeshwar chaudhari	<u>Chaudhari</u>
16)	vaishali shankar chaudhari	<u>Chaudhari</u>
17)	Shreyash Jaganath Chaudhari	<u>Shreyash</u>
18]	Rina Krushnaji chaudhari	<u>RChaudhari</u>
19]	Poiti Kamalakar chaudhari	<u>Chaudhari</u>
20	Kristanand Niraman chaudhari	<u>KNCChaudhari</u>
21]	Abhijit Prakash Chaudhari	<u>Abhi</u>
22]	Lalita Manohar Borkar	<u>Borkar</u>
23]	Megha Vasant Dahare.	<u>Dahare</u>
24)	Neha Ramesh Deshmukh	<u>Neha</u>
25]	Kesar Azeex Dhamari.	<u>Dhamari</u>
26]	Shanika. kushna Dwade	<u>Dwade</u>
27)	Nayan Ramesh Fulcat	<u>Fulcat</u>
28)	chary Anant Rao Ganer	C.A.Ganer
29	Dhanshari Dharmaj Ganvie	D.D.Ganvie



Manoharbai Shikshan Prasarak Mandal, Armori's
**RASHTRAPITA MAHATMA GANDHI ART'S & SCIENCE
COLLEGE, NAGBHID, DIST. CHANDRAPUR**
Accredited by NAAC 'B' Grade
(Affiliated to Gondwana University, Gadchiroli)

Officiating Principal
Dr. G. D. Deshmukh
M.Sc., NET., Ph.D.

STD: 07179
Office: 295404

Website: www.rmgcollegenagbhid.in

Email: - gdngbh72@gmail.com

nagbhid.rmgcollege@gmail.com

**VALUE ADDING COURSE
VAC: GANDHIAN THOUGHTS**

Students Attendance:

SN		Sept-21	Oct-21	Nov-21	Dec-21
1	Hariduta Krishna Kadukar				
2	Anjali G. Karkade				
3	Divya Homraj Karmakar				
4	Dranay Nikamthi Kayadra				
5	Vrushant Suresh Koram				
6	Harsha Prashant Korekar				
7	Swarnayali P. Kumare				
8	Purnam V. Madani				
9	Sneha K. Malode				
10	Nikita A. Mate				
11	Nelam S. Mohurle				
12	Prnya R. Motghare				
13	Puja D. Mule				
14	Sakshi R. Nagrikar				
15	Saloni G. Nalkar				
16	Purnam P. Nilavre				
17	Megha W. Niwate				
18	Ashata S. Pathan				
19	Sushma S. Pise				
20	Roshani P. Rantake				
21	Pratisha P. Santake				
22	Vaishnavi Sudhir Samasth				
23	Mehwish F. Sheikh				
24	Chanda T. Shende				
25	Pashmi R. Shende				
26	Harsha S. Shekhi				
27	Pranjali R. Santake				
28	Trupti C. Sonwane				
29	Sakshi J. Soyam				
30	Sakshi I. Thakare				



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Email: - gdnagbhir72@gmail.com

nagbhid.rmgcollege@gmail.com

**VALUE ADDING COURSE
VAC: GANDHIAN THOUGHT**

Students Attendance:

SN		Sept-21	Oct-21	Nov-21	Dec-21
31	Khushi K. Amdevedi				
32	Ashwini V. Bagde				
33	Pratiksha R. Bagmare				
34	Shraddha S. Bagmare				
35	Achal V. Bais				
36	Monali R. Bawankar				
37	Shejal S. Bawankar				
38	Rohit M. Bhanarkar				
39	Angadh I. Basode				
40	Islwari L. Borkar				
41	Keshori D. Borkar				
42	Pagal R. Chincholkar				
43	Sandosh R. Chankhan				
44	Sumit A. Chavke				
45	Vishakha R. Chaudhari				
46	Vaishali S. Chaudhari				
47	Shreyash J. Chaudhari				
48	Rina Krushnaji Chaudhari				
49	Prith Kamalakar Chaudhari				
50	Kristanand N. Chaudhari				
51	Abhrshela P. Chaudhari				
52	Lalita M. Borkar				
53	Megha V. Dahare				
54	Meha R. Deshmukh				
55	Kesar A. Dhamani				
56	Mayara R. Fulat				

Manoharbbhai Shikshan Prasarak Mandal, Armori's

RASHTRAPITAMAHATMA GANDHI ART'S & SCIENCE COLLEGE, NAGBHID, DIST.
CHANDRAPUR

Accredited by NAAC 'B' Grade

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COURSE COMPLETION CERTIFICATE

This certificate is presented to

Ku. Khushi Amdawadi

For completing the 4 month value adding course in Gandhian Thought

Hence certified.....

Principal of the College

Principal
Rashtrapita Mahatma Gandhi
Art's & Science College,
Nagbhid, Dist. Chandrapur