

**1.1.2 The institution adheres to the academic calendar including for the conduct of CIE**

# Academic Calendar (College) 2021-22

Nilkanthrao Shinde Science and Arts College, Bhadrawati, Dist. Chandrapur

## Academic Calendar

Session 2021-2022

**First Term (Odd Semester) 30-08-2021 to 06-02-2022**

Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Holiday	Total Days	Total Working Days
August	01	01	00	00	00	00	00	Nil	02	02
September	04	04	05	05	03	04	04	02	30	24
October	04	03	03	04	04	04	05	04	31	22
November	00	00	00	00	00	00	00	30	30	Nil
December	04	04	05	05	05	03	04	01	31	26
January	05	04	03	04	04	04	05	01	31	25
February	00	01	01	01	01	01	01	00	06	05
<b>Total Days</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>19</b>	<b>17</b>	<b>16</b>	<b>19</b>	<b>38</b>	<b>161</b>	<b>118</b>

Total Working Days	Number of Admission Days	Actual Teaching Days
<b>118</b>	<b>25</b>	<b>93</b>

Last date of admission	30-09-2021
Last date of admission with prior permission of Vice Chancellor	30-10-2021
Last date of admission with prior permission of Vice Chancellor	31-12-2021
Diwali Holidays/Winter Vacation	01-11-2021 to 30-11-2021

<b>Holidays</b>			
Sr. No.	Month	Date	Activity
1	September 2021	1-9-2021	Pola
		10-09-2021	Ganesh Chaturthi
2	October 2021	2-10-2021	Gandhi Jayanti
		6-10-2021	Pitru Moksha Amavasya
		15-10-2021	Dashahara
		19-1-2021	Eid
3	December 2021	25-12-2021	Christmas
4	January 2022	26-6-2022	Republic Day
5	February 2022	19-2-2022	Chatrapati Shivaji Maharaj Jayanti

*(Dr. N. V. Hafsey)*  
Chancellor - Academic  
calendar  
2021-22

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Dr. L. S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

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Nilkanthrao Shinde Science and Arts College, Bhadrawati, Dist. Chandrapur

Academic Calendar

Session 2021-2022

**Second Term (Even Semester) – 07-02-2022 to 15-06-2022**

Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Holiday	Total Days	Total Working Days
February	04	03	03	03	03	02	03	01	22	18
March	04	04	05	05	03	04	04	02	31	25
April	04	04	04	03	04	05	04	02	30	24
May	04	04	04	04	04	04	05	02	31	24
June	02	02	03	02	02	02	02	00	15	15
<b>Total Days</b>	<b>18</b>	<b>17</b>	<b>19</b>	<b>17</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>07</b>	<b>129</b>	<b>106</b>

Total Working Days	Actual Teaching Days
106	106

Holidays			
Sr. No.	Month	Date	Activity
1	March 2022	1-3-2022	Mahashivratri
		18-3-2022	Holi (Second Day)
2	April 2022	14-4-2022	Mahavir Jayanti
		14-4-2022	Dr. Babasaheb Ambedkar Jayanti
		15-4-2022	Good Friday
3	May 2022	3-5-2022	Ranzan Eid
		16-5-2022	Buddha Purnima

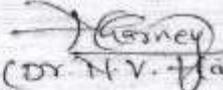
*[Signature]*  
(Dr. N. V. Hegde)  
Chairman - Academic  
Calendar  
2021-22

*[Signature]*  
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### Programmes

Sr. No.	Date	Programme
1.	15-08-2021	Independence Day
2.	26-08-2021	Placement Cell
3.	05-09-2021	Teachers Day Celebration
4.	08-09-2021	International Literacy Day
5.	30-09-2021 to 02-10-2021	NSS Week
6.	01-10-2021 to 07-10-2021	Wild Life Week
7.	02-10-2021	Mahatma Gandhi Jayanti
8.	06-10-2021	Alumni and Parent Teacher Association
9.	16-10-2021	Damma Chakra Anuvartan Din
10.	26-11-2021	Samvidhan Divas
11.	28-11-2021	Mahatma Phule Death Anniversary
12.	01 to 07-12-2021	AIDS Week
13.	06-12-2021	Dr. Babasaheb Ambedkar Maha Parinirvan Din
14.	03-01-2022	Savitribai Phule Jayanti
15.	26-01-2022	Republic Day
16.	01 to 07-02-2022	NSS Camp tentative
17.	05-02-2022	75 koti Suryanamaskar Sankalp
18.	19-02-2022	Chatrapati Shivaji Maharaj Jayanti
19.	08-03-2022	International Women Day
20.	11-04-2022	Mahatma Phule Jayanti
21.	14-04-2022	Dr. Babasaheb Ambedkar Jayanti
22.	01-05-2022	Maharashtra Day
23.	16-5-2022 to 20-05-2022	Preliminary Examination
24.	05-06-2022	World Environment Day
25.	21-06-2022	International Yoga Day

  
(Dr. N.V. Josney)  
Chairman - Academic  
calendar  
2021-22

  
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# Academic Calendar (University) 2021-22

## GONDWANA UNIVERSITY, GADCHIROLI

(Established by Government of Maharashtra Notification No. MIDC-2007/(322/07) UNI-4 Dated 27<sup>th</sup> Sept, 2011 & Presently a State University governed by Maharashtra Public University Act, 2016 (Maharashtra Act No. VI of 2017) [ACADEMIC SECTION])

M.I.D.C. ROAD, COMPLEX, GADCHIROLI, DIST GADCHIROLI - 442605 (Acad. Landline No.) 7132-223323

No.G.U./Acad./334/2021

Date : 10 /08/2021

### Notification

It is notified for general information of all the University conducted/constituent/affiliated colleges and Post Graduate Teaching Department of the University that the Academic Calendar for the Session 2021-2022 shall be as under:-  
**Academic Calendar for the Session 2021-2022**

Minimum instruction days per semester are:

Semester I	90 days/ for professional courses as mentioned by Central admission process.
Semester II	90 days
Total	180ys

### A) ACADEMIC CALENDAR FOR THE COURSES CONDUCTED AS PER "SEMESTER" PATTERN FOR SESSION 2021-2022

#### 1. Terms & Vacation

First Term (Odd semesters)	: 30/08/2021 to 06/02/2022
Diwali Holidays /Winter Vacation	: 01/11/2021 to 30/11/2021
Second Term (Even semesters)	: 07/02/2022 to 15/06/2022
Summer Vacation	: 16/06/2022 to 15/07/2022

#### 2. Admissions

a) Last date of admission (First term odd sem)	: 30/09/2021
b) Last date for Admission with prior permission of the Vice-Chancellor	: 30/10/2021

#### 3. Last date of submission of Enrollment form to the university

- i) upto 10/10/2021 for admitted student upto 30/09/2021
- ii) upto 10/11/2021 for admitted student upto 30/10/2021
- iii) For centralized admission (CAP) last date of enrollment shall be 10 days from the date of admission, as notified by the competent authority.

#### 4. Examination

##### a) Winter semester Examinations.

Commencement of Examination : 06/01/2022 to 05/02/2022

Last date for receipt of examinations Forms

a) Regular students	: 30/10/2021
b) Old Ex-students/ External student	: 30/10/2021
c) Ex-Students of immediately previous Examination	: 30/10/2021

##### 5. Examination

##### a) Summer Semester Examinations.

Commencement of Examination : 01/06/2022 to 14/7/2022

Last date for receipt of examinations Forms

a) Regular students	: 15/03/2022
b) Old Ex-students/External students	: 15/03/2022
c) Ex-Students of immediately previous Examination	: 15/03/2022

#### 6. Declaration of Results As per provision of Maharashtra Public Universities Act, 2016

  
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**B) ACADEMIC CALENDAR FOR THE COURSES CONDUCTED AS PER "ANNUAL" PATTERN FOR SESSION 2021-2022.**

- 1. Terms & Vacation**  
First Term : 30/08/2021 to 06/02/2022  
Winter Vacation : 01/11/2021 to 30/11/2021  
Summer Vacation : 16/06/2022 to 15/07/2022
- 2. Admission**  
a) Last date of Admission : 30/09/2021  
b) Last date for Admission with prior permission of the Vice-Chancellor : 30/10/2021
- 3. Last date of Enrolment**  
**Enrollment forms to the university**  
i) upto 10/10/2021 for admitted student upto 30/09/2021  
ii) upto 10/11/2021 for admitted student upto 30/10/2021  
iii) For centralized admission (CAP) last date of enrollment shall be 10 days from the date of admission, as notified by the competent authority.
- 4. Examinations**  
**a) Winter Examinations.**  
**Commencement of Examination** : 06/01/2022 to 05/02/2022  
**Last date for receipt of examination Forms**  
a) External students : 30/10/2021  
b) Old Ex-Students : 30/10/2021  
c) Ex-Students of immediately previous examination : 30/10/2021
- 5. Examinations**  
**a) Summer Examinations**  
**Commencement of Examination** : 01/06/2022 to 14/07/2022  
**Last date for receipt of examination Forms**  
a) Regular Students : 15/03/2022  
b) Old Ex-Students : 15/03/2022  
c) External Students : 15/03/2022  
d) Ex-Students of immediately previous examination : 15/03/2022

**Ph.D.**

Sr. No.	Examination	Date
1	PET Examination	25 <sup>th</sup> September, 2022
2	Ph.D. Course Work	Shall be notified Separately.

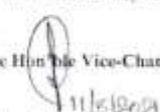
**SPECIAL ACADEMIC EVENTS**

University Foundation Day	2 <sup>nd</sup> October
Convocation of university	As per prior Approval of Hon'ble Chancellor

Note: i) This Academic Calendar 2021-2022 have been prepared by assuming that the situation created due to Covid-19 will be sorted out. But if the situation degrades further due to COVID-19 then this Calendar schedule may be change and shall be notified time to time

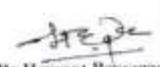
ii) Commencement of Next Academic Session for this batch shall be 16/07/2022

By Order of the Hon'ble Vice-Chancellor

  
(Dr. Anil Z. Chitade)  
Registrar

Copy forwarded for information and necessary action to :-

1. P.A. to Hon'ble Vice-Chancellor, Gondwana University, Gadchiroli.
2. P.A. to Hon'ble Pro-Vice-Chancellor, Gondwana University, Gadchiroli.
3. The Registrar of All Universities in the Maharashtra State.
4. The Principals/Director of all affiliated Colleges/Heads of the Post-Graduate Teaching Departments / Statutory officers/ Deputy Registrar of the Gondwana University, Gadchiroli.
5. Director, Knowledge of Resource Center of the Gondwana University, Gadchiroli.
6. System Analyst, Gondwana University, Gadchiroli.

  
(Dr. Hemant Borsagade)  
Deputy Registrar (Acad.)

  
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# College Preliminary Examination

## Physics

Nilkanthrao Shinde Sci and Arts college Bhadrawati Dist – Chandrapur  
Preliminary Examination Summer 2022  
B. Sc. Sem II Physics Paper II

Time: 75 Minutes

Max Marks: 50

Solve any 50 questions. One Mark each.

- According to Biot-Savart's law, the magnitude of magnetic induction (dB) due to a small current element of a conductor is directly proportional to –
  - The current (I) through it and the length of current element (dl).
  - the sine of the angle ( $\theta$ ) between the element and the line joining point P.
  - inversely proportional to the square of the distance ( $r^2$ ) between the element and the point P.
  - All of the above
- Give the SI unit of the magnetic induction from Biot-Savart law.
  - Ampere
  - Tesla
  - Weber
  - Gauss
- A wire placed along the north-south direction carries a current of 8 A from south to north. Find the magnetic field due to a 1 cm piece of wire at a point 200 cm north-east from the piece.
  - $14 \times 10^{-9}$  T
  - $1004 \times 10^{-9}$  T
  - $204.4 \times 10^{-9}$  T
  - $1.4 \times 10^{-9}$  T
- The magnetic field due to a current element is minimum in a plane passing through the element when it is perpendicular to its axis. State true or false.
  - True
  - False
- Identify the expression for magnetic induction from the following.
  - $B = \mu_0(H+I)$
  - $B = \mu_0(H \times I)$
  - $B = \mu_0(H-I)$
  - $B = \mu_0(HI)$
- Which among the following is true about magnetic susceptibility?
  - It is the ratio of magnetic intensity to intensity of magnetization
  - The SI unit of magnetic susceptibility is Tesla (T)
  - It is the ratio of intensity of magnetization to magnetic intensity
  - It is the ratio of magnetic moment to volume
- Give the SI unit of magnetic permeability of free space.
  - $T A m^{-2}$
  - $T A^{-2} m$
  - $T A^{-1} m$
  - $T A m^2$
- Relative magnetic permeability is unit less.
  - True
  - False
- The relative permeability of a medium is 0.050. What is its magnetic susceptibility?
  - 500
  - 501
  - 49.9
  - 499
- A material has a permeability of 0.1 H/m when the magnetic intensity is 70 A/m. What will be the magnetic induction inside the material?
  - 7 T
  - 0.7 T
  - 70 T
  - 0.07
- Ferromagnetic materials does not show hysteresis.
  - True
  - False
- Find the correct combination regarding relative permeability and magnetic susceptibility of a paramagnetic substance.
  - $\mu_r > 1, \chi < 0$
  - $\mu_r < 1, \chi > 0$
  - $\mu_r < 1, \chi < 0$
  - $\mu_r > 1, \chi > 0$
- Identify the expression for ampere's circuital law from the following?
  - $\oint B \cdot dl = \mu_0 I$
  - $\oint B \cdot dl = \mu_0 I$
  - $\oint B \cdot dl = 2 \mu_0 I$
  - $\oint B \cdot dl = 4 \mu_0 I$
- Which law can ampere's circuital be derived from?
  - Gauss Law
  - Newton's Law
  - Kirchhoff's Law
  - Biot-Savart Law
- State the rule that is used to find the direction of field acting at a point near a current-carrying straight conductor.
  - Cork rule
  - The right-hand thumb rule
  - Swimming rule
  - Flemings rule

  
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# College Preliminary Examination

## Marathi

निष्कंदराव शिरोडकरांचा व कला महाविद्यालय (अथवा अत्राधन) २०२२

सराव परिक्षा  
खेम IV

वेळ-७५म

सुण-५०

टिप:- कोणतेही प्रश्न सोडवा.

१) 'सत्याची जात' या काव्यसंग्रहाचे कवी कोण आहेत?

- अ) शंकरराव खरात ब) शरद्वंदू (मुक्तिबोध) क) इंदिरा संत  
ड) शिवाजी खांबेत.

२) सृष्टी, साहित्य व सौंदर्यमूल्य या गुंतास कोणता पुरस्कार प्राप्त झाला आहे?

अ) साहित्य अकादमी ब) ज्ञानपीठ क) महाशयू बासन  
ड) केशवसुत

३) 'दक्षिण वाङ्मय' रक विंगार हा पाठ कोणत्या पुस्तकातून घेतला आहे?

- अ) नवी मंडवाट ब) धार्मिक क) जीवन (आणि साहित्य) ड)  
उ) जन हे वोष्ठु जेणे

४) ग्रामीण विभागात असृष्ट्यावर होणारे अत्याचार सुरक्षित कराराची निगडीत आहे.

अ) भूमी प्रश्नारती ब) मजुरीरती क) अमाती ड) धरंरती

५) स्वतंत्र भारताच्या नव्या परिस्थितीत यादखेच्या किली पीड्या पुढे उगळेच्या आहेत.

- अ) दोन ब) तीन क) चार ड) एक

६) संगीता या पाठ्याचे लेखकाने पूर्वी नाव काय आहे?

- अ) शंकर रामा खरात ब) शंकर लक्ष्मण खरात  
क) शंकर रामा जाधव ड) शंकर माधव खरात



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# College Preliminary Examination

## Chemistry

2022

NILKANTHRAO SHINDE SCIENCE & ARTS COLLEGE, BHADRAWATI

COLLEGE PRELIMINARY EXAMINATION SUMMER – 2022

B.Sc. I Semester - II

Sub : Chemistry Paper-II (Physical Chemistry)

Time : 75 mins

Max. Marks : 50

Attempt any 50

- The graph of linear equation is always in the form of  
a) Straight line b) circle c) sphere d) curve
- The value of  $\log(xy)$  is  
a) 0 b)  $\log x + \log y$  c) 1 d) 2
- The value of  $\log 1$  is  
a) 1 b) 2 c) 0 d) 3
- The slope of the line is not defined if the line is  
a) Parallel to x-axis b) Parallel to y-axis c) Parallel to the line  $x+y=0$  d) Parallel to the line  $x-by=0$
- The slope  $m$  for equation  $3y = 2x + 6$  is  
a)  $3/2$  b)  $4/3$  c)  $2/3$  d) 6
- The equation  $y-y_1 = m(x-x_1)$ , for different values of  $m$  and  $((x_1, y_1)$  fixed, represents  
a) A family of concurrent lines b) A family of parallel lines c) A straight line  
d) A family of current lines.
- Two straight lines whose gradients are  $m_1$  and  $m_2$  respectively are parallel if,  
a)  $m_1=0$  b)  $m_1m_2=-1$  c)  $m_1=m_2$  d)  $m_2=0$
- The maximum value of  $(\log x)/x$  is  
a) 1 b)  $1/e$  c)  $e$  d)  $2/e$
- The SI unit of temperature is  
a) Celsius b) Fahrenheit c) Newton d) Kelvin
- The ionic product of water is  
a)  $1 \times 10^{-14}$  b)  $1 \times 10^{-7}$  c)  $1 \times 10^{-5}$  d) 1
- The pH of acidic solution is 3.72 Calculate the hydrogen ion concentration of solution.  
a) 1.905 b)  $7.325 \times 10^{-3}$  c) 4.258 d)  $1.905 \times 10^{-4}$
- In second quadrant, abscissa is — while ordinate is —  
a) negative, positive b) positive, negative c) positive, zero d) zero, negative

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# College Preliminary Examination

## Botany

**Nilkanthrao Shinde Science & Arts College, Bhadrawati**  
Preliminary Examination Summer 2022

B.Sc. Sem - IV Botany  
Paper II: PART ECOLOGY

Date: 02-06-2022  
Max Marks: 60

Time : 8.00 am to 9.15 am

Note:

- Solve 50 Questions out of 60 questions
- Choose correct answer from the given four options
- (1967) has defined ecology as the study of interactions of form.

- 1) friction and friction  
a) Kato  
b) Miles  
c) Hailst  
d) Great Hailst
- 2) is defined as the study of the relations of individual species to its environment  
a) Synecology  
b) Population ecology  
c) Autecology  
d) Community ecology
- 3) The lowest layer of atmosphere in which man and other living organisms live is called as  
a) Stratosphere  
b) Thermosphere  
c) Exosphere  
d) Troposphere
- 4) Mesosphere is about \_\_\_\_\_ in height above the earth surface.  
a) 90 km  
b) 110 km  
c) 120 km  
d) 130 km
- 5) The \_\_\_\_\_ at the earth's surface is governed by the brightness of the sun.  
a) Light  
b) Atmosphere  
c) Temperature  
d) None of the above
- 6) \_\_\_\_\_ is a stratified mixture of inorganic and organic materials, both of which are decomposition products  
a) Land  
b) Soil  
c) Both a and b  
d) None of the above
- 7) Weathering of rocks leads to formation of soil is called as  
a) Frost action  
b) glacier formation  
c) Pedogenesis  
d) some of these
- 8) The \_\_\_\_\_ is the term used for the vertical section of mature soil generally upto the depth of 2 meters.  
a) Soil profile  
b) land profile  
c) both a and b  
d) none of these
- 9) The characteristic of soil that determines the movement of water through pore spaces is known as  
a) Soil availability  
b) Soil profile  
c) both a and b  
d) none of the above
- 10) Plants cannot absorb the hygroscopic \_\_\_\_\_  
a) Water  
b) Soil  
c) Both a and b  
d) none of the above

- 36) The term ecotype was proposed by \_\_\_\_\_  
a) Tursson  
b) Raunkiaer's  
c) both a and b  
d) none of the above
- 37) Mishra and Shiva Rao (1948) found *Lindenbergia polyantia* and *Lindenbergia arisaeifolia* to be the ecotypes of \_\_\_\_\_ species.  
a) different  
b) same  
c) both a and b  
d) none of the above
- 38) head size called as  
a) allomeres  
b) mesomeres  
c) both a and b  
d) none of the above
- 39) \_\_\_\_\_ are animals which accumulate the gases than used in one when first survive in unfavorable periods of wood and the typical of flowers and grasslands.  
a) Cryptophytes  
b) Thymophytes  
c) Therophytes  
d) Plumerophytes
- 40) \_\_\_\_\_ is a scientific study of seasonal change i.e. the periodic phenomenon of organisms in relation to their climate.  
a) Physiognomy  
b) Sociability  
c) Phenology  
d) none of the above
- 41) \_\_\_\_\_ is the capacity of normal growth and reproduction which are important for successful survival of the species  
a) Hybrid vigour  
b) Vitality  
c) Vigour  
d) none of the above
- 42) \_\_\_\_\_ generally use Christen Raunkiaer's (1934) of plant life forms.  
a) Pharmacologist  
b) Ecologist  
c) Algologists  
d) zone of the above
- 43) \_\_\_\_\_ expresses the degree of association between species.  
a) Sociability  
b) Social reforms  
c) Social attitude  
d) none of the above
- 44) \_\_\_\_\_ commonly occur in high altitudes and latitudes  
a) Phanerophytes  
b) Hemicryptophytes  
c) Chamaephytes  
d) none of the above
- 45) The buds are completely hidden in the soil as bulbs and rhizomes called as  
a) Therophytes  
b) Phanerophytes  
c) Hemicryptophytes  
d) Geophytes
- 46) According to \_\_\_\_\_ succession is a natural process by which the same locality becomes successively colonized by different grasses or communities  
a) E. P. Odum  
b) E. Lucy Brain  
c) Clements  
d) none of the above
- 47) The gradual and predictable change in the species composition of a given area is called as  
a) ecological succession  
b) ecological gradation  
c) both a and b  
d) none of the above
- 48) Primary succession is a very \_\_\_\_\_ process.  
a) slow  
b) fast  
c) median  
d) none of the above

*Slacke*

Dr. L. S. Ladke

PRINCIPAL

N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

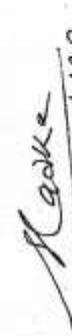
**NILKANTHRAO SHINDE SCIENCE AND ARTS COLLEGE BHADRAWATI**  
**COLLEGE PRELIMINARY EXAMINATION SUMMER -2022**

**TIME TABLE - ARTS FACULTY**

Date	Time	Sem - II	Sem - IV	Sem - VI
01/06/2022	9.30-10.45 A. M.	Marathi ✓	History ✓	Geography ✓
02/06/2022	9.30-10.45 A. M.	English ✓	Geography ✓	Sociology ✓
03/06/2022	9.30-10.45 A. M.	Geography ✓	Sociology ✓	History ✓
04/06/2022	9.30-10.45 A. M.	History ✓	Marathi ✓	English ✓
06/06/2022	9.30-10.45 A. M.	Sociology ✓	English ✓	Marathi ✓

  
**Dr. R. S. Hajare**  
Chief Supervisor  
College Preliminary Examination  
Nilkanthrao Shinde Science and Arts College,  
Bhadrawati

  
**Dr. Shashikant R. Sitre**  
Joint Chief Supervisor  
College Preliminary Examination  
Nilkanthrao Shinde Science and Arts College,  
Bhadrawati

  
**PRINCIPAL 27/5/22**  
**Dr. L. S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist. Chandrapur

  
**Dr. L. S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist. Chandrapur

# Unit Test - Botany

N.S. Science & Arts clg  
Bhadrawati  
class-B&C - Sem III

PAPER - III DUMINT

Page No.	
Date	

Total Marks - 15

## Unit - II

1. What is double fertilization? Describe the process of double fertilization - 5 marks

Q2 What is embryo? Describe the development of dicot embryo - 5 marks

Q3 What is endosperm? Describe the types of endosperm - 5 marks

Ladke

Dr. N.S. Bhadrawati

Asst Prof in  
Botany

Ladke

Dr. L.S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## Unit Test - Chemistry

Nilkanthrao Shinde Science & Arts College, Bhadrawati  
Chemistry Paper I (Organic)  
B. Sc. III Sem V

Time : 45 Minutes  
Unit Test  
Date: 25/08/2021  
Maximum Marks 15

---

A Explain theory and principle of NMR spectroscopy. 5

B Explain the following 5

1 spin spin coupling

2 chemical shift

C Explain shielding and deshielding in NMR. 2 1/2

D Why tms is used as reference material in NMR? 2 1/2

  
Dr. L.S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

  
(Dr. A.B. Dhote)

N.S. College, Bhadrawati

Unit Test (Physical Chemistry Paper II)

B.Sc. III Sem-V

Dt. 06/11/2021

Electrochemistry I, II

Total Marks 20

1. Define following 3M
  - a) Equivalent conductance
  - b) Molar conductance
  - c) Specific conductance
2. Write a short note on Kohlrausch's law with applications 3M
3. Explain Arrhenius Theory of electrolyte dissociation and give its applications. 4M
4. Write a short note on moving Boundary method and Hittorf's Method. 5M
5. What are Reversible and Irreversible cells and determine the pH by using Quinhydrone electrode. 5M

  
(Dr. K. P. Jumdle)

  
Dr. L.S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

N.S. college, Bhadrawati

Unit Test (Physical Chemistry Paper II)

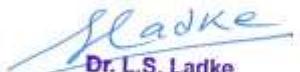
B.Sc. III Sem-VI

Dt. 21/04/2022

Total Marks 20

1. Write the difference between Thermal and Photochemical Process. 2M
2. Write the causes for high quantum yield. 2M
3. Write a short note on fluorescence and phosphorescence. 3M
4. Derive the expression for Beer-Lamberts law of photochemistry. 3M
5. Write a short note on i) Grothus-Draper law  
ii) Stark-Einstein law 4M
6. Explain Jablonski diagram for depicting radiative and non-radiative  
Fluorescence and phosphorescence processes. 4M
7. Write a short note on energy transfer process. 2M

  
(Dr. K. P. Junde)

  
Dr. L. S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## Unit Test - Physics

N.S. Science & Arts College, Bhadrawati Dist Chandrapur  
Department of Physics

Class: B.Sc. Sem - VI Subject: Physics - Paper - II

Digital And Analog Circuits And Instrumentation

Assignments Questions

UNIT - I

- Q-1) Distinguish between Analog and Digital Circuits -  
Q-2) State and prove De Moivre's theorem.  
Q-3) Convert the decimal No  $(57.8)_{10}$  into an equivalent Binary number.  
Q-4) Explain Full Adder

UNIT - II

- Q-1) Explain the working of full wave Rectifier  
Q-2) Explain the working of PN junction diode in forward bias.  
Q-3) Explain a Zener diode as a voltage Regulator  
Q-4) What is the necessity of filter circuit in a power supply -

  
**Dr. L.S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

  
(Dr. A.D. Bahagankar)

# Unit Test – Computer Science



Bhadrawati Shikshan Sanstha, Bhadrawati  
**NILKANTHRAO SHINDE SCIENCE AND ARTS COLLEGE**  
Bhadrawati, Dist. Chandrapur (M.S.)

[Department of Computer Science]

## UNIT TEST-I

Class : **B.Sc. VI Sem** Paper No & Name: **(Elective II): Data Communication with Cloud**  
Time : **50 min.** Date : **09/04/2022** Marks : **15**

Note: i) Solve any THREE questions  
ii) Draw neat and labeled diagram wherever necessary and assume suitable data if necessary.

- |      |                                  |    |
|------|----------------------------------|----|
| Q.1  | Explain analog data transmission | 05 |
| Q. 2 | Explain twisted pair cable       | 05 |
| Q. 3 | Explain Optical fiber            | 05 |
| Q. 4 | Explain Microwave Communication  | 05 |
| Q. 5 | Explain error control            | 05 |
| Q. 6 | Explain multiplexing in detail   | 05 |

**Dr. L.S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

**Nilkanthrao Shinde Science And Arts College, Bhadrawati**

*Department of Computer Science*

Class: B.Sc. IV Sem. Unit Test-I Max. Marks: 15

Paper No. & Name: II Visual Basic & Introduction to .NET Date:27/04/22

Sr. No.	Name	Marks
1	ALLAKATLA S. YADAGIRI	11
2	AWALE ACHAL A.	14
3	BAWANE MAHESH C.	08
4	BODHE MAYURI D.	06
5	DAHULE HITESH A.	09
6	DIXIT RAJYASHREE S.	07
7	DONGE KUNAL S.	13
8	DOPPALA AJAY C.	11
9	DURGE GITIKA K.	15
10	DURYODHAN AKSHAY N.	10
11	GHUGUL KRUNAL V.	09
12	JAMBHULKAR NIKITA V.	12
13	KARDE PRACHI H.	14
14	KALE PALLAVI S.	13
15	KAREKAR PRITI V.	12
16	KATKAR RACHI W.	06
17	KHARAWADE KHUSHI M.	08
18	MASALEKAR RAHUL S.	09
19	NAGPURE DARSHANA D.	10
20	NAKSHINE SAHIL V.	12
21	NANDE VIPUL G.	14
22	NIMBALKAR JANVI P.	12
23	PEDURKAR AISHWARYA R.	09
24	MAHEK M. SAYYAD	10
25	SHEIKH SANIYA S.	15
26	SHIVARKAR KOMAL P.	13
27	SHIVARKAR GANESH H.	12
28	SOYAM DIPAK R.	10
29	THAKUR KOMAL C.	09
30	TONGE KRUPALI A.	12
31	TUNGAPINDI PRAKOT N.	11
32	VIDHATE PRASAD S.	12
33	YELANE PRITI G.	13

**Dr. M. N. Quadri**  
Assistant Professor  
Department of Computer Science  
N.S.Sci. & Arts College, Bhadrawati



**Dr. L. S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

**Nilkanthrao Shinde Science And Arts College, Bhadrawati**

*Department of Computer Science*

Class: **B.Sc. II Sem.** Unit Test-I Max. Marks: 15

Paper No.& Name: **Structured Programming with C** Date: 12/05/2022

Sr. No.	Name	Marks
1	BHOSKAR KIUTIKA B.	10
2	BOSEWAR DIVYA V.	13
3	CHAUDHARI NIKITA G.	15
4	DARVE SIRAVANI V.	15
5	DASARI DAVID B.	03
6	DASRI PHILEMON V.	10
7	DURGE MANSI S.	09
8	GAURKAR DEVYANI P.	12
9	GAYKWAD ARPITA S.	14
10	HUMANE SANJANA R.	06
11	KANDE PRIYA V.	14
12	KARKADE SHREYA H.	13
13	KARKADE ANKITA S.	12
14	KHOBRAADE PRADNYA U.	12
15	LANDGE SAHIL S.	07
16	MANDHARE ANJALI S.	15
17	MESHARAM SANYOG S.	11
18	MESHARAM PRATIK R.	05
19	MESHARAM SANKET S.	07
20	MILMLE KRUNAL V.	11
21	NAGPURE MAYUR V.	10
22	PATHAK ANKIT A.	13
23	PATHAN FARHAD R.	14
24	PATHAN NILOFAR L.	09
25	PATHAN GUDHYA J.	10
26	RAUT RUPESH D.	12
27	RODE SHREYAS P.	13
28	RUYARKAR ACHAL V.	09
29	SAH ANKIT K.	12
30	SHEIKH SANIYA H.	10
31	SHEIKH AZIM S.	07
32	SWAN SAKSHI S.	07
33	TEKAM PRANALI K.	15
34	TUMSARE GOURI N.	14
35	VIDHATE SONAM D.	09
36	WARHADE YASHI S.	08

**Dr. M. N. Quadri**

Assistant Professor

Department of Computer Science

N.S.Sci. & Arts College, Bhadrawati

  
**Dr. L.S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## Unit Test – English

BA-I year / Sem-I M.M-20  
English class Test.

Q1 (A) Answer the following questions in 75 words.  
(Any two) 5

- 1) Why did Bishamber come to search of his sister?
- 2) At what venues would Shaw lecture?
- 3) How is mercy 'twice bless'd'?

(B) Answer any one questions in about 150 words. 5

- 1) Kalam was a gifted teacher. What does this text tell us about his method of teaching?
- 2) How does this poem achieve meaning in the context of the Indian freedom struggle?

Q2 (A) Fill in the blanks with article. 5

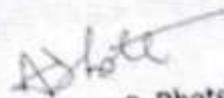
- 1) Have you had \_\_\_\_\_ breakfast?
- 2) \_\_\_\_\_ peacock is in danger of extinction.
- 3) Dr. Abdul Kalam was \_\_\_\_\_ honest man.
- 4) The table is made of \_\_\_\_\_ wood.
- 5) The cracked for \_\_\_\_\_ milk.

John

## Project Completion Certificate: Chemistry

### CERTIFICATE

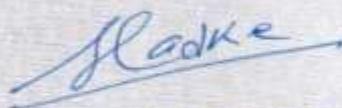
This is certify that project work entitled "Dephosphorization of steel produced from sponge iron in the induction furnace" is own work of of Ms Rupali D Chirde , conducted at Nilkanthrao Shinde Science and Arts College Bhadrawati, Dist. Chandrapur, Gondwana University, Gadchiroli, for their partial fulfilment of degree of Master of Science in chemistry in the faculty of science under my guidance. To the best of knowledge, this work has not been submitted earlier to any University or institution for award of any diploma or degree.



(Dr Mrs. Aparna B. Dhote)

Head of Department of Chemistry

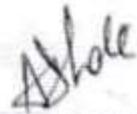
Nilkanthrao Shinde Science and Arts College,  
Bhadrawati.



**Dr. L.S. Ladke**  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## CERTIFICATE

This is to certify that the project work entitled "Assessment of physico-chemical parameters of Wani pond Ganeshpur " in District Yavatmal, Maharashtra" is own work of Mr. Gaurav V. Khulsange, conducted at Nilkanthrao Shinde Science and Art College, Bhadrawati, District Chandrapur Gondwana University, Gadchiroli, for the partial fulfillment of degree of Master of Science in chemistry in the faculty of science under my guidance. To the best of knowledge, this work has not been submitted earlier to any University or institution for the award of any diploma or degree.



(Dr. Mrs. Aparna B. Dhote)

Co-ordinator

Post graduate

Department of Chemistry  
Nilkanthrao Shinde Science  
and Art College, Bhadrawati



**Dr. L.S. Ladke**

PRINCIPAL

N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## Project Completion Certificates: Botany

### CERTIFICATE

This to certify that **Miss. Rohini Mahadev Pimpalshende** studying in **M.sc 2<sup>nd</sup> year Sem – IV , Botany** for the academic year 2021-2022 has completed the project work entitled as “ **SURVEY OF POISONOUS PLANTS IN WANI , DIST – YAVATMAL, MAHARASHTRA, INDIA .**” under the guidance of **Dr. Praveenkumar N. Nasare** . The project work is done by the student own work as per my knowledge.

Date :-

Place :- Bhadrawati

  
**Dr. L.S. Ladke**  
Principal  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

  
19/5/22  
**PRINCIPAL**  
**Dr. L.S. Ladke**  
Principal  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

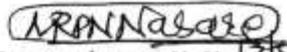
## CIRTIIFICATE

This to certify that the work present in this project work entitled "**Surve Of Poisonous Plants in Wani , Dist- Yavatmal, Maharashtra, India**". Is this own work of **Miss. Rohini Mahadev Pimpalshende** Conducted in college of **Nilakanthrao Shinde Science And Art's College, Bhadrawti** under my supervision.

Date :- 17/05/2022

Place :- Bhadrawti

  
Dr. L.S. Ladke  
PRINCIPAL  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

  
Dr. Praveenkumar N. Nasare 17/5/22

Dr. P.N. Nasare

Dr. P.N. Nasare  
Principal  
N.S. Science & Arts College  
Bhadrawati, Dist-Chandrapur

## CERTIFICATE

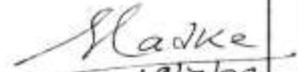
This to certify that Miss.Savita Ashokrao Muneshwar studying in M.sc 2<sup>nd</sup> year Sem – 4 , Botany for the academic year 2020-2021 has completed the project work entitled as " SURVEY OF MEDICINAL PLANTS IN SAKHARDARA , DIST – YAVATMAL , MAHARASHTRA, INDIA ." under the guidance of Dr. Praveenkumar N. Nasare . The project work is done by the student own work as per my knowledge.

Date :-

Place :- Bhadrawti



**Dr. L.S. Ladke**  
PRINCIPAL  
N.S. Science College  
Bhadrawati, Dist. Chandrapur

  
19/7/22  
PRINCIPAL

PL  
DT

# Ph. D. Students Seminar:

Nilkathrao Shinde Science and Arts College, Bhadrawati,  
Distt. Chandrapur

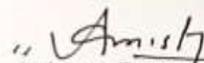
Centre for Higher Learning and Research

Name of Student : Mr. Ashish U. Shinde  
Subject : Chemistry, Physics  
Faculty : Science & Technology  
Thesis entitled : "Volumetric and thermoacoustic studies of Ternary mixtures at different temperatures"  
Name of Supervisor : Dr. G. R. Badale

Report on Seminar ( No : 01 )

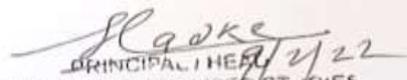
Presentation on review of literature carried out by the research students is satisfactory for the Ph.D. work.

  
Supervisor

  
Subject Expert

(Name Dr. G. R. Badale (Name Dr. A. A. Mistry  
HS College, Bhadrawati Awardmbetaw College,  
Walega

PRINCIPAL/HEAD  
Place of Research Work (CHLR)  
Nilkathrao Shinde Science & Arts  
College Bhadrawati, Dist-Chandrapur

  
PRINCIPAL/HEAD  
H L R AND SPECIALIZED STUDIES  
Nilkathrao Shinde Science and Arts  
College Bhadrawati Dist Chandrapur

Nilkathrao Shinde Science and Arts College, Bhadrawati,  
Distt. Chandrapur

Centre for Higher Learning and Research

Name of Student: Ku. Shivani Prakash Buzad

Subject: Chemistry

Faculty: Science and Technology

Thesis entitled: "Effect of Li<sup>+</sup>, Na<sup>+</sup> cations on different solvents through ultrasonic investigation"

Name of Supervisor: Dr. A. B. Dhote

date: - 09/02/22

Report on Seminar (No: 01)

More understanding towards secondary forces is needed.

Dhote  
Supervisor

(Name Dr. A. B. Dhote)

N.S. College Bhadrawati

S.A.  
Subject Expert

(Name Dr. S. A. Shah)

Mundhiketa College,  
Waran

PRINCIPAL/HEAD

Place of Research Work (CHLR)  
Nilkathrao Shinde Science & Arts  
College Bhadrawati Dist Chandrapur

Shadke  
PRINCIPAL/HEAD

HLR AND SPECIALIZED STUDIES  
Nilkathrao Shinde Science and Arts  
College Bhadrawati Dist Chandrapur

Nilkathrao Shinde Science and Arts College, Bhadrawati,  
Distt. Chandrapur

Centre for Higher Learning and Research

Name of Student : Mr. Sachin H. Sheikame

Subject : CHEMISTRY

Faculty : Science and Technology

Thesis entitled : "Ultrasonic investigation on the  
solution of Anti-malarial drugs  
at different temperatures"

Name of Supervisor : Dr. A. B. Dhote

Report on Seminar ( No : 01 )

Nice topic and Review of  
literature. Now they should  
proceed for the practical work.

Dhote  
Supervisor

Shenshi  
Subject Expert

( Name Dr. A. B. Dhote )

N. S. College, Bhadrawati

( Name Dr. Dhanshree Parakhai )

Mandhiketau college  
Nasara

PRINCIPAL/HEAD

Place of Research Work (CHLR)  
Nilkathrao Shinde Science & Arts  
College Bhadrawati Dist-Chandrapur

Madke  
PRINCIPAL/HEAD  
2/2/22

H L R AND SPECIALIZED STUDIES  
Nilkathrao Shinde Science and Arts  
College Bhadrawati Dist Chandrapur



**NILKANTHRAO SHINDE SCIENCE AND  
ARTS COLLEGE, CENTRE FOR HIGHER  
LEARNING AND RESEARCH  
BHADRAWATI, DIST. CHANDRAPUR**



DEPARTMENT OF Computer Science

**CERTIFICATE**

This is to certify that Shri / Ku. / Smt. Sejal  
Samnath Deogade is a bonafide student of  
Class B.Sc. (III) (Sem V) Roll No. \_\_\_\_\_ He / She has done  
Unsatisfactory / Satisfactory / Good / Excellent Assignment work in  
the subject Computer Science in Academic Session 2021-2022.

  
Incharge Teacher

  
Head of the Deptt.

N. S. Sci. & Arts College, Bhadrawati

  
Principal  
PRINCIPAL  
N. S. Sci. & Arts College, Bhadrawati  
Bhadrawati, Dist-Chandrapur

**NILKANTHRAO SHINDE SCIENCE AND  
ARTS COLLEGE, CENTRE FOR HIGHER  
LEARNING AND RESEARCH  
BHADRAWATI, DIST. CHANDRAPUR**



DEPARTMENT OF Botany

**CERTIFICATE**

This is to certify that Shri / Kú. / Smt. Harshad  
ASKAR is a bonafide student of  
Class B.Sc.III.48 Roll No. \_\_\_\_\_ He / She has done  
Unsatisfactory / Satisfactory / Good / Excellent Assignment work in  
the subject Botany P-II in Academic Session 2021-2022.

MR. P. N. NAGLE  
Incharge Teacher  
(Dr. P. N. Nagle)

[Signature]  
Head of the Deptt.

N. S. Sci. & Arts College, Bhadrawati

[Signature]  
Principal

N. S. Sci. & Arts College, Bhadrawati  
Bhadrawati, Dist-Chandrapur

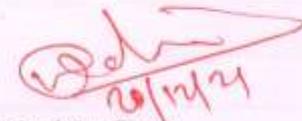
**NILKANTHRAO SHINDE SCIENCE AND  
ARTS COLLEGE, CENTRE FOR HIGHER  
LEARNING AND RESEARCH  
BHADRAWATI, DIST. CHANDRAPUR**



**DEPARTMENT OF Computer Science  
CERTIFICATE**

This is to certify that Shri / Ku. / Smt. Nilofar Latif  
Pathan is a bonafide student of  
Class B.Sc 1st year Roll No. \_\_\_\_\_ He / She has done  
Unsatisfactory / Satisfactory / Good / Excellent Assignment work in  
the subject Computer Science in Academic Session 2021-2022.

  
Incharge Teacher

  
Head of the Deptt.

N. S. Sci. & Arts College, Bhadrawati

  
Principal  
PRINCIPAL  
N.S. Science & Arts College, Bhadrawati  
Bhadrawati, Dist-Chandrapur

