



Janseva Foundation LoniBudruk  
**Arts and Commerce College, Shendi (Bhandardara)**

At.-Chichondi, Tal.-Akole, Dist.-Ahmednagar (MS) 422604

NAAC Accredited 'B+' Grade

Unipune ID- PU/AN/AC/93/2007 Email- [principal.acshendi@pravara.in](mailto:principal.acshendi@pravara.in)

Website : [www.accollegeshedi.in](http://www.accollegeshedi.in)



Sr. No.	Particulars	Academic Year
1	List of Certificate Courses	2023-24
2	Details of Certificate Courses	2023-24



  
**PRINCIPAL**  
Janseva Foundation Loni BK's  
Art's And Commerce College,  
Shendi(Bhandardara)-422604  
Tal. Akole, Dist. Ahmednagar,



Janseva Foundation LoniBudruk  
**Arts and Commerce College, Shendi (Bhandardara)**

At.-Chichondi, Tal.-Akole, Dist.-Ahmednagar (MS) 422604

NAAC Accredited 'B+' Grade

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**List of Certificate Courses  
Academic Year 2023-24**

Sr. No.	Name of Add on/Certificate Programs offered	Course Code	Year of offering
1	Soil and Water Analysis	B SWA 01	2023-24
2	Hindi Patrakarata	H HP 01	2023-24
3	Travel and Tourism	G TT 01	2023-24
4	Energy conservation	P EC 01	2023-24
5	Introduction of GIS	G IG 02	2023-24



  
**PRINCIPAL**  
Janseva Foundation Loni BK's  
Art's And Commerce College,  
Shendi(Bhandardara)-422604  
Tal. Akole, Dist. Ahmednagar,



**Certificate Course in  
“Soil and Water  
Analysis”  
Year 2023-24**



**Janseva Foundation LoniBudruk**  
**Arts and Commerce College, Shendi (Bhandardara)**  
**At.-Chichondi, Tal.-Akole, Dist.-Ahmednagar (MS) 422604**  
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Date: 24 /09 /2023

To,

**The Principal,**  
Arts and Commerce College,  
Shendi. Tal- Akole, Dist- A. Nagar.

**Subject: Permission to start certificate course.**

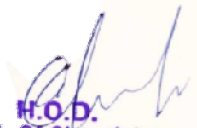
**Respected Sir,**

With reference to above subject the Department of Chemistry start "A Certificate course of Soil and Water Analysis" for all students from various faculties who are interested in the field of agrochemicals and requiring a skill based knowledge for self-employment. The syllabus for the course is based on the subject of Chemistry.

You are requested to sanction permission to start this course in the academic year 2022-23.

Thank you,

Yours Sincerely,

  
H.O.D.  
Dept. Of Chemistry  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist Ahmednagar

(  
Mr. Langhi.G.G)




**Janseva Foundation LoniBudruks  
Arts & Commerce College, Shendi**

**DEPARTMENT OF CHEMISTRY**

**“A Certificate Course in Soil and Water Analysis”**

Year: 2023-24 (Admitted Student List)

Sr.no	Name of Students	Class	Gender
1	BhoirKavitalaxman	FYBSC	FEMALE
2	Bhangare Prasad Vasant	FYBSC	MALE
3	Gaikwad Roshan Datta	FYBSC	MALE
4	FodasePratikshaBalu	FYBSC	FEMALE
5	GhodeVarshaSakharam	FYBSC	FEMALE
6	Ghorapade Ashwini Popat	FYBSC	FEMALE
7	KhadeBhauraoBalu	FYBSC	MALE
8	GondakeRupaliPramod	FYBSC	FEMALE
9	KhadeSakshiBhaskar	FYBSC	FEMALE
10	Lote Anita Dhondu	FYBSC	FEMALE
11	Mandave Saniya Dagadu	FYBSC	FEMALE
12	PabalkarBhagysfriUttam	FYBSC	FEMALE
13	SonavaneKshitijaKhandu	FYBSC	FEMALE
14	TalpeAkankshaEkanath	FYBSC	FEMALE
15	Mali MayurDnyaneshwar	FYBSC	MALE
16	Jagtap Vishal Shankar	FYBSC	MALE
17	GhaneRohitKhandu	FYBSC	MALE
18	BambalePayalMachindra	FYBSC	FEMALE
19	BhangreTusharMaruti	FYBSC	MALE
20	DhongadeSampada Santosh	FYBSC	FEMALE

  
**H.O.D.**  
**Dept. Of Chemistry**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal Akole, Dist Ahmednagar



**Janseva Foundation LoniBudruks  
Arts & Commerce College, Shendi  
DEPARTMENT OF CHEMISTRY**

**“A Certificate Course in Soil and Water Analysis”  
2023-24**

**Aims Objectives of the Course:-**

1. Students will be able to grasp the knowledge of soil and water testing.
2. Students will gain knowledge of Micro and Macro nutrients.
3. Students will be able to carry out soil and water analysis in laboratory.

**Syllabus Designing Instructions:-**

This course lasts three months which include two theory lectures and one practical per week and contains the following activities:

- A. Theory classes
- B. Field visit
- C. Assignment
- D. Practical

**A) Theory details:**

**Hours**

**Chapter 1: Analysis of soil**

- Introduction to soil analysis 5
- Types of soil
- Soil pollutants
- Importance of soil analysis
- Parameters of soil analysis
- Applications of soil analysis

**Chapter 2: Analysis of water**

- Introduction to water analysis 10
- Types of water
- Water pollutants
- Importance of water analysis
- Parameter of water analysis
- Application of water analysis

**B) Field visit:**

During the course time department will arrange field visit to nearby soil water analysis laboratory.

**C) Assignment:**


Students will be given assignments regarding soil and water analysis.

**D) Practical:**

**15**

**Soil Analysis**

- 1) To determine pH of given soil sample.
- 2) To determine pH of given water sample.
- 3) To determine salinity/ Alkalinity of given soil sample.
- 4) To determine salinity/ Alkalinity of given water sample.
- 5) To determine hardness of water.
- 6) To determine TDS of given sample of water.
- 7) To determine Mg content in soil analysis.
- 8) To determine Mg content in Water analysis.
- 9) To determine Ca content in soil sample.
- 10) To determine Ca content in water sample.
- 11) To determine the EC of soil sample.
- 12) To determine the EC of water sample.
- 13) To determine carbon content of soil sample.

  
**W.O.D.**  
**Dept. Of Chemistry**  
Janseva Foundation Loni Budruks  
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Date:26/09/2023

## Notice

### DEPARTMENT OF CHEMISTRY

All the students of Arts and Commerce College, Shendi are informed that, the admission for the "A Certificate Course in Soil and Water Analysis" are open for the academic year 2023-24. The students willing to admit for this course should immediately contact Mrs. Langhi G.G on or before Saturday, 26<sup>th</sup> Sep 2023. Students approaching thereafter shall not be considered for the admission to the course.

  
H.O.D.  
Dept. Of Chemistry  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist Ahmednagar

**Janseva Foundation LoniBudruks**  
**Arts & Commerce College, Shendi**  
**DEPARTMENT OF CHEMISTRY**

**Theory question paper**

**A Certificate Course on Soil and Water Analysis**

**Year : 2023-24**

**Time:2 hr**

**Date :Marks : 50 M**

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(NOTE : All questions are compulsory)

**Q.1) Choose the correct option from the following.**

**1. The water content of a soil sample cannot be determined by ----- method.**

- a) Oven drying                      b) alcohol                      c) calcium carbide                      d) pipette

**2. In oven drying method, the soil sample is kept for about----- hours in the oven.**

- a) 1                      b)2                      c) 24                      d) 48

**3. An organic soil sample is kept in oven for its water content determination. The temperature preferred is -----**

- a) 60<sup>0</sup>                      b) 80<sup>0</sup>                      c) 105<sup>0</sup>                      d) 110<sup>0</sup>

**4. ----- method is specially suited to a circumstance where water content is to be quickly determined for the purpose of proper field control.**

- a) oven drying                      b) Sand bath                      c) Alcohol                      d) Calcium carbide

**5. In pycnometer method of water content determination, it is necessary to accurately know the specific gravity G of soil whose water content is determined.**

- a) True                      b) False

**6. An oven – dried soil of mass 400g is placed in a pycnometer where empty weight is 573g. The mass of pycnometer with soil is 973g. The total mass of pycnometer with water and soil inside is 160g. The pycnometer filled with water alone has mass of 1480. The specific gravity of solids is 2.65. its water content is -----**

- a) 40.456                      b) 46.504                      c) 23.236                      d) 6.423

**7. In calcium carbide method, the gas produced is-----**

- a) Methane                      b) carbon dioxide                      c) acetylene                      d) oxygen

**8. The water content of soil deposit in the in-situ condition is determinate by----- method.**

- a) Radiation                      b) pycnometer                      c) calcium carbide                      d) oven-dry

**9. Which one is lower category for classification of soil?**

- a) soil order                      b) family                      c) soil series                      d) none of above

**10. Which clay mineral is responsible for cracking in black soil?**

- a) Kaolinite                      b) Illite                      c) vermiculite                      d) Montmorillonite

**11. Apatite is a group of minerals which mainly contains:**

- a) Sulphur                      b) Phosphorus                      c) Nitrogen                      d) Titanium

**12. pH meter measures:**

- a) H ions activity      b) H ions concentration      c) Al ions      d) All of the above

**13. EC (Electrical conductivity) meter measures:**

- a) Total salt in soil      b) Soluble salt in soil      c) Both the salt      d) None of the above

**14. The unit used for the measurement of electrical conductivity is-----**

- a) ds/m      b) us/cm      c) mg/m      d) Both a) and b)

**15. Olsen method is used phosphorus estimation in:**

- a) Acidic soil      b) Neutral to alkali      c) soil saline soil      d) All of the above

**16. Which method is used for determination of available phosphorus in acid soil?**

- a) Bray      b) Olsen      c) Walkley and black      d) Jackson

**17. Which instrument is used for the estimation of potash (k)?**

- a) Spectrophotometer      b) Flame photometer      c) Colorimeter      d) Atomic absorption

**18. Spectrophotometer is used for determination of -----**

- a) N      b) P      c) K      d) All of the above

**19. Which one of the following plant nutrients resistant to disease and insect-pest?**

- a) Potassium      b) Nitrogen      c) Phosphorus      d) Calcium

**20. The chemical composition of waste water naturally reflects the origin from which it came.**

- a) True      b) False

**21. The world's available fresh water supply is about ----- percent of that total water supply.**

- a) 10      b) 4      c) 3      d) 7

**22. Which of the following related to the aerobic organic matter is true?**

- a) Essential nutrients for growth      b) Development of sludge deposits  
c) Growth of undesirable aquatic life      d) Development of septic condition

**23. ----- tend to resist conventional method of wastewater treatment.**

- a) Suspended solids      b) Nutrients      c) Refractory organics      d) Priority pollutants

**24. The quality of the fish habitat begins to increase when the dissolved oxygen concentration drops below 4 or 5 mg L-1.**

- a) True      b) False

**25. Organic matter + nutrients +  $\text{O}_2$        $\text{CO}_2 + \text{H}_2\text{O}$  +-----**

- a) Biomass      b)  $\text{O}_2$       c) Nutrients      d) Organic matter

---

Best of Luck

**Janseva Foundation LoniBudruk**  
**Arts & Commerce College, Shendi**  
**DEPARTMENT OF CHEMISTRY**

**Specimen Answer Sheet**

**A Certificate Course on Soil and Water Analysis**

**Year : 2023-24**

**Time:2 hrMarks : 50 M**

---

(NOTE : All questions are compulsory)

**Q.1) Choose the correct option from the following.**

**1. The water content of a soil sample cannot be determined by ----- method.**

- a) Oven drying                      b) alcohol                      c) calcium carbide                      d) pipette

**Answer: d**

**2. In oven drying method, the soil sample is kept for about----- hours in the oven.**

- a) 1                      b)2                      c) 24                      d) 48

**Answer: c**

**3. An organic soil sample is kept in oven for its water content determination. The temperature preferred is -----**

- a) 60<sup>0</sup>                      b) 80<sup>0</sup>                      c) 105<sup>0</sup>                      d) 110<sup>0</sup>

**Answer: a**

**4. ----- method is specially suited to a circumstance where water content is to be quickly determined for the purpose of proper field control.**

- a) oven drying                      b) Sand bath                      c) Alcohol                      d) Calcium carbide

**Answer: d**

**5. In pycnometer method of water content determination, it is necessary to accurately know the specific gravity G of soil whose water content is determined.**

- a) True                      b) False

**Answer: a**

**6. An oven – dried soil of mass 400g is placed in a pycnometer where empty weight is 573g. The mass of pycnometer with soil is 973g. The total mass of pycnometer with water and soil inside is 160g. The pycnometer filled with water alone has mass of 1480. The specific gravity of solids is 2.65. its water content is -----**

- a) 40.456                      b) 46.504                      c) 23.236                      d) 6.423

**Answer: b**

**7. In calcium carbide method, the gas produced is-----**

- a) Methane                      b) carbon dioxide                      c) acetylene                      d) oxygen

**Answer: c**

**8. The water content of soil deposit in the in-situ condition is determinate by----- method.**

- a) Radiation                      b) pycnometer                      c) calcium carbide                      d) oven-dry

**Answer: a**

**9. Which one is lower category for classification of soil?**

- a) soil order                      b) family                      c) soil series                      d) none of above

**Answer: c**

**10. Which clay mineral is responsible for cracking in black soil?**

- a) Kaolinite                      b) Illite                      c) vermiculite                      d) Montmorillonite

**Answer: d**

**11. Apatite is a group of minerals which mainly contains:**

- a) Sulphur                      b) Phosphorus                      c) Nitrogen                      d) Titanium

**Answer: b**

**12. pH meter measures:**

- a) H ions activity                      b) H ions concentration                      c) Al ions                      d) All of the above

**Answer: a**

**13. EC (Electrical conductivity) meter measures:**

- a) Total salt in soil    b) Soluble salt in soil    c) Both the salt    d) None of the above

**Answer: b**

**14. The unit used for the measurement of electrical conductivity is-----**

- a) ds/m    b) us/cm    c) mg/m    d) Both a) and b)

**Answer: d**

**15. Olsen method is used phosphorus estimation in:**

- a) Acidic soil    b) Neutral to alkali    c) soil saline soil    d) All of the above

**Answer: b**

**16. Which method is used for determination of available phosphorus in acid soil?**

- a) Bray    b) Olsen    c) Walkley and black    d) Jackson

**Answer: a**

**17. Which instrument is used for the estimation of potash (k)?**

- a) Spectrophotometer    b) Flame photometer    c) Colorimeter    d) Atomic absorption

**Answer: b**

**18. Spectrophotometer is used for determination of -----**

- a) N    b) P    c) K    d) All of the above

**Answer: b**

**19. Which one of the following plant nutrients resistant to disease and insect-pest?**

- a) Potassium    b) Nitrogen    c) Phosphorus    d) Calcium

**Answer: a**

**20. The chemical composition of waste water naturally reflects the origin from which it came.**

- a) True    b) False

**Answer: a**

**21. The world's available fresh water supply is about ----- percent of that total water supply.**

- a) 10    b) 4    c) 3    d) 7

**Answer: c**

**22. Which of the following related to the aerobic organic matter is true?**

- a) Essential nutrients for growth    b) Development of sludge deposits  
c) Growth of undesirable aquatic life    d) Development of septic condition

**Answer: d**

**23. ----- tend to resist conventional method of wastewater treatment.**

- a) Suspended solids    b) Nutrients    c) Refractory organics    d) Priority pollutants

**Answer: c**

**24. The quality of the fish habitat begins to increase when the dissolved oxygen concentration drops below 4 or 5 mg L-1.**

- a) True    b) False

**Answer: b**

**25. Organic matter + nutrients +  $\text{O}_2$      $\text{CO}_2 + \text{H}_2\text{O}$  +-----**

- a) Biomass    b)  $\text{O}_2$     c) Nutrients    d) Organic matter

**Answer: a**




**A Certificate Course on Soil and Water Analysis**

**Year: 2023-24**

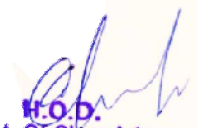
**Mark List (Theory)**

Sr.No	Name of Students	Mark out of 50 M
1	BhoirKavitalaxman	34
2	Bhangare Prasad Vasant	33
3	Gaikwad Roshan Datta	32
4	FodasePratikshaBalu	38
5	GhodeVarshaSakharam	30
6	Ghorapade Ashwini Popat	34
7	KhadeBhauraoBalu	30
8	GondakeRupaliPramod	44
9	KhadeSakshiBhaskar	30
10	Lote Anita Dhondu	40
11	Mandave Saniya Dagadu	42
12	PabalkarBhagyshriUttam	40
13	SonavaneKshitijaKhandu	40
14	TalpeAkankshaEkanath	43
15	Mali MayurDnyaneshwar	30
16	Jagtap Vishal Shankar	31
17	GhaneRohitKhandu	32
18	BambalePayalMachindra	33
19	BhangreTusharMaruti	30
20	DhongadeSampada Santosh	31

  
**H.O.D.**  
**Dept. Of Chemistry**  
Jyotiba Phule Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist Ahmednagar

**A Certificate Course on Soil and Water Analysis**  
**Year: 2023-24**  
**Mark List (Practical and oral)**


<b>Sr. No</b>	<b>Name of Student</b>	<b>Practical 30 M</b>	<b>Oral 20 M</b>	<b>Total 50M</b>
1	BhoirKavitalaxman	26	18	44
2	Bhangare Prasad Vasant	24	15	39
3	Gaikwad Roshan Datta	23	14	37
4	FodasePratikshaBalu	24	13	37
5	GhodeVarshaSakharam	25	18	43
6	Ghorapade Ashwini Popat	22	15	37
7	KhadeBhauraoBalu	24	15	39
8	GondakeRupaliPramod	28	18	46
9	KhadeSakshiBhaskar	25	15	40
10	Lote Anita Dhondu	25	18	43
11	Mandave Saniya Dagadu	26	16	42
12	PabalkarBhagysfriUttam	22	18	40
13	SonavaneKshitijaKhandu	28	16	44
14	TalpeAkankshaEkanath	25	15	40
15	Mali MayurDnyaneshwar	25	18	43
16	Jagtap Vishal Shankar	24	16	40
17	GhaneRohitKhandu	24	10	34
18	BambalePayalMachindra	24	13	37
19	BhangreTusharMaruti	22	20	42
20	DhongadeSampada Santosh	26	20	46

  
**H.O.D.**  
**Dept. Of Chemistry**  
Jansheva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Aकोle, Dist Ahmednagar

**“A Certificate Course on Soil and Water Analysis”**

**Result Analysis Year: 2023-24**

<b>Sr.No</b>	<b>Name of Student</b>	<b>Theory Marks out of 50 m</b>	<b>Practical (30+20) = 50M</b>	<b>Total 100M</b>	<b>Grade</b>
1	BhoirKavitalaxman	34	44	78	A+
2	Bhangare Prasad Vasant	33	39	72	A
3	Gaikwad Roshan Datta	32	37	69	A
4	FodasePratikshaBalu	38	37	75	A+
5	GhodeVarshaSakharam	30	43	73	A
6	Ghorapade Ashwini Popat	34	37	71	A
7	KhadeBhauraoBalu	30	39	69	A
8	GondakeRupaliPramod	44	46	90	O
9	KhadeSakshiBhaskar	30	40	70	A
10	Lote Anita Dhondu	40	43	83	O
11	Mandave Saniya Dagadu	42	42	84	O
12	PabalkarBhagyshriUttam	40	40	80	O
13	SonavaneKshitijaKhandu	40	44	84	O
14	TalpeAkankshaEkanath	43	40	83	O
15	Mali MayurDnyaneshwar	30	43	73	A
16	Jagtap Vishal Shankar	31	40	71	A
17	GhaneRohitKhandu	32	34	66	A
18	BambalePayalMachindra	33	37	70	A
19	BhangreTusharMaruti	30	42	72	A
20	DhongadeSampada Santosh	31	46	77	A <sup>+</sup>


  
**H.O.D.**  
**Dept. Of Chemistry**  
Jansaveva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist Ahmednagar

## A Certificate Course on Soil and Water Analysis

Year: 2023-24

### Result Analysis

Sr.No		Grade				Total Pass	Total Fail	Result
		O	A <sup>+</sup>	A	B <sup>+</sup>	20	0	100%
1	Girls	6	3	4	-			
2	Boys	00	2	5	-			

  
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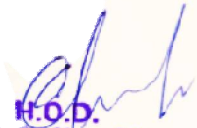
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Website : [www.acscollegeshedi.in](http://www.acscollegeshedi.in)



### **Notice**

All the students of certificate course on “A Certificate Course in Soil and Water Analysis” are hereby informed that, their passing certificates of course are received to department of chemistry, Arts and commerce college Shendi. These students are informed to collect their respective certificates from Prof.Langhi G.G on 02/01/2024

  
**H.O.D.**  
**Dept. Of Chemistry**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal.Akole, Dist Ahmednagar



Janseva Foundation LoniBudruks

**ARTS AND COMMERCE COLLEGE, SHENDI**

Tal-Akole, Dist-Ahmednagar, Pin-422604

# **CERTIFICATE**

**This Certifies that**

**Mr./Miss-----Of class -----has successfully  
completed the Certificate Course “Soil and Water Analysis” held by the Dept Of  
Chemistry during the Academic Year 2023-24**

Coordinator

Principal



**Janseva Foundation LoniBudruk**  
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**“A Certificate Course on Soil and Water Analysis”**


**Report**

Department of chemistry runs “A Certificate Course on Soil and Water Analysis” for students. The main objective behind starting the certificate was that the most of students belong to family with agricultural background.

Students in Tribal area are unaware about the condition of soil and water used for agriculture. By the use of excess fertilizers, insecticides, and pesticides the fertile value of soil is reduced. As a result of this the productivity of yield decreases.

The decrease in yield, financially weakens the farmer and also insufficient for country like India which has increasing trend in population. In order to make students aware of quality of soil and water used for farming, the department of chemistry undergoes soil and water analysis activity through which parameter like pH, conductivity, salinity, Do, TDS, turbidity etc. are verified. The report of such parameter is prepared. The faculty members explain the parameters and guide the students. Students of the department help in the activity by providing soil and water sample from their farms.

The department of Chemistry organizes visits to Mr. Madhe Sunil Tukaram Farm at Chichondi Village for field experience.

  
**H.O.D.**  
**Dept. Of Chemistry**  
Janseva Foundation Loni Budruk  
Arts And Commerce College, Shendi  
Tal. Akole, Dist Ahmednagar



**Certificate Course in  
“Hindi Patrakarata”  
Year 2023-24**



JANSEVA FOUNDATION LONI,  
ARTS AND COMMERCE COLLEGE, SHENDI  
DEPARTMENT OF HINDI  
2023-2024  
**HINDI PATRKARITA CERTIFICATE COURSE**

Sr.No.	Documents
1.	Permission Letter for starting course.
2.	Syllabus: with signature of syllabus framing Committee.
3.	Time table. Common time table, Course time table,
4.	Student list: (Student profile.)
5.	Students Notice of Commencement of the course.
6.	Student Attendance.
7.	Exam Notice.
8.	Question Paper.
9.	Specimen Answer sheet.
10.	Mark list
11.	Result Analysis.
12.	Course certificate.
13.	One page Report of the Course.

दिनांक: 01/11/2023

अनुमति पत्र

प्रति,

मा. प्राचार्य,

जनसेवा फौंडेशन लोणी बुद्रुक

कला व वाणिज्य महाविद्यालय शेंडी

विषय: हिंदी विषय के लिए 'हिंदी पत्रकारिता' प्रमाणपत्र कोर्स प्रारंभ करने के संदर्भ में...

महोदय,

उपरोक्त विषय में हम आपको सूचित करना चाहते हैं की, हमारे महाविद्यालय में हिंदी विषय के लिए हिंदी पत्रकारिता के बारे में अधिक जानकारी प्राप्त करने के लिए, हम एक 'हिंदी पत्रकारिता' प्रमाणपत्र कोर्स शुरू करना चाहते हैं, लेकिन इसके लिए हम आपसे अनुरोध करते हैं कि आप इसे शुरू करने के लिए अनुमति दे।

Smbule

हिंदी विभाग

डॉ. घुले एस. एम

‘हिंदी पत्रकारिता’ पाठ्यक्रम

इकाई	पाठ्यविषय	तासिकाए
इकाई-I	पत्रकारिता उद्भव और विकास	10 तासिकाए
इकाई-II	पत्रकारिता का अर्थ, परिभाषा, महत्व, स्वरूप	10 तासिकाए
इकाई-III	पत्रकारिता के विविध आयाम	10 तासिकाए

अंक विभाजन- पूर्णांक :100

आंतरिक मूल्यमापन : 30 (लघुत्तरी परीक्षा 20 अंक, स्वाध्याय 10 अंक)

मुख्य परीक्षा: 70 अंक

### उद्देश:-

छात्रों में पत्रकारिता के प्रती रुचि निर्माण करना।

छात्रों को पत्रकारिता का उद्भव और विकास के बारे में जानकारी देना।

छात्रों को पत्रकारिता के विविध आयाम को बारे में जानकारी देना।

### अध्यापन पद्धति:-

व्याख्यान तथा विश्लेषण

दृक-श्राव्य माध्यमों/संगणक, इंटरनेट आदि साधनों का प्रयोग

अतिथियों का व्याख्यान तथा समूह चर्चा स्वाध्याय लेखन

### पाठ्यक्रम उद्देश निष्पत्ती:-

छात्रों में पत्रकारिता के प्रती रुचि निर्माण हुई।

छात्रों को पत्रकारिता का उद्भव और विकास के बारे में जानकारी मिली।

छात्रों को पत्रकारिता के विविध आयाम को बारे में जानकारी मिली।

हिंदी पत्रकारिता प्रमाणपत्र पाठ्यक्रम  
प्रश्नपत्र का प्रारूप

समय: 2. 1/2 घंटे

पूर्णांक 70

(सभी प्रश्न अनिवार्य हैं)

प्रश्न:1 एक वाक्य उत्तर वाले प्रश्न

20 अंक

प्रश्न:2 लघुत्तरी उत्तर वाले प्रश्न

20 अंक

प्रश्न:3 दिघोत्तरी उत्तर वाले प्रश्न)

30 अंक

संदर्भ ग्रंथ:

पत्रकारिता की कालजयी परंपरा-कमलेश्वर

हिंदी भाषा के विकास में पत्र-पत्रिकों का योगदान-ऋषभदेव शर्मा

हिंदी पत्रकारिता- कृष्ण बिहारी मिश्र

भारतीय पत्रकारिता कोष खंड :2- विजयदत्त श्रीधर

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JANSEVA FOUNDATION LONI,  
ARTS AND COMMERCE COLLEGE, SHENDI  
DEPARTMENT OF HINDI  
2023-2024  
HINDI PATRKARITA CERTIFICATE COURSE  
TIME TABLE

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSEDAY	FRIDAY	SATURDAY
08:30 TO 09:30	-	-	-	HINDI PATRKARITA	HINDI PATRKARITA	HINDI PATRKARITA





JANSEVA FOUNDATION LONI,  
ARTS AND COMMERCE COLLEGE, SHENDI  
DEPARTMENT OF HINDI  
2023-2024  
HINDI PATRKARITA CERTIFICATE COURSE  
STUDENT LIST


SR. NO	NAME OF STUDENT	CLASS	CATEGORY
1	ASWALE AJAY NIVRUTI	TYBA	ST
2	BENDKOLI SHUBHAM SHIVAJI	FYBA	ST
3	<b>DARANE MANISHA GORAKSHNATH</b>	FYBA	ST
4	<b>DHADWAD VAIDHYAHI AVINASH</b>	SYBA	ST
5	DHONGADE SANDIP LAXMAN	FYBA	ST
6	<b>GHANE ROHINI KHANDU</b>	FYBA	ST
7	GHANE SAGAR TANAJI	FYBA	ST
8	<b>GODE MANGAL RAJU</b>	SYBA	ST
9	GOLWAD ANIL BHASKAR	SYBA	ST
10	<b>KADALI VARSHA GOVIND</b>	SYBA	ST
11	<b>KHADE SAVITA KUNDLIK</b>	FYBA	ST
12	KHADE VAISHALI GOVIND	FYBA	ST
13	<b>KHADE VANITA TANAJI</b>	FYBA	ST
14	KHATELE SHARAD KUNDLIK	FYBA	ST
15	<b>KORDE ASHWINI SHAM</b>	SYBA	ST
16	<b>KUNDE SAPANA JANARDAN</b>	SYBA	ST
17	<b>LENDE PRIYANKA ANNA</b>	SYBA	ST
18	LOTE OMKAR MACHHINDRA	FYBA	ST
19	MADAGE GANESH SAMPAT	TYBA	ST
20	MADHE KRUSHNA HIRAMAN	FYBCOM	ST
21	MADHE ROHIT HOUSHIRAM	FYBCOM	ST
22	MALI ROHIT VISHNU	TYBA	ST
23	MUTDAK PAWAN KIRAN	FYBCOM	SC
24	<b>MUTHE SAKSHI YOURAJ</b>	FYBCOM	NT
25	PARDHI SANTOSH KISAN	TYBA	ST



दिनांक: 03/11/2023

सूचना

महाविद्यालय के कला एवं वाणिज्य शाखा के छात्रों को प्रसन्नता पूर्वक सूचित किया जाता है की हिंदी विभाग के अंतर्गत 'हिंदी पत्रकारिता' प्रमाणपत्र कोर्स 20/11/2023 से प्रारंभ किया गया है इच्छुक छात्र प्रवेश ले सकते हैं। इसके लिए किसी भी तरह का शुल्क नहीं लिया जाएगा। प्रवेश सीमित है। जल्द से जल्द अपना प्रवेश सुनिश्चित करे।



डॉ. घुले एस एम

सहा. प्राध्यापक

















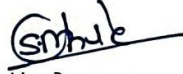
स्वाध्याय

विषय: 'हिंदी पत्रकारिता' प्रमाणपत्र कोर्स

निम्नलिखित प्रश्नों के उत्तर लिखिए।

प्रश्न: 1 हिंदी पत्रकारिता का स्वरूप लिखिए। 5 अंक

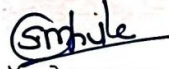
प्रश्न: 2 हिंदी पत्रकारिता का इतिहास लिखिए। 5 अंक



डॉ. घुले एस एम  
सहा. प्राध्यापक

अंतर्गत मूल्यमापन परीक्षा सूचना  
विषय: 'हिंदी पत्रकारिता'

महाविद्यालय के कला एवं वाणिज्य शाखा के छात्रों को सूचित किया जाता है की हिंदी विभाग के अंतर्गत 'हिंदी पत्रकारिता' प्रमाणपत्र कोर्स की अंतर्गत मूल्यमापन परीक्षा 19/12/2023 को आयोजित कि है, सभी छात्रों को परीक्षा के किए उपस्थित रहना अनिवार्य है।



डॉ. घुले एस एम  
सहा. प्राध्यापक

दिनांक: 30/12/2023

कोर्स पूर्ती अहवाल

जनसेवा फौंडेशन लोणी बुद्रुक कला व वाणिज्य महाविद्यालय शेंडी हिंदी विभाग के अंतर्गत 'हिंदी पत्रकारिता प्रमाणपत्र कोर्स' की शुरूवात 20/11/2023 को की, इस कोर्स में छात्रों ने पुरे हर्ष के साथ प्रवेश किया। और कामयाबी हासिल की। हिंदी विभाग कि सहाय्यक प्राध्यापक डॉ. घुले एस.एम इन्होंने कोर्स पढाया। इस कोर्स में कुल 25 छात्र थे। 30/12/2023 को कोर्स सफलतापूर्वक पुरा हो गया।



डॉ. शीला घुले

सहायक प्राध्यापक





**Certificate Course in  
“Travel Tourism”  
Year 2023-24**

**Janseva Foundation Loni Budruk**  
**Arts & Commerce College Shendi,**  
**Tal. Akole, Dist. Ahmednagar**  
**DEPARTMENT OF GEOGRAPHY**

A Certificate course introduce Travel and Tourism  
Year: 2023-24 (Admitted Student List)

Sr.no.	Student Name	Class	Gender	Cast	Contact No.
1	Khade Gangaram	SYBA	Male	ST	7038580271
2	Rongate Chandan	SYBA	Male	ST	9145469491
3	Zade Chandar Rajaram	SYBA	Male	ST	7588779660
4	Bande Rohit Dashrath	SYBA	Male	ST	8551098471
5	Jakhare Pavan Prabhakar	TYBA	Male	ST	7796324396
6	Kartule Swapnali Nadu	TYBA	Female	ST	7588539081
7	Kartule Shashikala Kundalik	TYBA	Female	ST	8850283663
8	Khade Ashwini Nivrutti	TYBA	Female	ST	9923381347
9	Khade Anita Maruti	TYBA	Female	ST	9764421895
10	Khade Kavita Popat	TYBA	Female	ST	7620519104
11	Khade Bhorabai Goga	TYBA	Female	ST	9075172732
12	Kokatere priyanka Bhaskar	TYBA	Female	ST	9420605440
13	Navale Bhaurav Sopan	TYBA	Male	ST	7219302813
14	Pichad Nikita Budha	TYBA	Female	ST	7249042892
15	Sagbhor Disha Dattu	TYBA	Female	ST	9689634252
16	Shene Tushar Kacharu	TYBA	Male	ST	7823033041
17	Asawale Ajay Nivrutti	TYBA	Male	ST	9405943618
18	Bande Madhav Dattu	TYBA	Male	ST	9518506490
19	Dhadwad kamal Popat	TYBA	Female	ST	9322728321
20	Ghode Rupali Balu	TYBA	Female	ST	9657190419


  
Head

**H.O.D.**  
**Dept. Of Geography**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

SYLLABUS


**Subject: Introduction of Travel & Tourism**

Sr.no	Topic	Sub-Topic	Periods
1	Introduction To Travel & tourism	1.Basic Concept :Travel &Tourism 2.Types of Tourism 3.types Of transportation	05
2	Lokal Tourism	1.Concept & need of Local Tourism 2.Introduction to local tourist places	05
3	Tour Planing & Skill development	1.Basic Skill:Communication,Time Manegement,computer Operating,Online Booking,net Banking,collection Booking &Ticket etc. 2.Framing the tour plan :Budget,Duration Insurance Route &Other Requirment for individual Family ,Group & mass level Tourism	10
4	Project Work & Visit to Tourist Place	One Short tour & preparation of tour Report	10

  
**H.O.D.**  
**Dept. Of Geography**  
**Janseva Foundation Loni Budruks**  
**Arts And Commerce College,Shendi**  
**Tal.Akole, Dist.Ahmednagar.**

**A Certificate Course in Travel and Tourism  
Result (2023-24)**

Sr.No.	Student Name	Test Marks50	Project 50	Total Marks 100
1	Khade Gangaram	32	34	64
2	Rongate Chandan	30	32	62
3	Zade Chandar Rajaram	34	36	70
4	Bande Rohit Dashrath	36	40	76
5	Jakhare Pavan Prabhakar	42	44	86
6	Kartule Swapnali Nadu	30	30	60
7	Kartule Shashikala Kundalik	34	35	69
8	Khade Ashwini Nivrutti	40	42	82
9	Khade Anita Maruti	40	42	82
10	Khade Kavita Popat	38	40	78
11	Khade Bhorabai Goga	38	40	78
12	Kokatare priyanka Bhaskar	36	38	74
13	Navale Bhaurav Sopan	30	34	64
14	Pichad Nikita Budha	44	46	90
15	Sagbhor Disha Dattu	44	44	88
16	Shene Tushar Kacharu	36	34	70
17	Asawale Ajay Nivrutti	30	35	65
18	Bande Madhav Dattu	32	36	68
19	Dhadwad kamal Popat	34	35	69
20	Ghode Rupali Balu	34	40	74

Head  
  
**H.O.D.**  
**Dept. Of Geography**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

**A Certificate Course introduce in Travel and Tourism**

**Summery**

Sr.No	Year	Number of Students							
		Gender	Open	OBC	SC	ST	NT	SEBC	Total
1	2023-24	Male	00	00	00	09	00	00	09
		Female	00	00	00	11	00	00	11

Total students =20

 Head

**H.O.D.**  
**Dept. Of Geography**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.













**Certificate Course in  
“Energy  
conservation”  
Year 2023-24**

प्रति,

मा. प्राचार्य,

जनसेवा फौंडेशन लोणी बुद्रुक संचलित

कला व वाणिज्य महाविद्यालय, शेंडी

ता. अकोले, जि. अहमदनगर

विषय : भौतिकशास्त्र विषयाकरिता Energy Conservation प्रमाणपत्र अभ्यासक्रम  
सुरु करणे बाबत

मा. महोदय

उपरोक्तविषयान्वये आपणास कळवू इच्छितो कि, आपल्या  
महाविद्यालयात विद्यार्थ्यांना भौतिकशास्त्र विषयाकरिता Energy Conservation  
विषयी अधिक माहिती मिळावी या करिता Energy Conservation प्रमाणपत्र  
अभ्यासक्रम सुरु करण्याचा मानस आहे, तरी त्याकरिता आपल्या परवानगी ने  
आपल्या महाविद्यालयात सदर प्रमाणपत्र अभ्यासक्रम सुरु करण्याकरिता  
परवानगी मिळावी हि नम्र विनंती.

कळावे,

*Alfred*  
*20/11/23*

*Alfred*

आपली विश्वासू

H.O.D.  
Dent. Of Physics  
भौतिकशास्त्र विभाग, प्रमुख  
Janseva Foundation, Loni Budruks  
Arts And Commerce College, Dist.  
Tal. Akole, Dist. Ahmednagar.

**Janseva Foundation Loni Budruk**  
**Arts and Commerce College, Shendi**

**Department of Physics**

**2023-24**

**“Certificate Course in Energy Conservation”**

**Syllabus**

**Learning Objective:**

- Students Can Define energy and list several potential energy source.
- Explain how fossils developed and how they are extracted from the earth.
- Explain in simple terms, how uranium produces energy.
- List at least one advantage and one disadvantage of each of the following:  
Oil, natural gas, coal, solar power, wind energy, and hydroelectric power.
- Define the fossil fuel age and list the energy sources that made it possible.
- Describe the outlook for fossil fuel availability in the next century.
- Identify potential source of future energy and describe their present limitation.

**Hours**

**1. Energy:**

**10**

**Energy and its source** – Energy, Fossil fuels, Nuclear power, Solar energy, wind energy, Hydroelectric power, Evaluating energy source, Measuring energy

- **Energy Crisis** – History of energy use, Fossils Fuel reserves, Alternative and synthetic fuels, Gas and oil from coal, Nuclear fuels, Geothermal energy, Biomass
- **Energy Consumption and loss** – Using fuel to generate electricity, Energy loss, Effects of climate on energy use, Degree-days, Cost of saving energy, ROI and payback period.
- **Surveying Electrical Consumption** – Identifying electricity consumers, Determining system efficiency, Consumption, Meter selection.



## **2. Introduction to Renewable and Solar Energy**

**10**

- Renewable Energy and its prospects various RE sources
- Introduction to solar energy and solar Radiation. Its importance, Differentiate solar PV and solar thermal energy.
- Solar Resource Measurement, Instrumentation and its applications.

## **3. Introduction of Photovoltaic Technology and its applications**

**10**

- Basics of Light to Energy Conservation
- Physics of energy conservation in solar cell ( current and voltage)
- Understanding basic terminologies of a PV cell ( I-V curve, Efficiency, FF)
- Solar cells to module, module name plate specification,
- Module to array and basic structure of PV module
- Factors affecting output of a PV module ( Temperature, Irradiance, Tilt angle, cell area shadowing, Dust mismatch, PV mismatch, PV module configurations, MPPT operation etc)
- Different configurations of PV Power system: stand along, Grid, Hybrid system etc.




**H.O.D.**

**Dept. Of Physics**

**Janseva Foundation Loni Budruks  
Arts And Commerce College, Siendi  
Tal.Akole, Dist.Ahmednagar.**

**Janseva Foundation Loni Budruks**  
**Arts and Commerce College, Shendi**  
**Certificate Course Time Table**  
**2023-24**

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:00 To 09:00						
08:30 To 9:30	Energy Conservation	Energy Conservation	Energy Conservation			
12:30 To 01:30						
2:10 To 03:10						

  
**H.O.D.**  
**Dept. Of Physics**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.





Janseva Foundation Loni Budruks  
Arts & Commerce College, Shendi

Tal-Akole, Dist-Ahmednagar

Pin-422604

Unipune ID- PU/AN/AC/93/2007

Email- principal.acshendi@pravara.in

Admission Form 23-24

Application No. ....

Date: .....

Name of Student: Sabale Adesh Sanjay

Address Village Adasore Post Adasore

Tal. Igatpuri Dist. Nashik

Pin Code ..... Mob No. 9588480565

Gender - Male/ Female

College Name Arts & commerce college, shendi

Name Of The Cert. Course Energy Conservation

Current Class F.V. Bsc.

Previous Year Qualification:	Yes	No
S.S.C.	✓	
H.S.C.	✓	
F. Y. B. Sc. /B.A/ B.Com	✓	
S. Y. B. Sc. /B.A/ B.Com		

Adesh  
Student Signature





**Janseva Foundation Loni Budruks  
Arts & Commerce College, Shendi  
At-Chichondi, Tal-Akole, Dist-Ahmednagar  
Pin-422604**

Unipune ID- PU/AN/AC/93/2007


Email- [principal.acshendi@pravara.in](mailto:principal.acshendi@pravara.in)

Date: 31/08/2023

**Notice**

**DEPARTMENT OF Physics**

All the students of Arts, Science and Commerce College, Shendi are informed that, the admission for the "A Certificate Course in energy conservation" are open for the academic year 2022-23. The students willing to admit for this course should immediately contact Mss. Potkule V.H on or before Saturday, 4<sup>th</sup> september 2023. Students approaching thereafter shall not be considered for the admission to the course.


  
H.O.D.  
Dept. Of Physics  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal.Akole, Dist.Ahmednagar.



**Janseva Foundation Loni Budruk**  
**Arts and Commerce College, Shendi**  
**Department of Physics**  
**2023-24**

**“Certificate Course in Energy Conservation”**  
**Student List – 2022-23**

Sr.No	Name of the Students
1	SABALE ADESH SANJAY
2	SONAWANE KSHITIJA KHANDU
3	SAGBHOR SANJIVANI KALU
4	TALAPE AKANKSHA EKNATH
5	SUKATE SAGAR MACHHINDRA
6	PAWAR GAURI RAVINDRA
7	BHOIR ROHAN JAGANNATH
8	GHORPADE ASHWINI POPAT
9	JAGTAP VISHAL SHANKAR
10	MALI MAYUR DNYANESHWAR
11	KACHARE VISHNU RAMDAS
12	MAHALE SANJAY DAGADU
13	PABALKAR BHAGYASHRI UTTAM

  
**H.O.D.**  
**Dept. Of Physics**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

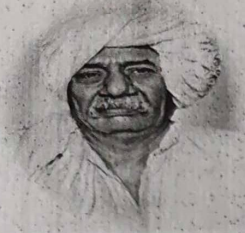












**Janseva Foundation Loni Budruks  
Arts & Commerce College, Shendi  
At-Chichondi, Tal-Akole, Dist-Ahmednagar  
Pin-422604**

Unipune ID- PU/AN/AC/93/2007

Email- [principal.acshendi@pravara.in](mailto:principal.acshendi@pravara.in)


---

Date 30/11/2023

**Department of Physics**

**Student Notice**

All students of Certificate Course are hereby informed that your examination is held on 1/12/2023 at 10.00 am to 12.00 pm. you should be present fifteen minutes before

  
H.O.D.  
Dept. Of Physics  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

**Janseva Foundation Loni Budruk**  
**Arts and Commerce College, Shendi**

**Department of Physics**

**2023-24**

**Theory question paper**

**“Certificate Course in Energy Conservation”**

**Year: 2023-24**

**Time: 2 hr**

**Date:**

**Marks: 50 M**

---

(NOTE: All questions are compulsory)

**Q.1 The total energy of an isolated system**

- a) Cannot change
- b) Can only increase
- c) May increase or decrease depending the nature of the system
- d) Can only decrease

**Q.2 when the velocity of an aero plane is doubled, the momentum ....**

- a) Remain unchanged
- b) Is conserved
- c) Becomes zero
- d) Increases uniformly

**Q.3 which of the following is a conventional of generating electrical energy?**

- a) Tidal power
- b) wind power
- c) thermal power
- d) solar power

**Q.4 Which of the following types of solar thermal collector is used to heat swimming pools**

- a) Low temperature collector
- b) Medium temperature collector
- c) High temperature collector
- d) any of the above



**Q.5 The mean sun does move at a uniform speed but otherwise requires the same time as the real sun to complete one orbit of the earth, this time being**

- a) The tropical year
- b) The leap year
- c) The Julian calendar year
- d) The Gregorian calendar year

**Q.6 When the momentum of a body is doubled, its kinetic energy.....**

- a) Remains the same
- b) Drops to zero
- c) Becomes four times its initial kinetic energy
- d) Becomes ten times its kinetic energy

**Q.7 Gravitational potential energy is converted into the electrical energy in.....**

- a) Hydroelectric power point
- b) Thermal power plant
- c) Wind mill
- d) Geothermal energy

**Q.8 The correct sequence of energy transfer that occurs when a bullet is shot upward and then started falling down at some point because of gravitational force.**

- a) Gravitational potential energy → Kinetic energy → Chemical potential energy → Kinetic energy →
- b) Kinetic energy → Gravitational potential energy → Chemical potential energy → kinetic energy →
- c) Chemical potential energy → Kinetic energy → Gravitational potential → energy
- d) Kinetic energy → Kinetic energy → Gravitational potential energy → Chemical potential energy

**Q. 9 in a wind turbine, if the velocity of wind is doubled, within the operating rang, the power output will be**

- a) Six times
- b) eight times
- c) double
- d) reduced to half

**Q.10 What does the area under the load curve represent?**

- a) System voltage
- b) current
- c) energy generated
- d) maximum demand

**Q.11 An instrument used for measuring total solar radiation is called**

- a) Hygrometer
- b) pyranometer
- c) anemometer
- d) pyrheliometer



**Q.12 Which type of solar cell gives the highest efficiency?**

- a) Mono crystalline
- b) polycrystalline germanium
- c) thin film
- d) polycrystalline silicon

**Q.13 Solar process heating systems are designed to provide large quantities of ---- for..... buildings.**

- a) Hot water, residential
- b) Space heating, nonresidential
- c) Hot water or space heating, residential
- d) Hot water or space heating nonresidential

**Q. 14 ..... photo voltaic devices in the form of thin films.**

- a) Cadmium telluroide
- b) cadmium oxide
- c) cadmium sulphide
- d) cadmium sulphate

**Q.15 The top layer of the semiconductor in the solar cell is also called as.....**

- a) p-type
- b) n-type
- c) pnp-type
- d) all of the above

**Q. 16 The current density of a photo voltaic cell ranges from..**

- a) 10-20 mA/Cm<sup>2</sup>
- b) 40-50 mA/Cm<sup>2</sup>
- c) 20-40 mA/Cm<sup>2</sup>
- d) 60-100 mA/Cm<sup>2</sup>

**Q.17 which among the following electronic component works with the principle of light to voltage conversion?**

- a) bridge rectifier
- b) zener diode
- c) half wave rectifier
- d) solar cell

**Q.18. which of the following is not correct disadvantage regarding nuclear energy plant?**

- a) nuclear energy increases the temperature of the water body
- b) nuclear energy produces radioactive wastes
- c) Nuclear power plant require more water than coal power plant.
- d) nuclear power plants release carbon emission

**Q.19 How nuclear energy is generated?**

- a) Energy generated due to fission of big nucleus
- b) Energy generated due to combining two small nucleus
- c) Both 1 and 2
- d) Neither 1 nor 2



**Q.20 which of the following energy conservations occurs in an electric iron?**

- a) Electrical energy is converted into chemical energy
- b) Electrical energy is converted into light energy
- c) The heat energy is converted into electrical energy
- d) The electrical energy is converted into heat energy

**Q. 21 the gas which is NOT produced in the process of gaseous biomass is .....**

- a) Neon
- b) methane
- c) hydrogen
- d) carbon dioxide

**Q. 22 The output of the solar cell is of the order of**

- a) 1W
- b) 5W
- c) 10W
- d) 20W

**Q. 23 which of the following is a non-renewable resource?**

- a) coal
- b) solar
- c) geothermal
- d) tidal

**Q.24 Which of the following is a renewable resource?**

- a) Solar energy
- b) natural gas
- c) coal
- d) mineral

**Q. 25 Photovoltaic cell or solar cell converts.....**

- a) Thermal energy into electricity
- b) Electromagnetic radiation directly into electricity
- c) Solar radiation into thermal energy
- d) Solar radiation into kinetic energy

**Janseva Foundation Loni Budruk  
Arts and Commerce College, Shendi**

**Department of Physics**

**Specimen Answer Sheet**

**“Certificate Course in Energy Conservation”**

**Year: 2023-24**

**Time: 2 hr**

**Date:**

**Marks : 50 M**

---

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- e) Cannot change
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- h) Can only decrease

**Ans – a**

**Q.2 when the velocity of an aero plane is doubled, the momentum ....**

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**Ans – b**

**Q.3 which of the following is a conventional of generating electrical energy?**

- a) Tidal power
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**Ans – c**

**Q.4 Which of the following types of solar thermal collector is used to heat swimming pools**

- a) Low temperature collector
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- c) High temperature collector
- d) any of the above

**Ans – a**



**Q.5 The mean sun does move at a uniform speed but otherwise requires the same time as the real sun to complete one orbit of the earth, this time being**

- a) The tropical year
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- c) The Julian calendar year
- d) The Gregorian calendar year

**Ans - a**

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**Ans - a**

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**Ans - a**

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energy                      Kinetic energy
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Gravitational potential energy
- g) Chemical potential energy → Kinetic energy → Gravitational potential →  
energy                      Kinetic energy
- h) Kinetic energy → Kinetic energy → Gravitational potential energy →  
Chemical potential energy

**Ans - C**



**Q. 9** in a wind turbine, if the velocity of wind is doubled, within the operating rang, the power output will be

- a) Six times      b) eight times      c) double      d) reduced to half

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c) Hot water or space heating, residential  
d) Hot water or space heating nonresidential

**Ans – d**

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- a) Cadmium telluroide      b) cadmium oxide  
c) cadmium sulphide      c) cadmium sulphate

**Ans – a**

**Q.15** The top layer of the semiconductor in the solar cell is also called as.....

- a) p-type      b) n-type      c) pnp-type      d) all of the above

**Ans – b**

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mA/Cm<sup>2</sup>

**Ans – b**



**Q.17** which among the following electronic component works with the principle of light to voltage conversion?

- a) bridge rectifier      b) zener diode      c) half wave rectifier      d) solar cell

**Ans - d**

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**Ans- d**

**Q.19** How nuclear energy is generated?

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g) Both 1 and 2  
h) Neither 1 nor 2

**Ans - c**

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**Ans - d**

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- b) Neon      b) methane      c) hydrogen      d) carbon dioxide

**Ans - a**

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- a) 1W      b) 5W      c) 10W      d) 20W

**Ans - 1W**

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- a) coal      b) solar      c) geothermal      d) tidal

**Ans - a**

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- a) Solar energy    b) natural gas    c) coal    d) mineral

**Ans – a**

**Q. 25 Photovoltaic cell or solar cell converts.....**

- a) Thermal energy into electricity  
b) Electromagnetic radiation directly into electricity  
c) Solar radiation into thermal energy  
d) Solar radiation into kinetic energy

**Ans – b**



**Janseva Foundation Loni Budruk**  
**Arts and Commerce College, Shendi**


**Department of Physics**

**2023-24**

**“Certificate Course in Energy Conservation”**

**Mark List (Theory)**

<b>Sr.No</b>	<b>Name of Students</b>	<b>Mark out of 50 M</b>
1	SABALE ADESH SANJAY	40
2	SONAWANE KSHITIJA KHANDU	44
3	SAGBHOR SANJIVANI KALU	35
4	TALAPE AKANKSHA EKNATH	45
5	SUKATE SAGAR MACHHINDRA	38
6	PAWAR GAURI RAVINDRA	39
7	BHOIR ROHAN JAGANNATH	40
8	GHORPADE ASHWINI POPAT	38
9	JAGTAP VISHAL SHANKAR	44
10	MALI MAYUR DNYANESHWAR	30
11	KACHARE VISHNU RAMDAS	38
12	MAHALE SANJAY DAGADU	40
13	PABALKAR BHAGYASHRI UTTAM	44

  
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**Dept. Of Physics**  
Janseva Foundation Loni Budruk  
Arts And Commerce College, Shendi  
Tal.Akole, Dist.Ahmednagar.



**“Certificate Course in Energy Conservation”**


**Result Analysis Year: 2023-24**

Sr.No	Name of Student	Theory Marks out of 50 m	Grade
1	SABALE ADESH SANJAY	40	A <sup>+</sup>
2	SONAWANE KSHITIJ KHANDU	44	O
3	SAGBHOR SANJIVANI KALU	35	A
4	TALAPE AKANKSHA EKNATH	45	O
5	SUKATE SAGAR MACHHINDRA	38	A <sup>+</sup>
6	PAWAR GAURI RAVINDRA	39	A <sup>+</sup>
7	BHOIR ROHAN JAGANNATH	40	A <sup>+</sup>
8	GHORPADE ASHWINI POPAT	38	A <sup>+</sup>
9	JAGTAP VISHAL SHANKAR	44	O
10	MALI MAYUR DNYANESHWAR	30	A
11	KACHARE VISHNU RAMDAS	38	A <sup>+</sup>
12	MAHALE SANJAY DAGADU	40	A <sup>+</sup>
13	PABALKAR BHAGYASHRI UTTAM	44	O

**“Certificate Course in Energy Conservation”**

**Result Analysis Year: 2023-24**

Sr.No	Grade	Grade					Total Pass	Total Fail	Result
		O	A <sup>+</sup>	A	B <sup>+</sup>	B			
1	Girls	3	2	1	0	0	13	0	100%
2	Boys	1	5	1	0	0			

  
**H.O.D.**  
**Dept. Of Physics**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, S. Mandi  
Tal. Akola, Dist. Ahmednagar.






**Janseva Foundation Loni Budruks  
Arts & Commerce College, Shendi  
At-Chichondi, Tal-Akole, Dist-Ahmednagar  
Pin-422604**

**Unipune ID- PU/AN/AC/93/2007**

**Email- [principal.acshendi@pravara.in](mailto:principal.acshendi@pravara.in)**

**Notice**

All the students of certificate course on "A Certificate Course in Energy conservation" are hereby informed that, their passing certificates of course are received to department of Physics, Arts and Commerce College, shendi. These students are informed to collect their respective certificates from Asst.Prof Potkule V.H on 11/12/2023

  
H.O.D.  
Dept. Of Physics  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal.Akole, Dist.Ahmednagar.



# CERTIFICATE

This Certifies that

Mr./Miss-----Of class -----has successfully

completed the Certificate Course "Energy Conservation" held by the Dept Of  
Physics during the Academic Year 2023-24

Coordinator

Principal





**Janseva Foundation Loni Budruks  
Arts & Commerce College, Shendi  
At-Chichondi, Tal-Akole, Dist-Ahmednagar  
Pin-422604**

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Department of Physics

**“Certificate Course in Energy Conservation”**

Report

The department of Physics organized a “Certificate Course in Energy Conservation” for Academic Year 2023-24 in the college for college students’. The duration of the course was 30 hours spread over a period of three months. Physical classes were conducted 3 days per week from each day.

The objective of the certificate course is to aware youths about energy conservation and management in use of energy. Case studies enrich concept on that topic and that will help to conduct energy conservation from a younger mind. A total of 13 students were selected to undergo this course. At the end of the course, there was a theory exam. Those who had secured minimum 90% attendance were eligible for appearing in the examination.

Certificates were awarded to the 13 candidates who had cleared examination.

H.O.D.  
Dept. Of Physics  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal Akole, Dist. Ahmednagar.



**Certificate Course in  
“Introduction to GIS”  
Year 2023-24**



**Janseva Foundation Loni Budruk**  
**Arts & Commerce College Shendi,**  
**Tal. Akole, Dist. Ahmednagar**  
**DEPARTMENT OF GEOGRAPHY**

A Certificate course in Geographical Information System  
Year: 2023-24 (Admitted Student List)

Sr.no.	Student Name	Class	Gender	Cast	Contact No.
1	Asawale Ajay Nivrutti	TYBA	Male	ST	9405943618
2	Bande Madhav Dattu	TYBA	Male	ST	9518506490
3	Dhadwad kamal Popat	TYBA	Female	ST	9322728321
4	Ghode Rupali Balu	TYBA	Female	ST	9657190419
5	Jakhare Pavan Prabhakar	TYBA	Male	ST	7796324396
6	Kartule Swapnali Nadu	TYBA	Female	ST	7588539081
7	Kartule Shashikala Kundalik	TYBA	Female	ST	8850283663
8	Khade Ashwini Nivrutti	TYBA	Female	ST	9923381347
9	Khade Anita Maruti	TYBA	Female	ST	9764421895
10	Khade Kavita Popat	TYBA	Female	ST	7620519104
11	Khade Bhorabai Goga	TYBA	Female	ST	9075172732
12	Kokatere priyanka Bhaskar	TYBA	Female	ST	9420605440
13	Navale Bhaurav Sopan	TYBA	Male	ST	7219302813
14	Pichad Nikita Budha	TYBA	Female	ST	7249042892
15	Sagbhor Disha Dattu	TYBA	Female	ST	9689634252
16	Shene Tushar Kacharu	TYBA	Male	ST	7823033041
17	Khade Gangaram	SYBA	Male	ST	7038580271
18	Rongate Chandan	SYBA	Male	ST	9145469491
19	Zade Chandar Rajaram	SYBA	Male	ST	7588779660
20	Bande Rohit Dashrath	SYBA	Male	ST	8551098471

  
Head


**H.O.D.**  
**Dept. Of Geography**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

**A Certificate Course in Geographical Information system**

**Summery**

Sr.No	Year	Number of Students							
		Gender	Open	OBC	SC	ST	NT	SEBC	Total
1	2023-	Male	00	00	00	09	00	00	09
	24	Female	00	00	00	11	00	00	11

Total students =20

  
**H.O.D.**  
**Dept. Of Geography**  
**Janseva Foundation Loni Budruks**  
**Arts And Commerce College, Shendi**  
**Tal.Akole, Dist.Ahmednagar.**

## SYLLABUS


Subject: Basic GIS (Geographical information system)

Sr.no	Topic	Sub-Topic	Periods
1	Introduction To GIS	1.Defination of GIS 2.Stage Of GIS Development 3.Objectives of GIS 4.Component GIS 5.GIS Application	06
2	Data Types & Model	1.Spatial Data; Raster & vector 2.Non-Spacial Data; Rational, Network, Hierarchical & object -oriented	06
3	Software Based Practical	1.Geo-referancing of Toposheet/Map 2.Digitization of point, line,& polygon 3.Data Attachment 4.Creation of Layout & MAP	18

### Sub- Geographical Information system

#### Result (2023-24)

Sr.No.	Student Name	Test Marks50	Project 50	Total Marks 100
1	Asawale Ajay Nivrutti	30	35	65
2	Bande Madhav Dattu	32	36	68

  
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 Dept. Of Geography  
 Janseva Foundation Loni Budruk  
 Arts And Commerce College, Shindri  
 Tal. Akola, Dist. Ahmednagar



3	Dhadwad kamal Popat	34	35	69
4	Ghode Rupali Balu	34	40	74
5	Jakhere Pavan Prabhakar	42	44	86
6	Kartule Swapnali Nadu	30	30	60
7	Kartule Shashikala Kundalik	34	35	69
8	Khade Ashwini Nivrutti	40	42	82
9	Khade Anita Maruti	40	42	82
10	Khade Kavita Popat	38	40	78
11	Khade Bhorabai Goga	38	40	78
12	Kokatare priyanka Bhaskar	36	38	74
13	Navale Bhaurav Sopan	30	34	64
14	Pichad Nikita Budha	44	46	90
15	Sagbhor Disha Dattu	44	44	88
16	Shene Tushar Kacharu	36	34	70
17	Khade Gangaram	32	34	64
18	Rongate Chandan	30	32	62
19	Zade Chandar Rajaram	34	36	70
20	Bande Rohit Dashrath	36	40	76

Head  
Department of Geography

**H.O.D.**  
**Dept. Of Geography**  
Janseva Foundation Loni Budruks  
Arts And Commerce College, Shendi  
Tal. Akole, Dist. Ahmednagar.

कला वाणिज्य व विज्ञान महाविद्यालय शेंडी (भंडारदरा)

सन २०२३-२४

विषय : भौगोलिक माहिती प्रणाली

वेळ:१ तास

दिनांक:०२/०९/२०२३


गुण:५०

- 
- प्रश्न १. भौगोलिक माहिती प्रणाली हे तंत्रज्ञान केव्हापासून उपयोगात आले? २  
अ) १९९६ ब) १९६५ क) १९७० ड) १९७५
२. भौगोलिक माहिती प्रणालीचा उपयोग खालील पैकी कोणत्या घटकांसाठी होतो? २  
अ) सामाजिक ब) धार्मिक क) आभियांत्रिकी ड) आर्थिक
३. भौगोलिक माहिती प्रणालीचा उपयोग खालील पैकी कोणत्या घटकासाठी होतो? २  
अ) भूमिउपयोजन ब) दूरदर्शन क) युद्ध ड) हवामान
४. भौगोलिक माहिती प्रणाली या तंत्रज्ञानात कोणत्या घटकाचा वाट महत्वाचा आहे? २  
अ) संगणक ब) रडार क) दूरसंवेदन ड) यापैकी नाही.
५. भौगोलिक माहिती प्रणालीचा सर्वप्रथम वापर कोणत्या देशाने केला. २  
अ) अमेरिका ब) कॅनडा क) जर्मनी ड) भारत
६. भौगोलिक माहिती प्रणालीचा वापर या क्षेत्रात केला जातो. २  
अ) चित्रीकरण ब) आर्थिक वितरण क) भूमिउपयोजन ड) वाहतूक
७. भौगोलिक माहिती प्रणाली मध्ये कोणत्या घटकाची आवश्यकता असते ? २  
अ) पुरेशी क्षमता ब) सॉफ्टवेअर क) स्मरण क्षमता ड) यापैकी नाही.
८. सांख्यिकीच्या नोंदी करण्यासाठी कोणत्या घटकाची आवश्यकता असते . २  
अ) अंकीय नोंदी ब) सामिक्षक क) अक्षर पट्टी ड) यापैकी नाही.
९. भौगोलिक संदर्भासाठी कोणत्या गोष्टीचा आवश्यकता लागते. २  
अ) अक्षांश ब) रेखांश क) उंची ड) यापैकी नाही.
१०. एखाद्या प्रदेशातील घटकांचे चित्रण करण्यासाठी कोणत्या पध्दतीचा वापर केला जातो. २  
अ) GPS ब) जाळी प्रतिमान क) सुदुर संवेदन ड) यापैकी नाही.

- ११) सांख्यिकी पद्धती किती प्रकारच्या आहेत? २  
अ) २ ब) ४ क) १० ड) ११
१२. भौगोलिक प्रदेशाची माहिती संकलित पणे दाखविण्याचा मार्ग कोणता. २  
अ) संगणक ब) नकाशा क) सुदूर संवेदन ड) यापैकी नाही
१३. GIS मध्ये कोणता घटक अति महत्वाचा आहे. २  
अ) प्रमाण ब) नकाशा प्रक्षेपण क) सूची ड) यापैकी नाही
१४. GIS मध्येक कोणत्या घटकाला महत्व आहे. २  
अ) भूपृष्ठ ब) अवकाशियम क) जलविभाग ड) डोंगराळ प्रदेश
१५. नकाशा प्रक्षेपणाचे प्रमुख किती प्रकार आहेत? २  
अ) ३ ब) ४ क) ५ ड) ११
१६. पृथ्वीवर एकूण किती अक्षवृत्ते आहेत. २  
अ) ९० ब) १८० क) ३६० ड) ३६५
१७. रेखावृत्ताची एकूण संख्या किती आहेत. २  
अ) ९० ब) १८० क) ३६० ड) ३६५
१८. सांख्यिकी मोजमापाचे किती परिमाण आहेत. २  
अ) २ ब) ४ क) ५ ड) १०
१९. मोजमापाची परिमाणे कोणती आहेत. २  
अ) नामदर्शक ब) क्रमदर्शक क) आंतरदर्शक ड) यापैकी सर्व
२०. तापमान नोंदीतील फरक किती अंश सेल्सिअस असतो. २  
अ) १ सेल्सिअस ब) १० सेल्सिअस क) २० सेल्सिअस ड) यापैकी नाही
२१. अवकाशीय संख्यिकीचे स्रोत कोणते. २  
अ) जणगणना ब) सर्वेक्षण क) हवाई छाया चित्रे ड) यापैकी सर्व



२२. DTM तयार करण्यासाठी कोणत्या पद्धतीचा वापर केला जातो . २  
अ) सदिश ब) जाळी सदृश्य क) अनियमित जाळी ड) शिरोबिंदू .
२३. GIS द्वारे स्थानिक पातळीवर केलेल्या सर्वेक्षणा करिता अंतराची मर्यादा किती असते.२  
अ) १ ते १० ब) १० ते १०० क) १०० ते २०० ड) २०० पेक्षा जास्त
२४. अंकीय नोंदकरण कसे केले जाते. २  
अ) स्वयंचलित ब) नियंत्रित क) उपग्रहीय ड) यापैकी नाही
२५. सर्वेक्षणा करिता समोच्च रेषा अंतर किती असते. २  
अ) १० मीटर ब) २० मीटर क) ५० मीटर ड) १०० मीटर

  
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