

#### Maratha Vidya Prasarak Samaj

#### G. M. D. Arts, B. W. Commerce and Science College, Sinnar, Dist. Nashik

Affiliated to Savitribai Phule Pune University, Pune

Id.No.PU/NS/ASC/013/1969

AISHE:C-41292

**Best College Awarded by SPPU2012-13** 

www.gmdcollege.in

ISO 9001:2015 Certified College

sinnarcollege001@yahoo.com

#### INTERNAL QUALITY ASSURANCE CELL

#### **CRITERION 1: CURRICULAR ASPECTS**



**CERTIFICATE COURSES** 2020-21



Maratha Vidya Prasarak Samaj's G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Tal. Sinnar, Dist. Nashik - 422 103 (M.S.) INDIA

Best College Award by Savitribai Phule Pune University 2012-13 Dr. P. V. Rasal

(M.A., LL.B., Ph.D.) Member : B.O.S. (Psychology)

Savitribai Phule Pune University

E-mail: rasalpundlik@gmail.com

Affiliated to Savitribai Phule Pune University ID No. : PU/NS/ASC/013/(1969)

Junior College No. J.13.13.001

HTE Sevaarth ID - 06220100119\_AST AISHE - C - 41292

Ref. No. 537/2023-24

Date: 13/07/2023

#### DECLARATION

This is to declare that the information, reports, true copies of the supporting documents, numerical data, provided links, institutional data, photographs etc. submitted/presented herewith is verified by Internal Quality Assurance Cell (IQAC) of this college and is correct as per the records. This declaration is for the purpose of NAAC accreditation of HEI for the 4<sup>th</sup> Cycle during the period from 2017-2018 to 2021-2022.

Date: 13/07/2023

Place: Sinnar

Dr. C. E. Gurule Coordinator, IQAC Co-ordinator IQAC

G. M. D. Arts, B.W. Commerce & Science College, Sinnar, Dist. Nashik 422103



Dr. P. V. Rasal Chairman, IQAC and Principal

PRINCIPAL G.M.D.Arts, B.W.Commerce and Science College, Sinnar, Dist. Nashik



#### Maratha Vidhya Prasarak Samaj's G.M.D. Arts, B.W. Commerce and Science College Sinnar

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#### Maratha Vidya Prasarak Samaj Nashik G.M.D. Arts, B.W. Commerce and Science College, Sinnar Programme Report

Department

Chemistry

Activity

Certificate course on Water and Soil analysis.

Level

: College level.

:

Organizer

Department of Chemistry, G.M.D. College, Sinnar

Date

15/01/2020 to 15/02/2020

**Total Participant** 

Total: 15 Male: 05

Female: 10

Report

Department of Chemistry conducted certificate

Course on 'water and soil analysis' for one month.

Total 15 students are admitted to this course.

Mr. R. S. Pagar **HEAD** 

DEPARTMENT OF CHEATETRY G.M.D. Arts, B.W. Commerce

and Science College, Sinnar

Dr. P. V. Rasal

PRINCIPAL G.M.D.Arts, B.W.Commerce and Science College, Sinnar, Dist. Nashik



#### MARATHA VIDYA PRASARAK SAMAJ, NASHIK. G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SIINAR, NASHIK-422103 (MS), INDIA.

NAAC Re-Accredited 'A' Grade College (CGPA 3.04) ISO 9001:2015 Certified College



#### **Department of Chemistry**

#### Syllabus of Certificate course in Water and Soil Analysis

#### Theory:

**Unit I-** Introduction to Soil analysis, Types of soil, Soil pollutants, Role of soil testing for environment, Uses of soil analysis.

**Unit II**- Introduction to Water analysis, Types of Water, Water pollutants, Role of water testing for environment, Uses of water analysis.

#### **Practicals:**

#### Part I – Soil Analysis [Compulsory 10]

- 1) To determine PH of given soil sample.
- 2) To determine nutrient content (NPK) of soil.
- 3) To determine salinity of given soil sample.
- 4) To determine conductivity of soil sample.
- 5) To determine sulphate of soil sample.
- 6) To determine total alkalinity of soil sample.
- 7) To determine soluble carbonates & bicarbonates of soil sample.
- 8) To determine nitrate of soil sample.
- 9) To determine exchangeable Ca of soil sample.
- 10) To determine exchangeable Mg of soil sample.
- 11) To determine exchangeable Na of soil sample.
- 12) To determine exchangeable K of soil sample.

#### Part II – Water Analysis [Compulsory 10]

- 1) To determine temperature, colour, odour & taste of water.
- 2) To determine hardness of water.
- 3) To determine PH of given water sample.
- 4) To determine total alkalinity, carbonates & bicarbonates of water.
- 5) To determine TDS of given sample of water.
- 6) To determine turbidity of water.
- 7) To determine conductivity of water.
- 8) To determine redox potential of water.

- 9) To determine Acidity of water.
- 10) To determine carbon dioxide of water.
- 11) To determine dissolved oxygen of water.
- 12) To determine inorganic phosphorus of water.
- 13) To determine reactive silica of water.
- 14) To determine sulphate, chloride, calcium, magnesium, sodium, potassium of water.
- 15) To determine hydrogen sulphide of water.
- 16) To determine residual chlorine of water.
- 17) To determine oil & grease of water.

Mr. R. S. Pagar Head, Department of Chemistry Dr. Dilip B. Shinde Principal



#### Maratha Vidya Prasarak Samaj Nashik

G.M.D. Arts, B.W. Commerce and Science College, Sinnar

Department of Chemistry

#### **Notice**

Date: 06/01/2020

All the students studying in SY/ TY B.Sc. are hereby informed that the Department of chemistry is going to start a certificate course on 'Water and Soil Analysis' for the academic year 2020-21. The students who are interested should enroll themselves for the course. The course will start from 15/01/2020 to 15/02/2020. The participated students will get the certificate.

Mr. R. S. Pagar

DEPARTMENT OF COMEMISTRY
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar

Dr. P. V. Rasal
PRINCIPAL
G.M.D.KALPSAPAbmmerce and
Science College, Sinnar, Dist. Nashik



#### G.M.D. Arts, B.W. Commerce and Science College, Sinnar, Nashik Department of Chemistry

Organized

# Short Term Course in Water and Soil Analysis CERTIFICATE

This is to certify that,	
	from
	has successfully
Completed Short Term Course in	Water and Soil Analysis
Conducted by Department of Ch	emistry on 15 January to
5 February 2020.	,

Mr. R. S. Pagar

HoD, HEAD mistry
DEPARTMENT OF CHEMISTRY
G.M.D. Arts, B.W. Commerce
and Science College, Sinner

Dr. P.V. Rasal
PRINCIPAL
M. DERIMOLIA Shere and
Jence College, Sinnar, Dist. Nashik

# Soil and Water Testing Laboratory 2020-2021

As a part of community services, Department of Chemistry has innovatively started "Soil and Water Testing Laboratory" keeping the view the farmers problems regarding quality and productivity. The laboratory was set up in September 2019. So it becomes prime importance to examine the quality of soil and water which would help in increasing crop productivity and quality. The laboratory was set up with vision "No profit" basis. Therefore the soil and water testing are done free of cost. In this laboratory following parameters of soil and water was checked:

Sr.No	Soil Parameters	Water Parameters
1.	Bulk Density	Total Dissolved Salts
2.	Moisture Content	рН
3.	Specific Gravity	Electrical Conductivity
4.	Water Holding Capacity	Acidity and Alkanity
5.	рН	Oxidizable substances
ó.	Total Soluble Salts	Chloride
	% of total soluble salts	Sulphates
	Electrical Conductivity	Calcium
	Calcium Carbonate content	Ammonium
0.	Gypsum Requirement	Nitrate
1.		Magnesium
2.		Residue on Evaporation

The parameters are checked by volumetric analysis and instruments such as pH meter, conductivity meter, colorimeter etc.

The department created awareness through local newspaper to submit the samples of soil and water. Totally 18 samples have been tested so far.



#### Maratha Vidya Prasarak Samaj Nashik G.M.D. Arts, B.W. Commerce and Science College, Sinnar Department of Chemistry Photos of Water and Soil Analysis Course

A Report on Certificate Course 'Water and Soil Analysis':





Mr. H. A. Dabhane

-melle-

IN Charge

Dr. P. V. Rasal

PRINCIPAL

G M.D.Arts, E. V. Commerce and chence College Sunicipalst Nashik



#### Maratha Vidya Prasarak Samaj Nashik G.M.D. Arts, B.W. Commerce and Science College, Sinnar

#### **Department of Chemistry**

#### List of Students for the certificate course of 'Water and Soil Analysis'

Sr.No.	Name of the students	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
		15-01	16-01	17-01	20-01	21-01	22-1	23-1	27-01
1	Andhale Yogita Sukhadev	yosta	Tosta	18	yogita	yosita	yosita	4086	yogi ta
2	Arote Priyanka Ramesh	Blocots		Gration		prodet	ocerto	A 0.	Protot
3	Bogir Swati Rajaram	Sur	Bus	BIL.	Bus	Bus	Sus	Bus	Bus
4	Chavanake Ashwini Ashok	A. A. one	4 A.A. chu	A.A.d	A.A.ch	- A.A.a	· AB	A.A.Gh	A.P.Ch
5	Thorat Akash Appasaheb	Allond	Arhent	Mulk	AB	Dhungt	ahmit	- Dunt	AB
6	Ugale Akash Dattatraya	valea	Vgale A.	UgaleA	igaleA	AB	YaleA	AB	vyalen
7	Ugale Keshav Dattatraya	Kujale	Knyle	Kingel	Kenle	Keyele	Kurale	Kyuls	- AR
8	Sirsat Diksha Bhausaheb	diesat	diesat	diseat	dissat	dissat	dissat	dizzat	diseat
9	Narode Rasika Sanjay	Poss	Ron	200	-Day	Dws.	Pus	Rus	Dun
10	Kahandal Ashvini Changdeo	Durine	Buili	Muli	Auny	As	duri	48	AR
11	Erande Poonam Tanaji	Poonang	Pagname	AR		Proname		48	PODAME
12	Ugale Seema Dattatray	uquu	wan	un	uhu	4B	vem	- AB	ueur
13	Warungase Arti Vishnu	Anti	Arti	Ati	Arti	- AB	Art	AM	Arti
14	Borade Sarthak Dattatray	B.S.D	B.SD	B.SD	C.SD	B.S.D	B.JD	'AR (	BSD
15	Pagar Arjun Sanjay	Pagar Ps	Pagar Pa	AB	Pagas P	Paggy	Pagan	, AG	PagarAs



#### Maratha Vidya Prasarak Samaj Nashik

#### G.M.D. Arts, B.W. Commerce and Science College, Sinnar

#### **Department of Chemistry**

#### List of Students for the certificate course of 'Water and Soil Analysis'

Sr.No.	Name of the students	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
		28-01	30-01	01-02	03-02	05-2	06-2	11-02	12-02
1	Andhale Yogita Sukhadev	yopita	you't	yogita	AR	yogita	yosita	AB	1.5
2	Arote Priyanka Ramesh	Blocoto	1 0 1	4 Brollete			S PROPERTY OF THE PARTY OF THE	8606	405 E
3	Bogir Swati Rajaram	Pur	town	toms	- A Sum	As	Dem	AR	Kom
4	Chavanake Ashwini Ashok	N. Nober	A 0 4	100/	AG		700		00
5	Thorat Akash Appasaheb	# Thent	A. A. Cha	Mont		A. A. Chu		A. A. A.	
6	Ugale Akash Dattatraya	Vgalia	Ugalia	Uzala		43	A Mond	1	AB
7	Ugale Keshav Dattatraya	KIALI	Kille	Kel. l.	De la	10.0	VIO	Ugalea	1
8	Sirsat Diksha Bhausaheb	diesat	Sisset	dissat	disent	dieset	diesat	As dieset	dissal
9	Narode Rasika Sanjay	Rasika	Rasino	The state of the s	40	-	Dasika		
10	Kahandal Ashvini Changdeo	Dulmi	Surrel	AB	down	Santi	Long		Raika
11	Erande Poonam Tanaji	POO name	POONAME	-	POORAME		Poonan	- AR POOTLAND	Burn
12	Ugale Seema Dattatray	ugue	very	um	AB		uem	- Hum	AS
.3	Warungase Arti Vishnu	Avti	Arti	Se	Ati	Aiti	. Ag	ATI	An An
.4	Borade Sarthak Dattatray	650	650	AB (	BS.D	Bs.D			- B24
.5	Pagar Arjun Sanjay	Rygnass	fagor As				(S.1)	AB	Pagnos

Mr. H. A. Dabhane

In Charge

Dr. P. V. Rasal

G.M.D.Arts, B.W.Commerce and Science College Singar Dist Nashik



#### Maratha Vidya Prasarak Samaj's, Nashik G.M.D.ARTS, B.W.COMMERCE AND SCIENCECOLLEGE, SINNAR

#### Department Of Chemistry Certificate course in Water and Soil Analysis Year- 2020- 2021

Marks- 20 Marks Time: - 1 Hr.

Q.1) Tick mark the corre	ct answer
1) Earth worms present in the so	il:
a) Reduce soil fertility	b) Increase soil fertility
c) Harm plants	d) Causes plant diseases
2) In which form is water the pu	irest?
a) Solid ice	b) clear liquid
c) Steam vapor	d) combination of ice and water
3) Maximum N content found in I	N fertilizer
<ul><li>a) Urea</li><li>c) Sodium nitrate</li></ul>	b) Anhydrous ammonia d) Ammonium sulphate
4) Saline soil can reclaiming by us	ing
<ul><li>a) Lime stone</li><li>c) Gypsum</li></ul>	b) Dolomite d) None
5) Urea fertilizer contain nitrogen	
a) 21% N c) 34% N	b) 46% N d) 26% N
6) What is the alternate name of w	ater?
a) Azide	b) Hydroxide
c) Oxidane	d) Dihydrogen oxide
7) Soil Analysis provides	b) Plant nutrient deficiency d) all the above
<ul><li>8) If the soil textural class has clay</li><li>a) Sandy Clay</li><li>c) Sandy Clay Loam</li></ul>	content more than 45 %, then it is called? b) Silty clay Loam d) Clay

<ul><li>9) Which among the following so</li><li>a) Black soil</li><li>c) Peaty soil</li></ul>	il types is the most fertile b) Desert soil d) Muck soil	soil?
<ul><li>10) The sum total of the exchange capacity. Which clay mineral has lated a) Kaolinite</li><li>c) Vermiculite</li></ul>		n absorb is called as cation exchange
11) The nitrate concentration in d	omestic water supplies, is	generally limited to
a) 10 c) 30	b) 15 d) 45	
12) Carbonates in water produce		
a) Temporary hardness	b) Perman	ent hardness
c) Acidity	d) Alkanity	1
<ul><li>13) Herbicide is the type of pestice</li><li>a) Destroy unwanted plants</li><li>c) Stop the growth of microor</li></ul>	b) Destroy	nematodes
14) Negative impacts of sediments	s include	
a) Creating unaesthetic murk	y water b) Co	overing up fish spawning areas
c) Blocking available light for	aquatic plants d) B	oth A and C
e) All of the above		
15) Hardness in water is measured	by the amount of	
a) Ca2+	b) Zn2+	
c) Mg2+	d) Both a and b	e) Both a and c
16) Which of the following is the	best example of a point so	ource of water pollution?
a) Storm water	b) Acid rain	c) Agricultural Runoff
d) Factory effluent	e) Residential po	esticide runoff
17) Nicotine is Insec a) Inorganic c) Synthetic		ly occurring above
<ul><li>18) pH of extremely acidic soil is.</li><li>a) Below 4.5</li><li>c) 5.1 to 5.5</li><li>19) A well-developed soil have</li><li>a) A-horizon</li></ul>	b) below d) 4.5 to	

1	D 1	•
C)	B-ho	orizon

d) All of these

20) Cation exchange capacity is expressed as:

a) Mole/litre

b) Meq /100 g

c) Meq/lit

d) Per cent



#### Maratha Vidya Prasarak Samaj's, Nashik G.M.D.ARTS, B.W.COMMERCE AND SCIENCECOLLEGE, SINNAR

#### Department Of Chemistry Certificate course in Water and Soil Analysis Year- 2020- 2021

Sr. No.	Name of the student	Marks Obtained out of 20
01	Andhale Yogita sukhdev	19
02	Arote Priyanka Ramesh	18
03	Bogir Swati Rajaram	18
04	Chavanke Ashwini Ashok	20
05	Thorat Akash Appasaheb	18
06	Ugale Akash Dattatray	20
07	Ugale Keshav Dattatray	17
08	Shirsat Diksha Bhausaheb	17
09	Narode Rasika Sanjay	19
10	Kahandal Ashwini Changdev	19
11	Erande Poonam Tanaji	20
12	Ugale Seema Dattatray	18
13	Warungase Arti Vishnu	19
14	Borhade Sarthak dattatray	16
15	Pagar Arjun Sanjay	18

HEAD
DEPARTMENT OF CHEMISTRY
G.M.D. Aris, B.W. Commerce
and Science college, Sinnar

Principal
G. M. D. Arts, B. W. Commerc
Science College, Sinnar, Dist. A

HOD Principal





#### Maratha Vidya Prasarak Samaj's

# G. M. D. ARTS, B. W. COMMERCE & SCIENCECOLLEGE,

Nashik-Pune Highway, Sinnar, Dist.Nashik-422 103

#### **SYLLABUS**

Certificate Course in Food Processing and
Preservation

A.Y- 2020-2021



# Certificate Course Food Processing and Preservation (A.Y.2020-21)

#### Fundamental of Food and Nutrition

#### Learning Objective:

- ✓ To acquaint the students with fundamental principles and various techniques of food preservation.
- ✓ To enable the students to know the post-harvest management systems and processing technologies for preservation of fruits & vegetables and various value-added products.
- ✓ To develop proficiency skill in producing different types of processed fruits & vegetables products.
- ✓ Operating & maintenance the modern processing equipment & machineries
- ✓ To make different processed fruit & vegetable-based products with quality assurance and safety.

#### Learning Outcome:

Student will enable to understand different food preservation techniques, process.

- ✓ Student will enable to extend shelf life of different food product by using the various methods of food preservation
- ✓ To develop proficiency skill in producing different nutritious food products.
- ✓ Operating & management of balanced diets for different age groups
- ✓ Make different processed food products with quality assurance.
- ✓ Assessment of nutritional status of the women and children

#### ➤ Unit-I

Food constituents - Definition, occurrence, properties and metabolism of Protein, Carbohydrate and Lipids.

Browning reactions in foods:

i. Non enzymic browning: Maillard reaction, browning of ascorbic acid, caramelization of sugars.

ii. Enzymic browning: Definition, mechanism, control measures.

#### ▶ Unit-II

Concept of food and nutrition - Elements of nutrition, Food groups and role of nutrients metabolism - BMR

Recommended dietary allowances, Balanced diet for different age groups (Infancy to old age).

#### Unit-III

Malnutrition-Causes, types, symptoms and prevention, Assessment of nutritional status of the community, National nutrition policy.

#### Principles of Food Preservation

#### Unit-I

Preservation by salt and sugar - Principle, method, equipment and effect on food quality

#### Unit-II

Thermal processing methods of preservation – Principle and equipment: Canning, blanching, pasteurization, sterilization, evaporation, etc. Need and principle of concentration, methods of concentration – Thermal concentration, freeze concentration, membrane concentration, changes in food quality by concentration

#### Unit-III

Food preservation by use of low temperature – Principle, equipment and effect on quality (Chilling, cold storage, freezing etc.) Preservation by drying dehydration and concentration – Principle, Methods, equipment and effect on quality. Preservation by radiation, chemicals and preservatives: Definition, methods of irradiation, direct and indirect effect, measurement of radiation dose, dose distribution, effect on microorganisms. Preservation by fermentation- Definition, advantages, disadvantages, types, equipment.

Demonstration of various machineries used in food processing.

- Demonstration on effect of blanching on quality of foods.
- 2. Demonstration on canning and bottling of fruits and vegetables.
- 3. Preservation of food by high concentration of sugar i.e., preparation of jam
- 4. Preservation of food by using salt e.g., Pickle
- 5. Preservation of food by using acidulants i.e., pickling by acid, vinegar or acetic acid

#### Processing Technology of Fruits and Vegetables

#### Unit-I

Storage practices: Modified & Controlled atmospheric storage, hypobaric storage, cool store. Commodity treatments- chemicals, wax coating, pre-packaging.

Post Harvest handling, packaging & transport system for various fruits & vegetables and house operations.

#### Unit-II

Commercial processing of major fruits and vegetables (jam, jellies, marmalade, purees, concentrates, preserve, candy, toffee/bar etc.) Processing technology for manufacturing of fruit juices, pulp, RTS beverage, nectars, squash, syrups, cordials, Carbonated.

#### Unit-III

Processing of Tomato: paste, ketchup, sauce, puree, soup, chutney etc.

Drying and dehydration technology of fruits and vegetables: preparation of raisins, anardana, dried fig, dried leafy vegetables, juice powders, flakes, wafers, chips etc. Fermented fruits and vegetables products like sauerkraut, pickles, wines etc. Utilization of By-products and wastes from fruits and vegetables processing industry

Head
Department of Vocational
Hood Processing & Preservation
G.M.D. Arts B.W. Commerce
and Science College Sinnar

Principal

G M D Arts B. W. Commerce and
Science County Sinnar, Dist. Nashik



#### Maratha Vidya Prasarak Samaj's

#### G. M. D. ARTS, B. W. COMMERCE & SCIENCE COLLEGE, SNNAR, NASI Attendance-Certificate in Food Processing and Preservation Course 2020-21

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1	(A)	OW	2 * 3	5

Sr. No	Name of the students	Class
1.	Avhad Akanksha Vishnu	SY BVOC
2.	Bangar Mayuri Narayan	SY BVOC
3.	Bodake Priyanka Bansi	SY BVOC
4.	Dhore Sayli Raviraj	SY BVOC
5.	Gadekar Rajashri Anil	SY BVOC
6.	Gaikwad Nikita Sharad	SY BVOC
7.	Ghuge KomalGanpat	SY BVOC
8.	Jadhav Ritesh Rajendra	SY BVOC
9.	Jadhav Sahil Kailas	SY BVOC
10.	Jadhav Vrushabh Mhalu	SY BVOC
11.	Kakad Sarika Mhalu	SY BVOC
12.	Kedar Bhagyashri Balkrushna	SY BVOC
13.	Kurhade Mahesh Sudam	SY BVOC
14.	NannawareVaibhavPandurang	SY BVOC
15.	Nathe Suresh Bhausaheb	SY BVOC
16.	Pal Aarati Keshraj	SY BVOC
17.	Patole Ashwini Gorakh	SY BVOC
18.	Patole Kuldip Ajit	SY BVOC
19.	Pawar Sonali Balu	SY BVOC
20.	Sonawane Tushar Govind	SY BVOC
21.	Surwade Prajakta Sanjay	SY BVOC
22.	Ugale Kalpesh Uttam	SY BVOC
23.	Ugale Kanchan Janardan	SY BVOC
24.	Ugale Poonam Sanjay	SY BVOC
25.	Vidhate Supriya Rajendra	SY BVOC
26.	Waje Trupti Dattu	SY BVOC

Head
Department of Vocational
Food Processing & Preservation
G.M.D. Arts B.W. Commercee
and Science College Sinnar

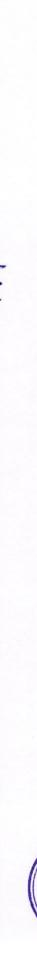
Principal
G M D Arts B W. Commerce and
Coloned Colonge Signar, Dist Nashik



# G. M. D. ARTS, B. W. COMMERCE & SCIENCE COLLEGE, SNNAR, NASHIK Attendance-Certificate in Food Processing and Preservation Course Maratha Vidya Prasarak Samaj's 2020-21

822 103

20



Ishma R. K. B. R.	26.	25.	24.	23.	22.	21.	20.	19.	18.	17.	16.	15.	14.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	Sr. No
	Waje Trupti Dattu	Vidhate Supriya Rajendra	Ugale Poonam Sanjay	Ugale Kanchan Janardan	Ugale Kalpesh Uttam	Surwade Prajakta Sanjay	Sonawane Tushar Govind	Pawar Sonali Balu	Patole Kuldip Ajit	Patole Ashwini Gorakh	Pal Aarati Keshraj	Nathe Suresh Bhausaheb	NannawareVaibhavPandurang	Kurhade Mahesh Sudam	Kedar Bhagyashri Balkrushna	Kakad Sarika Mhalu	Jadhav Vrushabh Mhalu	Jadhav Sahil Kailas	Jadhav Ritesh Rajendra	Ghuge KomalGanpat	Gaikwad Nikita Sharad	Gadekar Rajashri Anil	Dhore Sayli Raviraj	Bodake Priyanka Bansi	Bangar Mayuri Narayan	Avhad Akanksha Vishnu	Name of the students
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Head
Department of Vocational
Food Processing & Preservation
G.M.D. Arts B.W. Commercee
and Science College Sinnar

PRINCIPAL
G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik



# Maratha Vidya Prasarak Samaj's G. M. D. ARTS, B. W. COMMERCE & SCIENCE COLLEGE, SNNAR, NASHIK Attendance-Certificate in Food Processing and Preservation Course 2020-21



26.	25.	24.	23.	22.	21.	20.	19.	18.	17.	16.	15.	14.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	Sr. No
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Head
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#### Maratha Vidya Prasarak Samaj's G.M.D. Art's, B.W. Commerce and Science College, Sinnar Certificate in Food Processing and Preservation Course 2020-21

#### **EXAMINATION**

Marks- 100	Date- 19-12-2020	Time- 3 hours
*Note- All questions are com	nulcom	

1. ATP 2. RDA 3. ETS 4. TCA Cycle 5. FAD 6. NADH 7. ICMR  Q. B) Write note on RDA. 6 marks  Q2. Write down he short notes on. (any 3) 1. Cell Transport 2. Malnutrition 3. Non- enzymatic browning 4. Peptide Hormones  Q3. A) Difference between Essential and Non- Essential amino acid. 4 marks  Q. B) How to control Enzymatic Browning. 4 marks  Q. C) What is Emulsification, explain with diagram. 4 marks  Q4. Write down the classification of- 1. Carbohydrate 2. Enzymes  Q5. Write down digestion of- 1. Lipids 2. Proteins  Q6. What is food additive Write down the E-numbers or E-codes of food additives.  Q7. Explain in short India's current food production status in world.  Q8. Write down the Principles of Preservation with examples  Q9. What is Rancidity and explain antioxidants with examples  10 marks	Q1.A) Write down the full forms of the following (any 6)	6 marks
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#### Maratha Vidya Prasarak Samaj's

#### G. M. D. ARTS, B. W. COMMERCE & SCIENCE COLLEGE, SNNAR, NASHIK Marks-Certificate in Food Processing and Preservation Course 2020-21

Roll No.	Name of the Student	Marks obtained (Out of 100)
1.	Avhad Akanksha Vishnu	78
2.	Bangar Mayuri Narayan	72
3.	Bodake Priyanka Bansi	75
4.	Dhore Sayli Raviraj	81
5.	Gadekar Rajashri Anil	69
6.	Gaikwad Nikita Sharad	75
7.	Ghuge KomalGanpat	72
8.	Jadhav Ritesh Rajendra	73
9.	Jadhav Sahil Kailas	68
10.	Jadhav Vrushabh Mhalu	76
11.	Kakad Sarika Mhalu	67
12.	Kedar Bhagyashri Balkrushna	72
13.	Kurhade Mahesh Sudam	71
14.	NannawareVaibhavPandurang	70
15.	Nathe Suresh Bhausaheb	68
16.	Pal Aarati Keshraj	69
17.	Patole Ashwini Gorakh	70
18.	Patole Kuldip Ajit	70
19.	Pawar Sonali Balu	72
20.	Sonawane Tushar Govind	72
21.	Surwade Prajakta Sanjay	70
22.	Ugale Kalpesh Uttam	73
23.	Ugale Kanchan Janardan	72
24.	Ugale Poonam Sanjay	73
25.	Vidhate Supriya Rajendra	68
26.	Waje Trupti Dattu	72

Department of Vocational Food Processing & Preservation G.M.D. Arts B.W. Commerce and Science College Sinnar Principal
G M D Arts B W. Commerce and
Counce Counce Signar, Dist. Nashik



G.M.D Arts, B.W Commerce and Science College Sinnar-Affiliated to the Savitribai Phule Pune University, Pune Maratha Vidya Prasarak Samaj's

# Certificate of Achievement

This is to certify that Mr/Ms/ Mrs/

of has actively completed th

Certificate Course in Food Processing and Preservation

organised By Dept. of B. VOC Food Processing and Preservation during 01/06/ to 01/12/2020

His / Her participation is highly appreciated and best wishes for their futu

endeavours



PRINCIPAL









## Maratha Vidya Prasarak Samaj's

# G. M. D. ARTS, B. W. COMMERCE & SCIENCE COLLEGE,

Nashik-Pune Highway, Sinnar, Dist.Nashik-422 103

#### **SYLLABUS**

# Certificate Course in Livestock Production and Management



#### Certificate Course Livestock Production and Management

#### Livestock Production Management (A.Y.2020-21)

#### Livestock Production And Management -I

#### > Theory

#### Unit-I

Livestock in India- association of livestock to Indian society during vedic, medieval and modern era. Demographic distribution of livestock and role in economy. Introductory animal husbandry. Common animal husbandry terms. Body conformation and identification. Dentition and ageing of animals.

#### Unit-II

Transport of livestock by rail, road, air and on foot. Common farm management practices including disinfection, isolation, quarantine and disposal of carcass. Introduction to methods of drug administration. Common vices of animals, their prevention and care. Livestock production systems of different agro-climatic zones. Livestock resources and resources management Livestock produce and products and their availability and their role in rural/urban hearth/economy. Organic livestock production.

#### Unit-III

General principles affecting the design and construction of building for housing for various livestock species. Selection of site. Arrangements of the building with special reference to Indian conditions. Utilization of local materials. Building materials used for construction of wall, roof and floor of animal houses, their characteristics, merits and demerits.

Demography of cattle and buffalo population. Breeds and breed descriptors of important breeds. Important traits of cattle and buffaloes. General management and feeding practices of calves, heifers, pregnant, lactating and dry animals in bulls and working animals. Draught ability of cattle and buffaloes. Raising of buffalo mates for meat production. Housing systems, layout and design of different biddings for dairy animals inducing backyard dairy and

mixed farms. Routine dairy farm operations and labor management Methods of milking and are precautions. Factors affecting quality and quantity of milk production. Clean max production Dairy farm accounts and records. Concepts of input and output cost of dairy farming (small and large holdings).

#### > Practical

#### Lab. - Livestock Production Management-I

- 1. A. Identification of various breeds of
  - a. cattle,
  - b. buffalo,
  - c. sheep
  - d. goat
  - B. Familiarization with body points of animals. Approaching, handling and restraining
    - a. cattle,
    - b. buffalo,
    - c. sheep
    - d. goat
  - C. Clipping, shearing, dipping, spraying and spotting sick animals.
  - 2. A. Detection of vices. Feeding of animals. Methods of identification (marking, tattooing, branding, tagging and electronic chip).
    - B. Determination of age. Determination of body weight using different measurements. Preparation of animals for show and judging. Layout plans for dairy and sheep/goat farms. Familiarization with routine farm operations.
  - 3. A. Selection and culling of animals. Milking of dairy animals. Training of breeding mates. Detection of heat Identification and care of pregnant animals. Care of neonatal and young stock. Maintenance, cost accounting, economic analysis and preparation of balance sheet of dairy and sheep/goat farm records. Structure of wool and its differentiation from hair fibre.
  - 4. Determination of staple length, crimps, diameter and strength of wool fibre. Sorting, packaging and grading of wool. Recovery of wax from wool. Scouring and carbonization of wool. Visit to different animal farms/ demonstration centres/ individual rural, urban

and peri-urban animal units/ wool production centres & industries/ wool, meat and lite animal markets.

#### Animal Nutrition and Feed Technology

#### > Theory

#### Unit-I

Importance of nutrients in animal production and health. Composition of animal body and plants. Nutritional terms and their definitions. Importance of minerals (major and trace elements) and vitamins in health and production, their requirements and supplementation in feed.

#### Unit-II

Common feeds and fodders, their classification, availability and importance for livestock and poultry production. Measures of food energy and their applications - gross energy, digestible energy, metabolism energy, net energy, total digestible nutrients, starch equivalent, food units, physiological fuel value. Direct and indirect calorimetry, carbon and nitrogen balance studies.

#### Animal Nutrition and Feed Technology

#### > Practical

- 1. Familiarization of various feed stuff, fodders and their selection.
- 2. Preparation and processing of samples for chemical analysis herbage, faeces, urine and
- 3. Weende's System of analysis Estimation of dry matter, total ash, acid insoluble ash, crude protein, ether extract crude fibre, nitrogen free extract, Calcium and phosphorus in feed samples.
- 4. Demonstration of detergent methods of forage analysis.
- 5. Qualitative detection of undesirable constituents and common adulterants of feed.
- 6. Demonstration of laboratory ensiling of green fodders. Silage pit preparation.
- 7. Demonstration of conducting digestion trial in ruminants. Calculation of nutritive value of different feed stuffs in terms of digestible crude protein (DCP), total digestible nutrient (TDN), Nitrogen retention (NR) and starch equivalent (SE). Calculation of requirements of nutrients in terms of DCP, TDN and metabolisable energy (ME) for maintenance, growth,

and other types of production like meat, milk, wool, reproduction and work.

- 8. Formulation of rations for different categories of livestock under different conditions.
- 9. Demonstration of the methods for improving the nutritive quality of straws and other crop residues.
- 10. Formulation of rations for feeding of livestock during scarcity periods. Visit to feed factories.

#### Fodder Production and Grassland Management

#### > Theory

#### Unit-I

Importance of grasslands and fodders in-livestock production. Agronomical practices for production of leguminous and non-leguminous fodders in different seasons.

Soil and water conservation and irrigation drainage for fodder production. Farm, power and Unit-II agro-energy. Farm machinery and equipment Harvesting and post-harvest techniques for fodder preservation.

#### Unit-III

Storage of feeds and fodders. Scarcity fodders. Feed and fodder management for individual animals. Fodder production for small units through inter cropping or back yard cultivation.

#### Fodder Production and Grassland Management

#### > Practical

- 1. Visit to the fodder farm. Familiarization with the various types of fodder crops utilized in the state and the samples of fodder in India.
- 2. Fodder cropping routines familiarization. Collection, preservation and storage of feed and fodder; possible damages/loss and methods to prevent them.
- 3. Cost calculations of fodder production. Familiarizations with the back yard fodder cropping and intercropping of fodder.
- 4. Livestock waste utilization and recycling.
- 5. Calculation on the economic aspects of fodder cropping and procurement of feed.

Department of Vocational Livestock Production & Management G.M.D. Arts B.W. Commerce and Science College Sinnar Science College, Sinnar, Dist. Nashik,



#### Maratha Vidya Prasarak Samaj's

#### G.M.D. Arts, B.W. Commerce & Science College, Sinnar. Dept. of B. Voc

# Certificate Course in (Livestock production and Management ) (2020-2021)

#### **Student List**

Roll No	Student Name	Class
1	Ananthre Darshan Pratap	S.Y B.VOC
2	Ashtekar Samadhan Balasaheb	S.Y B.VOC
3	Avhad Mahesh Ramesh	S.Y B.VOC
4	Belote Rahul Vishnu	S.Y.B.VOC
5	Gurkule Amol Sadashiv	S.Y B.VOC
6	Jagtap Rushikesh Kailas	S.Y B.VOC
7	Kale Prathamesh Milind	S.Y B.VOC
8	Kardak Shweta Subhas	S.Y B.VOC
9	Khillari Subhash Ganpat	S.Y B.VOC
10	Loharkar Prasad Sunil	S.Y B.VOC
11	Pagare Sagar Vishnu	S.Y B.VOC
12	Pangarkar Pravin Dnyaneshwar	S.Y B.VOC
13	Pawale Yash Somnath	S.Y B.VOC
14	Rudrakar Vaibhav Waman	S.Y B.VOC
15	Said Mahesh Popat	S.Y B.VOC
16	Sanap Sangam Bharat	S.Y B.VOC
17	Shirsat shekar Bhaudas	S.Y B.VOC
18	Shirsat Vivek Bhausaheb	S.Y B.VOC
19	Vaishnav Dhiraj Jaykumar	S.Y B.VOC
20	Vaidhya Tushar Gajananrao	S.Y B.VOC

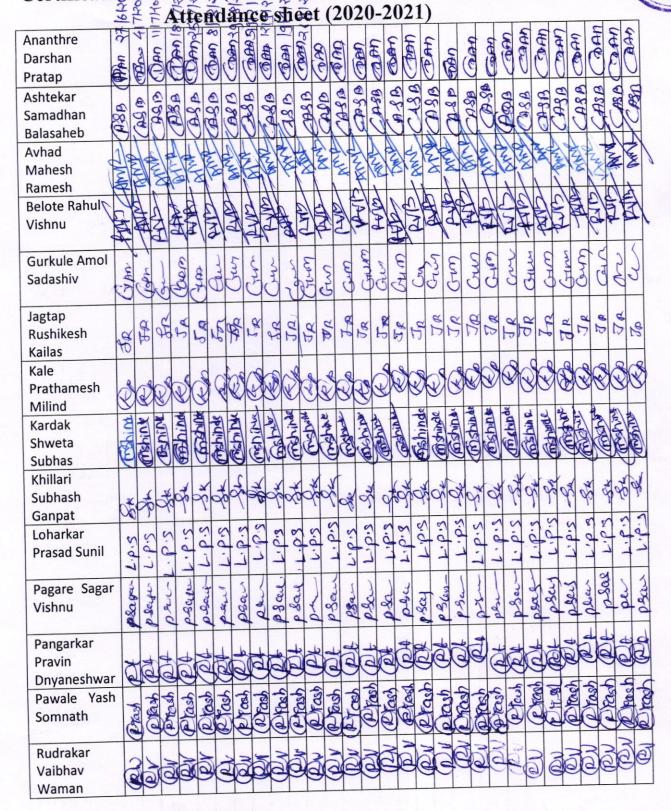
Head
Department of Vocational
Livestock Production & Management
G.M.D. Arts B.W. Commerce
and Science College Sinnar

PRINCIPAL
G.M.D.Arts,B.W.Commerce and
Science College,Sinnar,Dist.Nashik.

#### G.M.D. Arts, B.W. Commerce & Science College, Sinnar.

Dept. of B. VOC

Certificate Course in (Livestock Production and Management)



Head Department of Vocational Livestock Production & Management G.M.D. Arts B.W. Commercee and Science College Sinnar



G.M.D. Arts, B.W. Commerce & Science College, Sinnar.
Dept. of B. VOC

Certificate Course in (Livestock Production and Management)

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Vaishnav Dhiraj Jaykumar	2	N. S.	200	300	A.	CO	3	O.V.	2	93	9	and a	On.		57	27	97	an	23	14	en	500	NO NO	03	VA	61	S. S.	10	V 0
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Head
Department of Vocational
Livestock Production & Management
G.M.D. Arts B.W. Commerce
and Science College Sinnar

PRINCIPAL
G.M.D.Arts, B.W.Commerce and
Sc.ance College, Sinnar, Dist. Nashik



#### M.V.P.SAMAJ'S G. M. D.ARTS, B.W.COM& SCI, COLLEGE SINNAR.

External Examination December 2020

## Certificate Course In (Live Stock Production and Management)

Name Of the Students:		Date:	
Seat No:	Supervisor's Sign:	Marks: 50	

#### Instructions:

- · Solve any five questions from following
- Each questions carry equal marks
- Each question carry 5 marks
- Q.1) What are the types of Poultry Houses?
- Q.2) Write down the water management system of Poultry farm.
- Q.3) Write short note on seasonal management of poultry farm.
- Q.4) Explain the digestive system of chicken.
- Q.5) What are the advantages and disadvantages of poultry farm.
- Q.6) Write short note on disease spread through water contamination & its prevention.

## Maratha Vidya Prasarak Samaj's

# G.M.D. Arts, B.W. Commerce & Science College, Sinnar. Dept. of B. Voc

Certificate Course in (Livestock production and Management) (2020-2021)

	(2020-2021)		
Student Name	Internal Marks (50)	External Marks (50)	Total (100)
Ananthre Darshan Pratap	50	45	95
Ashtekar Samadhan Balasaheb	40	40	80
Avhad Mahesh Ramesh	50	40	90
Belote Rahul Vishnu	40	45	85
Gurkule Amol Sadashiv	30	44	74
Jagtap Rushikesh Kailas	40	48	88
Kale Prathamesh Milind	45	45	90
Kardak Shweta Subhas	40	45	85
Khillari Subhash Ganpat	43	43	86
Loharkar Prasad Sunil	40	42	82
Pagare Sagar Vishnu	44	45	89
Pangarkar Pravin Dnyaneshwar	40	45	85
Pawale Yash Somnath	44	43	87
Rudrakar Vaibhav Waman	50	44	94
Said Mahesh Popat	45	42	87
Sanap Sangam Bharat	45	41	86
Shirsat shekar Bhaudas	44	42	86
Shirsat Vivek Bhausaheb	40	40	80
Vaishnav Dhiraj Jaykumar	45	41	86
Vaidhya Tushar Gajananrao	45	40	85

Head
Department of Vocational
Livestock Production & Management
G.M.D. Arts B.W. Commerce
and Science College Sinnar

PRINCIPAL
G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik.



G.M.D Arts, B.W Commerce and Science College Sinnar- Nashik Affiliated to the Savitribai Phule Pune University, Pune Maratha Vidya Prasarak Samaj's

# Certificate of Achievement

This is to certify that Mr/Ms/ Mrs/

of has actively completed the

Certificate Course in Livestock Production and Management

organised By Dept. of B. VOC Livestock Production and Management during 01/06/2020 to 01/12/2020 His / Her participation is highly appreciated and best wishes for their future

endeavours



**PRINCIPAL** 





# Maratha Vidhya Prasarak Samaj's G.M.D. Arts, B.W. Commerce and Science College Sinnar

# List of the Students Enrolled in Online MOOC Programs like SWAYAM & NPTEL

## 2020-21

Sr. No.	Name of the Students	Department	Percentage (%)
1	Chine Kunal	Commerce	71
2	Shete Prasad Arjun	Commerce	53
3	Londhe Shruti Anil	Physics	41
4	Shinde Madhuri Namdev	Chemistry	64
5	Shelar Akshay Lalji	Chemistry	53
6	Gatkal Poonam Madhav	Chemistry	55
7	Lokhande Gital Vishnu	Chemistry	51
8	Gujarathi Khushi Vaibhav	Chemistry	65
9	Navle Abhijeet Dattatray	Chemistry	60
10	Pawar Sneha Shankar	Chemistry	51

11	Deshmukh Pooja Dattatray	Chemistry	51
12	Gadakh Hrutuja Madhukar	Chemistry	52
13	Chavanke Aakansha Pandurang	Mathematics	58
14	Dongare Prachi Manesh	Mathematics	56
15	Kotwal Santoshi Namdeo	Mathematics	46
16	Sonawane Arti Bajirao	Mathematics	48
17	Waychale Roshani Rajendra	Mathematics	48
18	Shinde Yashraj Bhausaheb	Mathematics	43
19	Salvi Vishakha Rajesh	Micro-Biology	70
20	Shitole Sushma Vinod	Micro-Biology	59
21	Biswas Nikita Ranjit	Micro-Biology	51



Principal
G. M. D. Arts. B. W. Commerce and
Science College, Sinnar, Dist. Nashik







#### SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to

Nikita Ranjit Biswas

for successfully completing the four credit course

Enzymology

with a consolidated score of 51%

from the evaluation based on continuous online assessments and the Proctored



Roll No.: 4010213182

This course was offered by Prof. Bashir A. Ganie of University of Kashmir

examination held in month of March 2021.

Marks in Online	e Assignments	Marks in Pro	ctored Exam	Total	Score
Total	Obtained	Total	Obtained	Total	Obtained
30	17	70	34	100	51

J. B. Nadda
National Coordinator
Consortium for Educational Communication (CEC),
New Delhi

Issued On: 18/06/2021



Dr. Salima Jan Director EMRC Srinagar University of Kashmir

To validate and check scores: https://swayam.gov.in







#### SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to
Shitole Sushma Vinod
for successfully completing the four credit course
Enzymology
with a consolidated score of 59%
from the evaluation based on continuous online assessments and the Proctored



Roll No.: 401020845

This course was offered by Prof. Bashir A. Ganie of University of Kashmir

examination held in month of March 2021.

Marks in Online	e Assignments	Marks in Pro	ctored Exam	Total	Score
Total	Obtained	Total	Obtained	Total	Obtained
30	23	70	36	100	59

J. B. Nadda
National Coordinator
Consortium for Educational Communication (CEC),
New Delhi

Issued On: 18/06/2021



Dr. Salima Jan Director EMRC Srinagar University of Kashmir

To validate and check scores: https://swayam.gov.in







#### SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to
Salvi Vishakha Rajesh
for successfully completing the four credit course
Enzymology
with a consolidated score of 70%
from the evaluation based on continuous online assessments and the Proctored

examination held in month of March 2021.



Roll No.: 4010206298

This course was offered by Prof. Bashir A. Ganie of University of Kashmir

Marks in Online	e Assignments	Marks in Pro	ctored Exam	Total	Score
Total	Obtained	Total	Obtained	Total	Obtained
30	30	70	40	100	70

J. B. Nadda
National Coordinator
Consortium for Educational Communication (CEC),
New Delhi

Issued On: 18/06/2021



Dr. Salima Jan Director EMRC Srinagar University of Kashmir

To validate and check scores: https://swayam.gov.in

Roll No: NPTEL20MA33S52050055

YASHRAJ SARADWADI ROAD, SINNAR . OM PLAZA FLAT. NO 24
OM PLAZA, FLAT NO 24 . BUILDING ,
SARADWADI ROAD , SANJEEVANI NAGAR,
SINNAR , NASHIK NASHIK MAHARASHTRA - 422103 PH. NO:8698740746



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



#### NPTEL Online ertification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## YASHRA J

for successfully completing the course

## Numerical Methods

with a consolidated score of

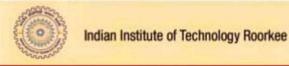
Online Assignments | 12.83/25 | Proctored Exam

30/75

Total number of candidates certified in this course: 36

Prof. V. C. Srivastava Coordinator, Continuing Education Centre **IIT Roorkee** 

Sep-Nov 2020 (8 week course) Prof. Inderdeep Singh **NPTEL Coordinator** IIT Roorkee







## NPTEL Online Certification



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

## WAYCHALE ROSHANI RAJENDRA

for successfully completing the course

#### Numerical Methods

with a consolidated score of

Online Assignments 10.96/25 Proctored Exam 36.75/75

Total number of candidates certified in this course: 36

Prof. V. C. Srivastava Coordinator, Continuing Education Centre IIT Roorkee

Roll No: NPTEL20MA33S52050027

Sep-Nov 2020 (8 week course) Prof. Inderdeep Singh

NPTEL Coordinator IIT Roorkee



Indian Institute of Technology Roorkee

To validate and check scores: https://nptel.ac.in/noc



## NPTEL Online Certification



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

## **SONAWANE ARTI BAJIRAO**

for successfully completing the course

#### Calculus of Several Real Variables

with a consolidated score of

Online Assignments | 14.75/25 | Proctored Exam

33/75

Total number of candidates certified in this course: 46

Prof. Rajesh M.Hegde Chairman, Centre for Continuing Education IIT Kanpur

Roll No: NPTEL20MA27S72050153

Sep-Nov 2020 (8 week course) Prof. Satyaki Roy NPTEL Coordinator IIT Karpur



Indian Institute of Technology Kanpur



To validate and check scores: https://nptel.ac.in/noc

Roll No: NPTEL20MA27S72050104

TO
KOTWAL SANTOSHI NAMDEO
NAIGAON ROAD
MAPARWADI
SINNAR
MAHARASHTRA - 422103
PH. NO :7083041129



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### **KOTWAL SANTOSHI NAMDEO**

for successfully completing the course

#### **Calculus of Several Real Variables**

with a consolidated score of 46 %

Online Assignments | 16.08/25 | Proctored Exam | 30/75

Total number of candidates certified in this course: 46

**Prof. Rajesh M.Hegde**Chairman, Centre for Continuing Education
IIT Kanpur

Sep-Nov 2020 (8 week course) Satyahifr

Prof. Satyaki Roy NPTEL Coordinator IIT Kanpur





Roll No: NPTEL20MA27S72050125

TO PRACHI MANESH DONGARE TEJKAMAL BUNGALOW, SIDDHIVINAYAK NAGAR , NEAR BODKE COURIER SHIVAJI NAGAR, TAL-SINNAR, DIST - NASHIK NASHIK MAHARASHTRA - 422103 PH. NO:8856895983



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## PRACHI MANESH DONGARE

for successfully completing the course

## **Calculus of Several Real Variables**

with a consolidated score of 56 9

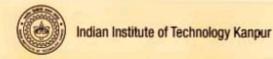
Online Assignments 18.08/25 Proctored Exam 37.5/75

Total number of candidates certified in this course: 46

Prof. Rajesh M.Hegde Chairman, Centre for Continuing Education IIT Kanpur

Sep-Nov 2020 (8 week course) Satyahifr

Prof. Satyaki Roy NPTEL Coordinator IIT Kanpur





Roll No: NPTEL20MA27572050008

TO CHAVANKE AAKANSHA PANDURANG BHIRAVNATH NAGER NEAR WATER TANK SINNAR MAHARASHTRA - 422103 PH. NO:8421027960



Score Type of Certificate

>=90 Elite+Gold

75-89 Elite+Silver

>=60 Elite

40-59 Successfully Completed

<40 No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## **NPTEL Online Certification**

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### CHAVANKE AAKANSHA PANDURANG

for successfully completing the course

#### Calculus of Several Real Variables

with a consolidated score of 58 %

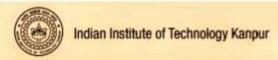
Online Assignments | 18.92/25 | Proctored Exam | 39/75

Total number of candidates certified in this course: 46

Prof. Rajesh M.Hegde Chairman, Centre for Continuing Education

Sep-Nov 2020 (8 week course) Satyatify

Prof. Satyaki Roy NPTEL Coordinator IIT Kanpur





Roll No: NPTEL20CY30572050059

TO
DESHMUKH POOJA DATTATRAY
AT SUREGAON POST MARHAL BK TAL SINNAR MAHARASHTRA - 422606 PH. NO :9881633885



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

of credits recommended by NPTEL:2

dditional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## **DESHMUKH POOJA DATTATRAY**

for successfully completing the course

## **Introductory Organic Chemistry - I**

with a consolidated score of

Online Assignments | 17.92/25 | Proctored Exam

33/75

Total number of candidates certified in this course: 177

c. Harinath

Prof. Harinath Chakrapani Dean, International Relations and Outreach **NSER** Pune

Sep-Nov 2020 (8 week course)

Prof. Andrew Thangaraj NPTEL Coordinator IT Macras



**IISER** - Indian Institute of Science Education isser Pune and Research Pune



certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL20CY30S72050084

TO
PAWAR SNEHA SHANKAR
SARSWATI NAGAR SARDWADI ROAD
NEAR GANPATI MANDIR
SINNAR
MAHARASHTRA - 422103
PH. NO :9975968624



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

D. of credits recommended by NPTEL:2

additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



# NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## PAWAR SNEHA SHANKAR

for successfully completing the course

# Introductory Organic Chemistry - I

with a consolidated score of 51 %

Online Assignments 11.67/25 Proctored Exam 39.75/75

c. Harinauti

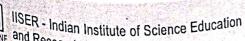
Total number of candidates certified in this course: 177

Sep-Nov 2020

Prof. Andrew Thangaraj NPTEL Coordinator IIT Madras



Prof. Harinath Chakrapani Dean, International Relations and Outreach IISER Pune



1

Roll No: NPTEL20CY30S72050027

TO HRUTUJA MADHUKAR GADAKH AT POST DEOPUR TALUKA SINNAR DISTRICT NASHIK MAHARASHTRA - 422103 PH. NO :8080890271



Score	Type of Certificate			
>=90	Elite+Gold			
75-89	Elite+Silver			
>=60	Elite			
40-59	Successfully Completed			
<40	No Certificate			

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## **NPTEL** Online Certification



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

## HRUTUJA MADHUKAR GADAKH

for successfully completing the course

## **Introductory Organic Chemistry - I**

with a consolidated score of 52 %

Online Assignments | 18.33/25 | Proctored Exam | 33.75/75

Total number of candidates certified in this course: 177

c. Harinauh

**Prof. Harinath Chakrapani**Dean, International Relations and Outreach
IISER Pune

Sep-Nov 2020 (8 week course) Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



IISER - Indian Institute of Science Education and Research Pune





## Elite

## **NPTEL Online Certification**

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### **ABHIJEET DATTATRAY NAVLE**

for successfully completing the course

## **Introductory Organic Chemistry - I**

with a consolidated score of

%

Online Assignments | 21.67/25 | Proctored Exam | 38.25/75

c. Harinall

Total number of candidates certified in this course: 177

Prof. Harinath Chakrapani Dean, International Relations and Outreach **IISER Pune** 

Sep-Nov 2020 (8 week course) Prof. Andrew Thangaraj NPTEL Coordinator **IIT Madras** 



**IISER - Indian Institute of Science Education** and Research Pune



Roll No: NPTEL20CY30S72050053

To validate and check scores: https://nptel.ac.in/noc



## Elite

## **NPTEL Online Certification**

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### KHUSHI VAIBHAV GUJARATHI

for successfully completing the course

## **Introductory Organic Chemistry - I**

with a consolidated score of 65

Online Assignments 20.42/25 Proctored Exam 44.25/75

c. Harinauh

Total number of candidates certified in this course: 177

**Prof. Harinath Chakrapani** Dean, International Relations and Outreach IISER Pune

Sep-Nov 2020 (8 week course)





IISER - Indian Institute of Science Education and Research Pune



Roll No: NPTEL20CY30S72050037

To validate and check scores: https://nptel.ac.in/noc

Roll No: NPTEL20CY30S72050023

TO GITAL VISHNU LOKHANDE SONI BHAVAN SHIVAJI NAGAR SINNAR MAHARASHTRA - 422103 PH. NO:9403239953



S	core	Type of Certificate			
>=	90	Elite+Gold			
7	5-89	Elite+Silver			
>	=60	Elite			
40	)-59	Successfully Completed			
</td <td>10</td> <td>No Certificate</td>	10	No Certificate			

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## **NPTEL Online Certification**



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

#### GITAL VISHNU LOKHANDE

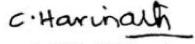
for successfully completing the course

## Introductory Organic Chemistry - I

with a consolidated score of

Online Assignments 19.17/25 Proctored Exam 32.25/75

Total number of candidates certified in this course: 177



Prof. Harinath Chakrapani Dean, International Relations and Outreach **IISER Pune** 

Sep-Nov 2020 (8 week course) Prof. Andrew Thangaraj **NPTEL Coordinator** IIT Madras



IISER - Indian Institute of Science Education and Research Pune





## NPTEL Online Certification



(Funded by the Ministry of HRD, Govt. of India)

## **GATKAL POONAM MADHAV**

for successfully completing the course

This certificate is awarded to

## **Introductory Organic Chemistry - I**

with a consolidated score of

Online Assignments | 20.83/25 | Proctored Exam | 33.75/75

c. Harina

Prof. Harinath Chakrapani Dean, International Relations and Outreach **IISER Pune** 

Total number of candidates certified in this course: 177

Sep-Nov 2020 (8 week course) Prof. Andrew Thangaraj

NPTEL Coordinator IIT Madras



IISER - Indian Institute of Science Education and Research Pune



Roll No: NPTEL20CY30S72050019

To validate and check scores: https://nptel.ac.in/noc

Roll No: NPTEL20CY30S72050009

TO SHELAR AKSHAY LALJI AT:-GHANGALWADI, POST:-NIMGAON TAL:-SINNAR, DIST:-NASHIK. SINNAR MAHARASHTRA - 422103 PH. NO :7057683189



Score	Type of Certificate			
>=90	Elite+Gold			
75-89	Elite+Silver			
>=60	Elite			
40-59	Successfully Completed			
<40	No Certificate			

#### No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## **NPTEL** Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## SHELAR AKSHAY LALJI

for successfully completing the course

## **Introductory Organic Chemistry - I**

with a consolidated score of 53 %

Online Assignments | 21.67/25 | Proctored Exam | 31.5/75

Total number of candidates certified in this course: 177

Prof. Harinath Chakrapani

c. Harina

Dean, International Relations and Outreach
IISER Pune

Sep-Nov 2020 (8 week course) Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



IISER - Indian Institute of Science Education and Research Pune



Roll No: NPTEL20CY30S72050043

To SHINDE MADHURI NAMDEV AT.POST SONARI.TAL.SINNAR.DIST.NASHIK

MAHARASHTRA - 422103 PH. NO:9822806155



Score	Type of Certificate	
>=90	Elite+Gold	
75-89	Elite+Silver	
>=60	Elite	
40-59	Successfully Completed	
<40	No Certificate	

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## Elite

## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### SHINDE MADHURI NAMDEV

for successfully completing the course

## Introductory Organic Chemistry - I

with a consolidated score of

64

Online Assignments | 22.08/25 | Proctored Exam

42/75

c. Harinal

Total number of candidates certified in this course: 177

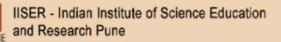
Prof. Harinath Chakrapani Dean. International Relations and Outreach

**IISER Pune** 

Sep-Nov 2020 (8 week course)









## NPTEL Online Certification



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

#### SHRUTI ANIL LONDHE

for successfully completing the course

## Solar Photovoltaics Fundamentals, Technology and Applications

with a consolidated score of

Online Assignments 11.25/25 Proctored Exam

30/75

Total number of candidates certified in this course: 161

Prof. V. C. Srivastava Coordinator, Continuing Education Centre IIT Roorkee

Roll No: NPTEL20PH21S32050132

Sep-Nov 2020 (8 week course) Prof. Inderdeep Singh NPTEL Coordinator IIT Roorkee



Indian Institute of Technology Roorkee



To validate and check scores: https://nptel.ac.in/noc

Roll No: NPTEL20MG61S42050089

TO
PRASAD ARJUN SHETE
KANADI MALA, GULWACH ROAD, SINNAR
TAL SINNAR, DIST NASHIK
SINNAR
MAHARASHTRA - 422103
PH. NO :9922228605



Score	Type of Certificate			
>=90	Elite+Gold			
75-89	Elite+Silver			
>=60	Elite			
40-59	Successfully Completed			
<40	No Certificate			

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## NPTEL Online Certification



(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

## PRASAD ARJUN SHETE

for successfully completing the course

## Introduction to Marketing Essentials

with a consolidated score of 53 %

Online Assignments 22.50/25 Proctored Exam 30/75

Total number of candidates certified in this course: 378

Prof. V. C. Srivastava Coordinator, Continuing Education Centre IIT Roorkee

Sep-Nov 2020 (8 week course) Prof. Inderdeep Singh NPTEL Coordinator IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL20MG61S32050128

To KUNAL CHINE KHARJE MALA SINNAR MAHARASHTRA - 422103 PH. NO :8805222034



Score	Type of Certificate  Elite+Gold			
>=90				
75-89	Elite+Silver			
>=60	Elite			
40-59	Successfully Completed			
<40	No Certificate			

#### No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## Elite

## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

#### KUNAL CHINE

for successfully completing the course

## **Introduction to Marketing Essentials**

with a consolidated score of 71 %

Online Assignments | 22.92/25 | Proctored Exam | 48/75

Total number of candidates certified in this course: 378

**Prof. V. C. Srivastava**Coordinator, Continuing Education Centre
IIT Roorkee

Sep-Nov 2020 (8 week course)

Prof. Inderdeep Singh

NPTEL Coordinator

IIT Roorkee



Indian Institute of Technology Roorkee



#### MVP Samaj's



## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

# Department of Physical Education (AY 2020-21)

Date: 01/10/2021

## **Notice**

## Certificate Course in Basics of Yoga

All the students are hereby informed that the department of Physical Education is going to conduct an online certificate course in 'Basics of Yoga' from 10/10/2021 to 25/10/2021. All the interested students should contact Prof. S. D. Ingale (Physical Director) for registration on or before 05/10/2021. After the completion of the course, the certificate will be issued.

Prof. S.D. Ingale

Dept. of Physical Education & Sports, G.M.D. Arts, B.W. Commerce & Science College, Sinnar SINNAR 422 103

Dr. P.V. Rasal

G M D Arte B W Commerce and Science Connege Linear, Cist Nashik



#### MVP Samaj's

## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

# Department of Physical Education (AY 2020-21)

## Certificate Course in Basics of Yoga

## Objectives of the Course:

The objectives of a "Certificate Course in Basics of Yoga" syllabus generally aim to provide participants with a foundational understanding of yoga philosophy, practices, and principles. The course is designed to equip participants with the knowledge and skills needed to establish a solid foundation in their personal yoga practice and potentially serve as an introductory step toward further studies or teaching yoga. Here are the common objectives of such a course:

- Understand the historical and philosophical context of yoga.
- Learn about different paths of yoga and their significance.
- Familiarize participants with basic yoga postures (asanas) and their benefits.
- Teach proper alignment, adjustment techniques, and safety considerations in practicing asanas.
- Introduce participants to various breathing techniques and their effects on mind and body.
- Teach the fundamentals of pranayama (breath control) for enhanced wellbeing.
- Explore different meditation techniques and their roles in calming the mind and improving focus.
- Provide an understanding of mindfulness practices and their integration with yoga.
- Develop a basic understanding of the body's anatomical structures and how they relate to yoga practice.
- Recognize the importance of flexibility, strength, and balance for overall health.

#### Syllabus:

Module 1: Introduction to Yoga

Definition and origins of yoga



- Different paths of yoga (Hatha, Raja, Bhakti, Jnana, Karma, etc.)
- Benefits of practicing yoga
- Overview of key yoga texts (such as the Yoga Sutras of Patanjali)

## Module 2: Yoga Philosophy and Lifestyle

- The philosophy of yoga: Yamas and Niyamas (ethical guidelines)
- Incorporating yogic principles into daily life
- Mind-body connection and holistic well-being

## Module 3: Asanas (Yoga Poses)

- Introduction to basic yoga postures
- Alignment and safety in asana practice
- Breathing techniques (Pranayama) and its integration with asanas

## Module 4: Pranayama and Meditation

- Various pranayama techniques (breathing exercises)
- Introduction to meditation and its benefits
- Mindfulness and concentration practices

## Module 5: Yoga Anatomy and Physiology

- Understanding the physical body in relation to yoga
- Importance of flexibility, strength, and balance
- Basic overview of body systems relevant to yoga practice

## Module 6: Relaxation and Stress Management

- Yoga Nidra: The yogic sleep for deep relaxation
- Techniques for managing stress and anxiety through yoga

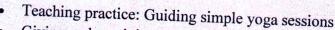
## Module 7: Introduction to Ayurveda

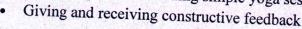
- Basic principles of Ayurveda
- Doshas (Vata, Pitta, Kapha) and their relevance to yoga practice

## Module 8: Yoga Ethics and Teaching Guidelines

- The role of a yoga teacher and ethical considerations
- Effective communication and creating a safe and inclusive class environment

#### Module 9: Practicum





## Module 10: Final Assessment and Certification

- Written examination on course content
- Practical assessment of teaching skills

#### Outcome of the Course:

The outcomes of a "Certificate Course in Basics of Yoga" are designed to reflect the knowledge, skills, and personal growth that participants can expect to achieve upon completing the course. These outcomes are centered around equipping participants with a solid foundation in yoga philosophy, practices, and principles, which can serve as a stepping stone for further studies or even teaching yoga. Here are the typical outcomes of such a course:

- 1. Foundational Understanding: Participants will gain a clear understanding of the history, philosophy, and various paths of yoga, providing them with a holistic perspective on the practice.
- Yoga Practices: Participants will become familiar with basic yoga postures (asanas), pranayama techniques, meditation practices, and relaxation methods to enhance their physical, mental, and emotional well-being.
- 3. Mind-Body Connection: Participants will develop an awareness of the mind-body connection and how yoga contributes to overall holistic health.
- 4. Breath Awareness: Participants will learn to incorporate proper breathing techniques (pranayama) into their practice, which can have a positive impact on their stress levels, focus, and energy.
- Stress Management: Participants will acquire tools and techniques to manage stress and anxiety through yoga practices, promoting emotional resilience and a sense of calm.
- 6. Mindfulness Skills: Participants will develop mindfulness skills, enhancing their ability to be present and fully engaged in their daily lives.
- 7. Physical Awareness: Participants will understand basic anatomy relevant to yoga and be able to practice asanas with proper alignment and posture, reducing the risk of injuries.
- 8. Introduction to Teaching: For those interested in becoming yoga teachers, participants will gain an initial introduction to teaching skills, including communication, creating a safe environment, and providing guidance during yoga sessions.
- Ethical Values: Participants will internalize ethical principles and values that guide their personal practice and interactions with others in a yoga community.



10. Personal Growth: Through self-reflection and introspection encouraged by the course participants may experience personal growth, increased self-awareness, and a deeper connection to themselves.

11. Holistic Well-being: By embracing the holistic approach of yoga, participants can expect improvements in physical fitness, mental clarity, emotional balance, and

12. Certification: Participants who successfully complete the course will receive a certificate, acknowledging their commitment to learning and understanding the basics of yoga.

It's important to note that while the course provides a strong foundation, it's just the beginning of the journey. Many participants go on to pursue more advanced yoga studies, further personal practice, or even pursue teaching certifications if they wish to share their knowledge and experiences with others.

Prof.'S.D. Ingale Co-ordinator

Head
Dept. of Physical Education & Sports.
G.M.D. Arts, B.W. Commerce
& Science College, Sinnar

Dr. C.E. Gurule

Cogndinator

OAC

G. M. D. Arts. R.W. Commerce & Science College, Strings, Dist. Nationk 422103 Dr. P.V. Rasal

G.M.D.Arts, B.W.Commerce and Science College, Sinnar, Dist. Nashik



## MVP Samaj's

## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

# Department of Physical Education (AY 2020-21)

## Certificate Course in Basics of Yoga

## **Attendance and Result Report**

The department of Physical Education has conducted an online certificate course in 'Certificate Course in Basics of Yoga'from 10/10/2021 to 25/10/2021. For the course, 75 students have enrolled from the college. The course is conducted by on-line mode. The students joined at Google Meet and attended the course. The result is as follows:

75	69	06	69	00	100
Enrolled Students	Appeared Students	Absent Students	Passed Students	Failed Student	Percentage of Passing

Prof. S.D. Ingale

Dept. of Physical Education & Sports. G.M.D. Arts, B.W. Commerce & Science College, Sinnar SINNAR OF A22 103 OF THE STATE OF THE STATE

Dr. P.V. Rasal

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#### Maratha Vidya PrasarakSamaj, Nashik

## G.M.D. Arts, B.W. Commerce and Science College, Sinnar

**E-Content and Online Teaching Record** 

Academic Year- 2020-21

# **Evidences of Videos Lectures on You Tube & Google Classroom Certificate Course in Basics of Yoga**



Figure 1: Google Meet



Figure 2: Presentation on Google Meet







## **Evidences of Videos Lectures on You Tube & Google Classroom**

# Certificate Course in Certificate Course in Basics of Yoga

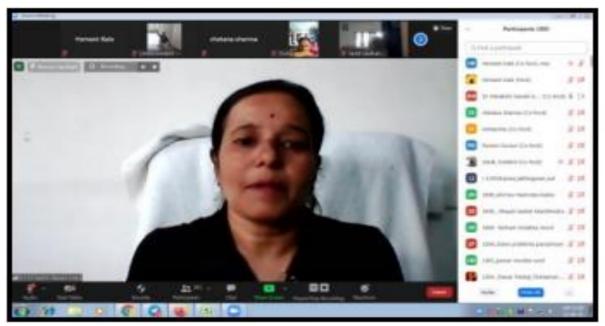


Figure 3: Google Meet conducted by Resource Person



Figure 4: Demonstration of Yoga

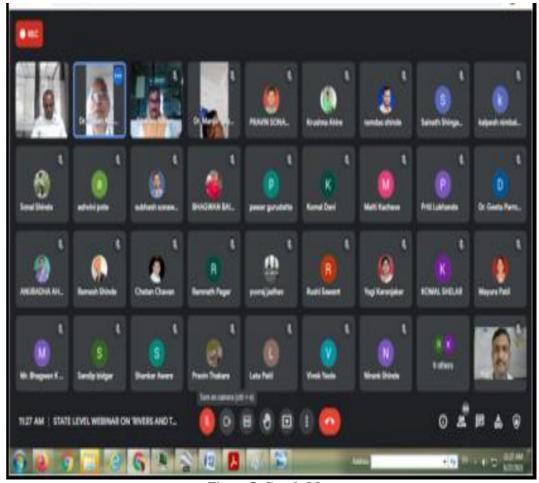


Figure 5: Google Meet

## **Basics Course of Yoga you-tube link.**

- https://youtu.be/6JIxoeeCEQQ
- https://youtu.be/aN-Q2JV46q4
- <a href="https://youtu.be/RBmjlc\_VwNc">https://youtu.be/RBmjlc\_VwNc</a>
- <u>https://youtu.be/dAqQqmaI9vY</u>
- <a href="https://youtu.be/4ZBUDd4bsyA">https://youtu.be/4ZBUDd4bsyA</a>
- <a href="https://youtu.be/dAqQqmaI9vY">https://youtu.be/dAqQqmaI9vY</a>
- <a href="https://youtu.be/sSiA25XlG">https://youtu.be/sSiA25XlG</a> A









Maratha Vidya Prasarak Samaj's

G.M.D Arts, B.W Commerce and Science College Sinnar- Nashik

Affiliated to the Savitribai Phule Pune University, Pune



# Certificate of Achievement

This is to certify that Mr./Ms./ Mrs	
	has actively

## completed the

**Certificate Course in Basics of Yoga** 

organized By Department of Physical Education in collaboration with IQAC during

10/10/2021 to 25/10/2021

His / Her participation is highly appreciated and best wishes for their future endeavors

Dr. S.D. Ingale HOD Dr. C.E. Gurule
IQAC Coordinator

Dr. P.V.Rasal Principal









#### G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of English
(AY 2020-21)

Date: 20/01/2021

#### **Certificate Course in**

## Enriching Communicative Competence in English Notice

All the students of our college are hereby informed that the department of English is going to conduct an online certificate course on **'Enriching Communicative Competence in English '** from 1<sup>nd</sup> Feb. 2021 to 15<sup>th</sup> Feb. 2021. All the interested students should contact Dr. S. R. Shinde for registration on or before 31<sup>st</sup> Jan. 2021. After the completion of the course, the certificate will be issued.

Prof. Dr. C.E. Gurule
College, Sinnar

Dr. P.V. Rasal
PARTOSPAL
G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik



## MVP Samaj's G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of English

#### Certificate Course in

#### ENRICHING COMMUNICATIVE COMPETENCE IN ENGLISH

#### **Syllabus**

#### Introduction

Language is a means to acquire education. It is a tool to express ideas, a royal vehicle of thoughts, means and method of communication, used by a community or nation. Certificate Course in Communicative English is designed to enhance one's language skills in English, especially with a special focus on improving speaking skills. Since English is now the international medium of expression, it is necessary to master the language to stay connected with the world.

By joining Communicative English Certificate course, students will be able to learn the elements of the language and acquire the confidence to speak fluently and write correctly in formal and informal situations. They will face no problem while communicating in schools, colleges, universities or in any public place. Because, they will learn the pronunciation of words, their meanings and to make sentences that help them to overcome speech problems in active communication. They will also learn it through interactive games, situational conversations, project works, lab sessions, etc., designed especially for those students who want to improve their communication skills for better employment opportunities.

#### **Objectives**

- 1. To enable students to master proper English pronunciation, spelling, meaning and usage.
- 2. To make students how to construct acceptable and correct sentences using familiar and apt vocabulary in the context of daily activities.
- 3. To provide students with English language skill practice to improve their



English proficiency.

- 4. To practice genuine English dialogues and speeches in the classroom to improve English language fluency by simulating real-life situations.
- 5. Using a variety of classroom and outdoor activities, conduct of workshops & seminars, assisting students to overcome their anxiety of speaking in English, in front of their classmates and teachers, thereby increasing their self-confidence.
- 6. To assist students to become the self-directed and autonomous English language learners.

#### Outcomes of the course:

- 1. To develop vocabulary and enhance grammar accuracy
- 2. To produce words with right pronunciation
- 3. To improve LSRW skills
- 4. To develop rapport, speak more confidently and listen intently
- 5. To analyze and take advantage of body language
- 6. To enhance students' work professionalism

#### **Syllabus**

SI. No	Module	Topics			
1 Grammar		Introduction to Grammar, Types of Sentences, Verbs, Tenses and Types of Tenses, the Sequence of Tenses (rules in use of tenses), Question Tags, some exceptions in question tags			



3	Communicat	Invitation, Meeting and Parting, Sentences of
ko.	ion(in Real	Gratitude, Sentences of Congratulations and Good
	Life	Wishes, Sentences of Refusal, Sentences of
	Situations)	Believing, Sentences of Request, Sentences
	11128	relating to Meals, Sentences of Time, Sentences of
		Permission, Sentences of Encouragement,
		Sentences of Consolation, Sentences of
		Annoyance, Sentences of Affection, Sentences of
		Negation, Sentences of Consent, Sentences of
4 10		Sadness, Sentences of relating to Quarrel,
		Sentences of Anger, Sentences of Apology (Sorry)
4	Conversations	Conversation, Introducing Self and Others, Talking
	-I	to Student, Getting Ready to go, Asking the Way,
		Inquiry about a Doctor/Patient, Talking to Doctor,
		At a General Store/Mall, Talking to a Railway
		Clerk, Talking to a Receptionist, Enquiry about
		Admission process/Course Details at
20	N. C.	Institute/College
6	Conversati	At an Interview, In a Party, Talking on the Phone,
	ons-II	In a college, Booking a Room in a Hotel, Talking to
		Customer Care, With Class Teacher/ Principal,
		With a Foreigner, With a Tourist Guide, Marriage
		Negotiation, Online Interview, Online Order -
		Delivery Conversation, at a Kitty Party, Talking on
		Natural Disasters, Talking on Pollution, Talking on politics/Social Issues - Debates

HEAD
DEPARTMENT OF ENGLISH
G.M.D. Arts, B.W. Commerce
And Science College, Sinnar



PRINCIPAL
G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik

## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of English
(AY 2020-21)

#### Certificate Course in

## Enriching Communicative Competence in English Attendance and Result Report

The department of English has conducted an Online Certificate Course on 'Enriching Communicative Competence in English' from 1<sup>nd</sup> Feb. 2021 to 15<sup>th</sup> Feb 2021. For the course, 1305 students have enrolled from all the faculties of the college. The lectures in on-line mode were conducted in on-line mode. Approximately 750 students joined at Google Meet and the remaining students joined the You Tube links. The online examination of 50 marks was conducted by the department of English. The result was as follows:

Enrolled Students	Appeared Students	Absent Students	Passed Students	Failed Students	Percentage of Passing
1274	1206	68	1183	23	98.09

Prof. Dr. C.E. Gurule
Co-ordinator

DEPARTMENT OF ENGLISH G.M.D. Arts, B.W. Commerce And Science College, Sinnar



Dr. P.V. Rasal

PRIVICIPAL

G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik

#### Maratha VidyaPrasarakSamaj, Nashik

#### G.M.D. Arts, B.W. Commerce and Science College, Sinnar

**E-Content and Online Teaching Record** 

Academic Year- 2020-21

#### **Evidences of Videos Lectures on You Tube & Google Classroom**

## Certificate Course in Enriching communicative competence in English

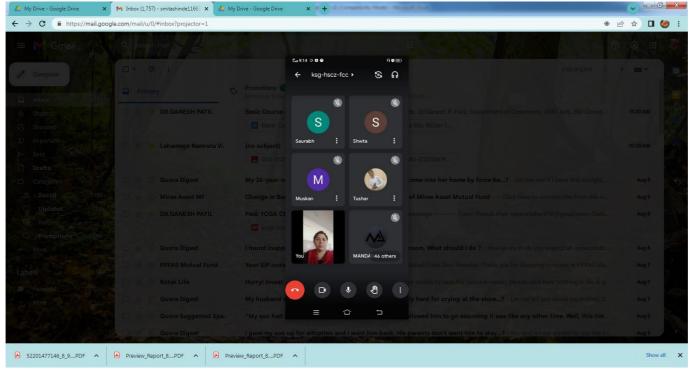


Figure 1: Google Meet Lecture by the Expert Mrs..D. S. Suryawanshi

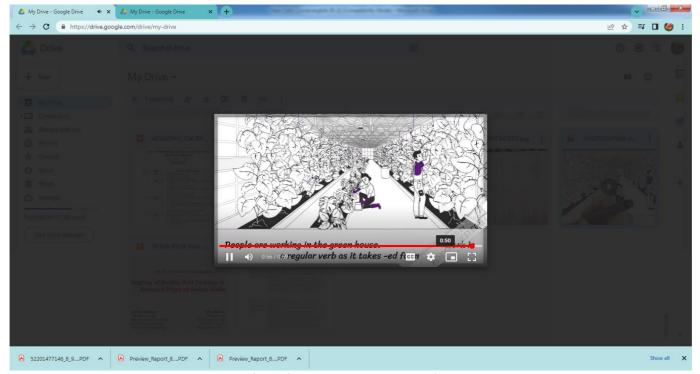


Figure 2: Lecture conducted on video



Figure 31: Video Lecture

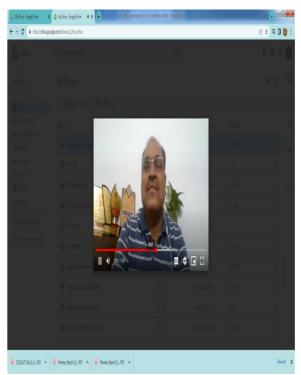


Figure 4: Video Lecture





Principal
G. M. D. Arts, B. W. Commerce and
Science College, Sinnar, Dist.Nashik



## Maratha Vidya Prasarak Samaj's G.M.D Arts, B.W Commerce and Science College Sinnar- Nashik Affiliated to the Savitribai Phule Pune University, Pune

## CERTIFICATE

## OF APPRECIATION

This is to certify that Mr./Ms./ Mrs	
	has actively completed th
Certificate Course in Enriching Communi	cative Competence in English
organized By	/
Department of English in collabora	ation with IQAC during
01/02/2021 to 15/0	2/2021
His / Her participation is highl	y appreciated and
best wishes for their futu	ire endeavors

Dr. C. E.Gurule
HOD &IQAC COORDINATOR

Dr. P.V.Rasal Principal



## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of Computer Science

(AY 2020-21)

Date: 05/12/2020

#### Certificate Course in

## Introduction to Information and Cyber Security

#### **Notice**

All the students of the UG and PG classes are hereby informed that the department of Computer Science is going to conduct an online certificate course on 'Introduction to Information and Cyber Security' from 1st Jan. 2021 to 31st Jan. 2021. All the interested students should contact Smt. N.V. Lahamage (HoD, Department of Computer Science) for registration on or before 31st Dec 2020. After the completion of the course, the certificate will be issued.

Note- It is mandatory for all the PG students to register for the course.

Prof. N.V. Lahamage

DEPARTMENT OF COMPUTER SCIENCE G.M.D. Arts, B.W. Commerce and Science College, Sinnar SINNAR HAZZ 103 O

Dr. P.V. Rasal

PRINCIPAL

G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik

## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of English

#### syllabus and Outcomes

#### **Certificate Course in**

## INTRODUCTION TO INFORMATION AND CYBER SECURITY

#### **Syllabus**

#### **Chapter 1: Overview of Networking Concepts**

- 1. Basics of Communication Systems
- 2. Transmission Media
- 3. Topology and Types of Networks
- 4. TCP/IP Protocol Stacks
- 5. Wireless Networks
- 6. The Internet

#### **Chapter 2: Information Security Concepts**

- 1. Information Security Overview: Background and Current Scenario
- 2. Types of Attacks
- 3. Goals for Security
- 4. E-commerce Security
- 5. Computer Forensics
- 6. Steganography

#### **Chapter 3: Security Threats and Vulnerabilities**

- 1. Overview of Security threats
- 2. Weak / Strong Passwords and Password Cracking
- 3. Insecure Network connections
- 4. Malicious Code
- 5. Programming Bugs
- 6. Cyber crime and Cyber terrorism
- 7. Information Warfare and Surveillance

#### Chapter 4: Cryptography / Encryption

- 1. Introduction to Cryptography / Encryption
- 2. Digital Signatures
- 3. Public Key infrastructure
- 4. Applications of Cryptography
- 5. Tools and techniques of Cryptography

#### **Learning Outcomes**

- Protect and defend computer systems and networks from cyber security attacks.
- Diagnose and investigate cybersecurity events or crimes related to computer systems and digital evidence. ...
- Effectively communicate in a professional setting to address information security issues.

(Prof. N. V. Lahamage) Head Dept. of Comp. sci

Science College, Sinnar, Dist. Nashik



## G.M.D. Arts, B.W. Commerce & Science College, Sinnar

Department of Computer Science

(AY 2020-21)

#### Certificate Course in

## Introduction to Information and Cyber Security

## **Attendance and Result Report**

The department of Computer Science has conducted an Online Certificate Course on 'Introduction to Information and Cyber Security' from 1st Jan. 2021 to 31st Jan. 2021. For the course, 671 students have enrolled from TYBSc, TYBCS, M.A., M. Com. and M.Sc. The lectures in on-line mode were conducted in on-line mode. Approximately 97 students joined at Google Meet and the remaining students joined the You Tube links. The online examination of 25 marks was conducted by the department of Computer Science. The result was as follows:

Enrolled Students	Appeared Students	Absent Students	Passed Students	Failed Students	Percentage of Passing
671	659	12	626	33	94.99

Prof. N.V. Lahamage

Co-ordinator
HEAD
DEPARTMENT OF COMPUTER SCIENCE
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar



Dr. P.V. Rasal

PRINCIPAL

G.M.D.Arts, B.W.Commerce and
Science College, Sinnar, Dist. Nashik

#### Maratha VidyaPrasarakSamaj, Nashik

#### G.M.D. Arts, B.W. Commerce and Science College, Sinnar

E-Content and Online Teaching Record Academic Year- 2020-21

#### **Evidences of Videos Lectures on You Tube & Google Classroom**

## Certificate Course in Introduction to Information and Cyber Security

#### Links for the lectures

- o <a href="https://drive.google.com/file/d/1tycmFolzdRxyZ0zeA5Und6eLtlkjzwXJ/view?usp=sharing">https://drive.google.com/file/d/1tycmFolzdRxyZ0zeA5Und6eLtlkjzwXJ/view?usp=sharing</a>
- o <a href="https://drive.google.com/file/d/1tCfmNWApKJxcR3U4e">https://drive.google.com/file/d/1tCfmNWApKJxcR3U4e</a> TMRXsoK6zljYKX/view?usp=sharing
- o https://drive.google.com/file/d/1oV-fq9EBA87HVi5kPwWF3jLAlypgxmIN/view?usp=sharing
- o <a href="https://drive.google.com/file/d/1HRExXQPlykg1HHECOoEzOzs9fOkKAz0x/view?usp=sharing">https://drive.google.com/file/d/1HRExXQPlykg1HHECOoEzOzs9fOkKAz0x/view?usp=sharing</a>
- o https://drive.google.com/file/d/16HXHqvo2IMLiyzdTVPiFOCbMbKqss-3H/view?usp=sharing
- o https://drive.google.com/file/d/11Zes U1ce94qk3kv53i7rC 0UgXNvRGB/view?usp=sharing
- https://drive.google.com/file/d/11Zes\_U1ce94qk3kv53i7rC\_0UgXNvRGB/view?usp=sharing

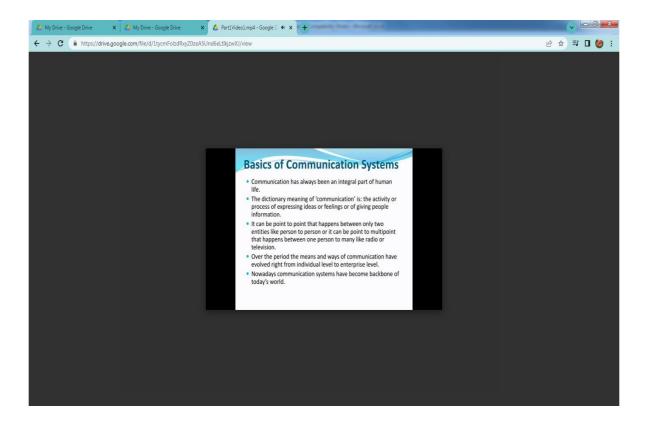
CO-ORDINATOR
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Principal G. M. D. Arts, B. W. Commerce and Science College, Sinnar, Dist.Nashik

#### **Video Lectures**

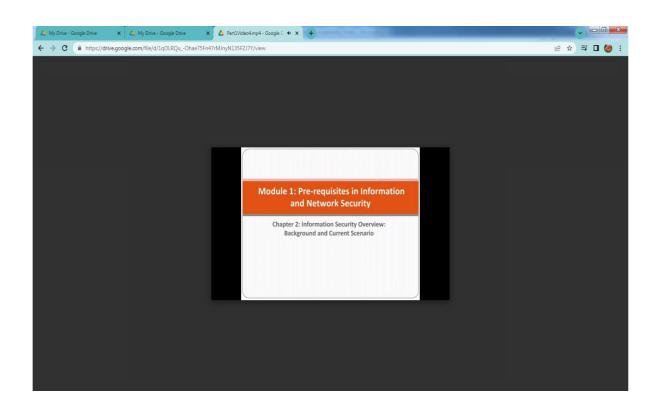








Principal
G. M. D. Arts, B. W. Commerce and
Science College, Sinnar, Dist.Nashik









Principal
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Science College, Sinnar, Dist. Nashik



Maratha Vidya Prasarak Samaj's G.M.D Arts, B.W Commerce and Science College Sinnar- Nashik Affiliated to the Savitribai Phule Pune University, Pune

## **CERTIFICATE OF ACHIEVEMENT**

This is to certify that Mr./Ms./ Mrs./	_
/ ha	S
actively completed the	
Certificate Course in Introduction to Information and Cyber Security	
organized By Department of Computer Science in collaboration with IQAC during 01/01/2021 to 31/01/2021	
His / Her participation is highly appreciated and best wishes for their future endeavo	r

Prof. N. V. Lahamage HOD Dr. C.E. Gurule
IQAC Coordinator

Dr. P.V.Rasal Principal