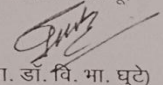


1.2 Academic Flexibility : Supportive Document

Certificate Course in Financial Markets (2021-22)- University Permission Letter

	पुण्यश्लोक अहिल्यादेवी होळकर सोलापूर विद्यापीठ, सोलापूर Punyashlok Ahilyadevi Holkar Solapur University, Solapur केगाव, सोलापूर - ४१३ २५५, महाराष्ट्र (भारत) दूरध्वनी क्र. ०२१७-२७४४७७८ / २१३/२१५ (२१ लाईन्स), फॅक्स ०२१७-२७५१३००, संकेतस्थळ http://su.digitaluniversity.ac.in ई मेल : su.digitaluniversity.ac.in, su@su.ac.in	
अभ्यासमंडळे विभाग		
जा.क्र.पुअहोसोविसो/अमंवि/२०२१/ 5844		दि. 12 AUG 2021
प्रति		
१) मा. प्राचार्य/प्राचार्या, सर्व संलग्नित महाविद्यालये		
२) मा. संचालक, विद्यापीठ परिसर सर्व शैक्षणिक संकुले		
पुण्यश्लोक अहिल्यादेवी होळकर सोलापूर विद्यापीठ, सोलापूर		
विषय :- शैक्षणिक वर्ष २०२१-२२ पासून चारही विद्याशाखा अंतर्गत सुधारित करण्यात आलेले अभ्यासक्रम विद्यापीठाच्या संकेतस्थळावर उपलब्ध करून देण्यात आले बाबत...		
संदर्भ :- दि.१०/०७/२०२१ रोजीच्या विद्यापरिषदेतील ठराव क्र. १२२, १२३, १२४, १२५, १२६, १२७, १२८, १२९, १३०, १३१, १३२ आणि १३३.		
महोदय/महोदया,		
उपरोक्त विषयास अनुसरून आपणास कळविण्यात येते की, शैक्षणिक वर्ष २०२१-२२ पासून विज्ञान व तंत्रज्ञान विद्याशाखा, वाणिज्य व व्यवस्थापन विद्याशाखा, मानवविज्ञान विद्याशाखा आणि आंतर-विद्याशाखीय अभ्यास विद्याशाखा अंतर्गत येणारे पदवी तृतीय वर्ष, पदव्युत्तर द्वितीय वर्ष आणि पीएच. डी. कोर्सवर्क च्या सुधारित अभ्यासक्रमास मा.विद्यापरिषदेने दि.१०/०७/२०२१ रोजीच्या बैठकीत ठराव क्र. १२२, १२३, १२४, १२५, १२६, १२७, १२८, १२९, १३०, १३१, १३२ आणि १३३ नुसार सर्वानुमते सर्व विद्याशाखांनी केलेल्या शिफारशिस दुरुस्तीसह मान्यता प्रदान केली आहे.		
या अनुषंगाने शै. वर्ष २०२१-२२ पासून सुधारित करण्यात आलेले उपरोक्त नमूद चारही विद्याशाखा अंतर्गत पदवी तृतीय वर्ष, पदव्युत्तर द्वितीय वर्ष आणि पीएच. डी. कोर्सवर्क अभ्यासक्रम प्रस्तुत विद्यापीठाच्या संकेतस्थळावर BOS या मथळ्याखाली उपलब्ध करून देण्यात आले आहेत.		
सदर बाब आपल्या अधिपत्याखाली सर्व संबंधित अध्यापक व विद्यार्थ्यांच्या निर्देशनास आणून द्यावी, ही विनंती. सोबत उपरोक्त नमूद ठरावांच्या छायांकित प्रती जोडल्या आहेत.		
		आपला विश्वासू,  (प्रा. डॉ. वि. मा. घुटे) प्र.कुलसचिव
सोबत : वरीलप्रमाणे.		
प्रत : १) मा. अधिष्ठाता, सर्व विद्याशाखा		
२) मा. अध्यक्ष, सर्व स्थायी व अस्थायी अभ्यासमंडळे		
३) मा. कुलगुरु महोदयांचे कार्यालय		
४) मा. प्र. कुलगुरु महोदयांचे कार्यालय		
५) मा. कुलसचिव महोदयांचे कार्यालय		
६) मा. संचालक, परीक्षा व मूल्यमापन मंडळ		
७) मा. संचालक, शैक्षणिक संशोधन व विकास विभाग		
		
G:\ARM\32 Syllabus copies w.e.f. June 2021-22\1 All notes.docx		

Certificate Course in Financial Markets (2021-22)- Invitation Letter of Inaugural Function

1 June 2008

DAKSHIN SOLAPUR TALUKA SHIKSHAN MANDAL'S

**V. G. Shivdare College of Arts,
Commerce and Science, Solapur**
(Affiliated to Solapur University)
(Accredited by NAAC 'B' Grade)

Jule Solapur-1, Vijapur Road, SOLAPUR - 413004 Maharashtra
Visit us at : www.vgshivdarecollege.org e-mail : vgshikshana@rediffmail.com

Phone : 0217-2303411
Fax : 0217-2341380

Late Shri. V. G. Shivdare Ex. M. L. A. FOUNDER	Shri. R. V. Shivdare PRESIDENT	Shri. I. R. Hatture SECRETARY	Dr. B. N. Kamble PRINCIPAL
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Ref:VGS/ 14 /2022-23

Date: 08/04/2022

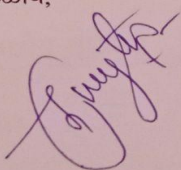
प्रति,
मा. प्रा. डॉ. श्रीनिवास जगताप,
सहयोगी प्राध्यापक,
कॉमर्स विभाग,
एच. एन. कॉमर्स कॉलेज,
सोलापूर.

विषय : दिनांक ११/०४/२०२२ रोजी Certificate Course in Financial Markets कोर्सच्या
उद्घाटना समारंभास उपस्थित राहण्याबाबत आमंत्रण पत्र...

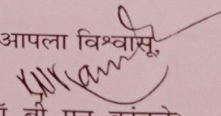
महोदय,

आमच्या महाविद्यालयात अर्थशास्त्र विभाग अंतर्गत बी. ए. भाग ३ च्या वर्गाला Certificate Course
in Financial Markets कोर्स पु.अ.हो. सोलापूर विद्यापीठ अंतर्गत चालू झालेले असून सदर कोर्सचे
उद्घाटन आपल्या शुभहस्ते संपन्न व्हावे असे आमचे मानस आहे. तरी आपण आमच्या विनंतीला मान देऊन
विद्यार्थ्यांना मार्गदर्शन करावे. दिनांक ११/०४/२०२२ रोजी सकाळी १०:०० वाजता कार्यक्रम आयोजित केलेले
आहे.

कळावे,





आपला विश्वासू,

(डॉ. बी. एन. कांबळे)
प्राचार्य

Certificate Course in Financial Markets (2021-22)- Thanking Letter

1st June 2008



**V. G. Shivdare College of Arts,
Commerce and Science, Solapur**
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Jule Solapur-I, Vijapur Road, SOLAPUR - 413004 Maharashtra
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Late Shri. V. G. Shivdare
Ex. M. L. A.
FOUNDER

Shri. R. V. Shivdare
PRESIDENT

Shri. I. R. Hatture
SECRETARY

Dr. B. N. Kamble
PRINCIPAL

Ref:VGS/ 17 /2022-23

Date: 12/04/2022

प्रति,
मा. प्रा. डॉ. श्रीनिवास जगताप,
सहयोगी प्राध्यापक,
कॉमर्स विभाग,
एच. एन. कॉमर्स कॉलेज,
सोलापूर.

विषय : दिनांक ११/०४/२०२२ रोजी Certificate Course in Financial Markets कोर्सच्या
उद्घाटना समारंभास उपस्थित राहिल्याबद्दल आभार पत्र...

महोदय,

आपण आमच्या विनंतीला मान देऊन दिनांक ११/०४/२०२२ रोजी Certificate Course in
Financial Markets कोर्सचे उद्घाटन करून आमच्या विद्यार्थ्यांना व्याख्यानपर मार्गदर्शन केलात त्याबद्दल
आम्ही आपले मनस्वी आभार मानतो.

धन्यवाद!

Received
with thanks
[Signature]



आपला विश्वासू
[Signature]
(डॉ. बी. एन. कांबळे)
प्राचार्य

**Student List -Present at inaugural function of Certificate Course in Financial Markets On
11/04/2022**

दक्षिण सोलापूर तालुका शिक्षण मंडळाचे
दी. जी. शिवदारे कॉलेज ऑफ आर्ट्स, कॉमर्स अँड सायन्स, सोलापूर

कार्यक्रमाचे नाव : Certificate Course in Financial Markets उद्घाटन समारंभ
दिनांक : ११/०४/२०२२ स.१०.०० वाजता स्थळ : मॅमिनार हॉल
संयोजक : अर्थशास्त्र विभाग

अ. क्र.	विद्यार्थ्याचे नाव	वर्ग	रोल नंबर	सही
1	Survale Aishwarya Dattatray	B.com 3 rd year	2312	Aishwarya
2	Survale Ranjira Rajendra	B.com 3 rd year	2271	Ranjira
3	Ncha A. vhanmare	B.com 2 nd yr	2501	Akhmare
4	Kaveri A. Kodate	B.com 2 nd yr	2408	Kaveri
5	Sakshi S. Bhatkar	B.com 2 nd yr	2502	Sakshi
6	Pranita. Shirakkar	B.com 2 nd year	2482	P.A.S.
7	Suptiya chivadshetti	B.com 3 rd year	2225	Suptiya
8	Vijayashri Mukteshi	B.com 3 rd year	2245	Vijayashri
9	Kizankumari Titendru Ram	B.com 3 rd yr	2270	K.T. Ram
10	Aimas sodil sayyed	B.com II year	2488	Aimas
11	Laxmi Avinash Kumbhar	B.com II	2424	Laxmi
12	Vaishnavi Parushottam sutar	B.com II	2454	Vaishnavi
13	Bharati vijay vade	B.com II	2483	Bharati
14	Pratiksha Kalappa waghmode	B.com II	2406	Pratiksha
15	Sangita Rajendra Rambe	B.com II	2489	Sangita
16	Manasi Balbhini Machekar	B.com II	2410	Manasi
17	Gauri Revansiddha Khajurkar	B.com II	2437	Gauri
18	Pratiksha Vitthal Kshirsagar	B.com I	2614	Pratiksha
19	Nayamini Gaurishab Jambekar	B.com I	2696	Nayamini
20	Rohod Archana Pandurang	B.com I	2601	A.P. Rohod
21	Shruti Bharat Khadare	B.com I	2608	Shruti
22	Sonali Kalkar Deshpande	B.com I	2710	Sonali
23	Anjali Shivappa Kore	B.com I	2611	A.S. Kore
24	Rohod pooja kushniwal	B.com II	2434	Rohod
25	Biradar Soundarya Basavaraj	B.com II	2426	S.B.B.
26	Waghmode Komal Mukund	B.com II	2404	Komal
27	Awade Payal Bhurat	B.com II	2486	Awade
28	Mane Vaishnavi	B.com II	2447	V. Mane
29	Apard Ambika Uttamrao	B.com I	2667	Apard

**Student List -Present at inaugural function of Certificate Course in Financial Markets On
11/04/2022**

30	Raut Nirguna Suresh	B.Com Ist	2609	<i>N. Raut</i>
31	Dingane Nulan Vishnu	B.com Ist	2630	<i>N.V. Dingane</i>
32	Jadhav Anuja Pravin	B.COM Ist	2709	<i>Anudhara</i>
33	Saw katkar Sakshi Prasad	B.Com Ist	2607	<i>Sakshi</i>
34	Badade Bhakti Shivaji	B.com Ist	2602	<i>Bhakti</i>
35	Kumudini Laghunath Waghmare	B.com I	2714	<i>Indira</i>
36	Sakshi Bhurat Pawar	B.com I	2619	<i>Pawar</i>
37	Renuka Ankush chaugule	B-com I	2653	<i>R. Chaugule</i>
38	Shrishaail Mulbanna Nimben	Bcom I	2731	<i>Shrishaail</i>



Student List -Present at inaugural function of Certificate Course in Financial Markets On

11/04/2022

दक्षिण सोलापूर तालुका शिक्षण मंडळाचे की. जी. शिवदारे कॉलेज ऑफ आर्ट्स, कॉमर्स अँड सायन्स, सोलापूर

कार्यक्रमाचे नाव : Certificate Course in Financial Markets उद्घाटन समारंभ

दिनांक : ११/०४/२०२२ स.१०.०० वाजता

स्थळ : सीमिनार हॉल

संयोजक : अर्थशास्त्र विभाग

अ. क्र.	विद्यार्थ्याचे नाव	वर्ग	रोल नंबर	महो
1	Mangesh M. Sonawale	B. Com III	2209	(Mangesh)
2	Pavane omkar	B. Com III	2206	omkar
3	Vinayak Mohan Lehande	B. Com III	2231	Vinayak
	Dinesh Shrinivasrao Panshri	B. Com III	2219	Dinesh
	Vaibhav Vijay Surwase	B. Com III	2276	Surwase P.V.
	Jadhav Prasad Ravikanth	B. Com I	2226	Prasad
	Omkar Basavaraj Shimpi	B. Com III	2049	Omkar
	Amar Gaitwad	B. Com III	2023	A. Gaitwad
9	Pranesh Lingarkar	B. Com III	2053	Pranesh
10	Pavan Navale	B. Com - I	2677	Pavan
11	Shreyash Konde	B. Com I	2616	Shreyash
12	Rohit Bhingde	B. Com II	2620	Rohit
13	ONKAR VARGONDE	B. Com I	2637	ONKAR
14	Prathmesh Gajjar	B. Com I	2640	Prathmesh
15	Vishal Laxman Bardole	B. Com I	2638	Vishal B.
16	Shivkumar Tukaram Kungalkar	B. Com I	2666	Shivkumar
17	Koli Suraj Dagdu	B. Com I	2637	Koli
18	Reddy D. Prabhesh	B. Com I	2689	Reddy
19	Adarsh D. Shikhar	B. Com I	2711	Adarsh
20	Abhijeet V. Pawar	B. Com I	2726	Abhijeet
21	Abhijeet Sanjay Jadhav	B. Com I	2718	Abhijeet
22	Harsh V. Manohar	B. Com I	2685	Harsh
23	Pranav Ramling Nambale	B. Com I	2618	Pranav
24	Sharan I. Jamadar	B. Com I	2703	Sharan
25	Ravi Tushiram Rathod	B. Com I	2631	Ravi
26	Omkar S. Nabhu	B. A III	1101	Omkar
27	Vipul V. Awate	B. A III	1104	Vipul
28	Omkar Kale	B. Com	2729	Omkar
29	Vijaykatesh	B. Com	2720	Vijaykatesh



Student List -Present at inaugural function of Certificate Course in Financial Markets On

11/04/2022

30) Pooja Gaddam	B.Com (I)	2643	Pooja Gaddam
31) Rupnar Ashwini	B.Com (I)	2623	Rupnar Ashwini
32) Anja Kulkarni	B.Com (I)	2675	Anja Kulkarni
33) Supriya Ambekar	B.Com (I)	2658	Supriya Ambekar
34) Rohini Kamble	B.Com (I)	2620	Rohini Kamble
35) Aishwarya Surjavanshi	B.Com I	2651	Aishwarya Surjavanshi
36) Avantika Lonar	B.Com I	2673	Avantika Lonar
37) Supriya Koli	B.Com I	2633	Supriya Koli
38) Mamta Bhasrajwalge	B.Com I	2654	Mamta Bhasrajwalge
39) Sakshi Rathod	B.Com I	2665	Sakshi Rathod
40) Nikita Rathod	B.Com I	2679	Nikita Rathod
41) Avidhanammashri Shimpi	B.Com I	2644	Avidhanammashri Shimpi
42) Deshmukh Yogini	B.Com I	2621	Deshmukh Yogini
43) Grewa Sakshi	B.Com I	2612	Grewa Sakshi
44) Shruti Deshpande	B.Com I	2712	Shruti Deshpande
45) Dhanshi Tokapure	B.Com I	2689	Dhanshi Tokapure
46) Shreya Gorkwad	B.Com I	2678	Shreya Gorkwad
47) Shweta Gogi	B.Com I	2663	Shweta Gogi
48) Anjali Pawar	B.Com - I	2694	Anjali Pawar
49) Tejasvi Patil	BA - III	1187	Tejasvi Patil
50) Sush Jadhav	BA III	1102	Sush Jadhav
51) Aditi Jadhav	B.Com I	2638	Aditi Jadhav
52) Shruti More	B.Com I	2672	Shruti More
53) Omkar Habbu	B.A III	1101	Omkar Habbu
54) Mihir Gajikar	B.A IV	1129	Mihir Gajikar
55) Vipul Awade	B.A III	1104	Vipul Awade



Inaugural function of Certificate Course in Financial Markets On 11/04/2022

Chief Guest : Dr. Shrinivas Jagtap





V. G. Shivdare College of Arts, Commerce and Science, Solapur

Department Of Economics



Inaugural Function of Certificate Course in Financial Markets B.A.III

Date: 11-04-2022

Time: 10:00am

Chief Guest

Dr. Shrinivas Jagtap
Associate Professor,

Hirachand Nemchand Collage of Commerce, Solapur



President

Dr. B. N. Kamble
Principal

Dr. Birajdar A. L.
Dept. of Economics

V. G. Shivdare College Of Arts,
Commerce and Science, Solapur

Prof. Kamble M.B
Dept. of Economics

Estd. : June 2005



DAKSHIN SOLAPUR TALUKA SHIKSHANMANDAL'S

**V. G. Shivdare College of
Arts, Commerce and Science, Solapur**
(Kannada Linguistic Minority Institute)
(Affiliated to P. A. H. Solapur University)

Phone : 0217 -2303411
Fax : 0217- 2341380

Jule Solapur-1, Vijapur Road, Solapur – 413004 Maharashtra

Visit us at : www.vgshivdarecollege.com

e-mail : vgb.biotchnology@rediffmail.com / vgprincipal@sus.ac.in

Late Shri. V. G. Shivdare
Ex. M. L. A.
FOUNDER

Shri. R. V. Shivdare
PRESIDENT

Shri. I. R. Hatture
SECRETARY

Dr. B. N. Kamble
PRINCIPAL

Ref. No. : VGS/ 434/२०२१-२२

दिनांक :- २५/०८/२०२२

To,
Miss. Kirti Somvanshi
(Share Market Advisor)
Solapur.

Sub. : Appreciation for your remarkable contribution to Add-on Course.

Respected Madam,

We would like to thank you for outstanding contribution for running add-on course "Financial Market in Economics" for B.A. Part III for the academic year 2021-22. Our college appreciates your efforts and the assistance for conducting add-on course for Economics department.

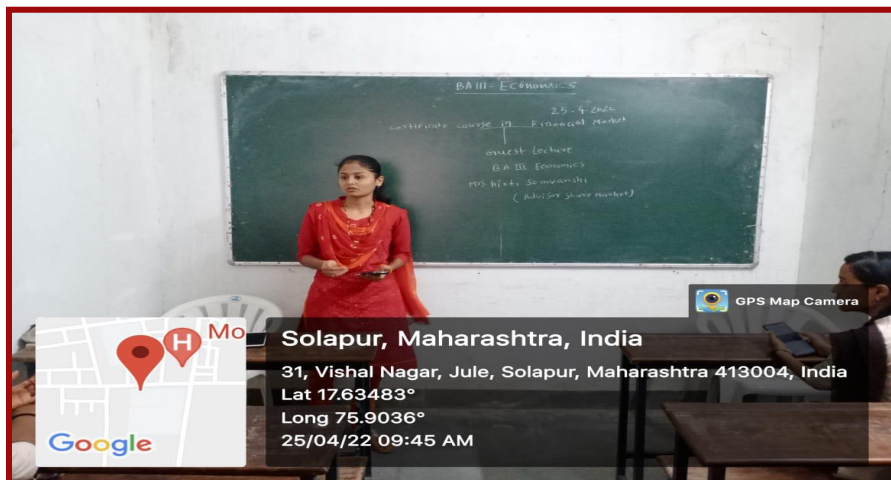
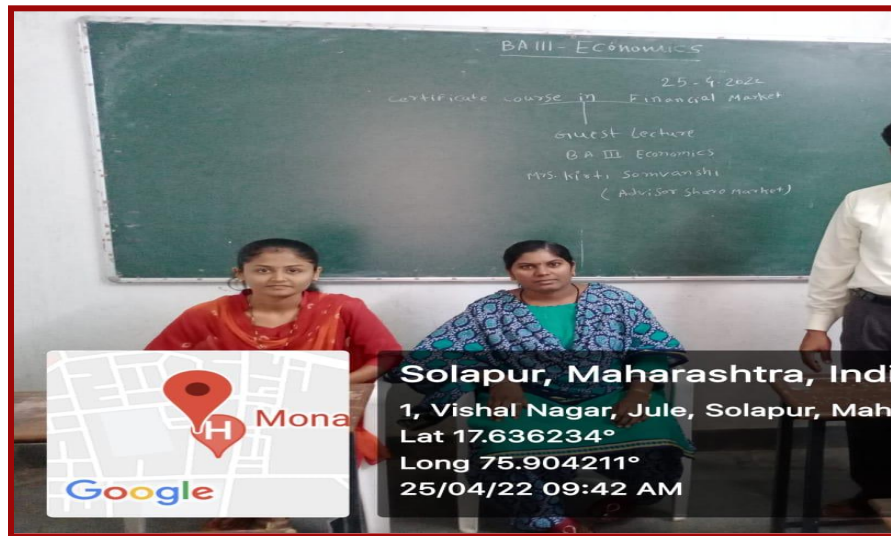
We expect your co-operation will continue in future us.

Thanking You,




(Dr. B. N. Kamble)
Principal

Kirti Somvanshi Mam - Practical Lecture on Financial Markets



B.A III (Economics) Student List 2021-22

Sr. No.	Student Name	Roll No.
1	Ghale Mahesh Nagnath	1018
2	Dhamame Ashwini Gaourishankar	1107
3	Mhetre Pooja Suresh	1113
4	Kore Ankit Dhareppa	1115
5	Bagdure Revati Chandrashekar	1117
6	Rajput Akash Sanjaykumar	1142
7	Pawar Suman Shepu	1153
8	Govindpurkar Sanjana Prashant	1154
9	Govindpurkar Sony Shrikant	1155
10	Chavan Payal Sanjay	1161
11	Rathod Vishali Sharnappa	1166
12	Kamble Akash Laxman	1168
13	Jathar Saurabh Nagnath	1181
14	Ghotale Vijay Mallikarjun	1184
15	Sutar Pravin Chidanand	1185
16	Bansode Abhishek Rajendra	1186



Kulkarni
PRINCIPAL
V.G. SHIVDARE COLLEGE OF
ARTS, COMMERCE & SCIENCE, SOLAPUR.

Certificate course in Financial Market
B.A. III SEM. VI Fee Receipt
2021-22

B.A III (Economics) Student List 2021-22

Sr. No.	Student Name	Roll No.	Mo.No.	Signature
1	Govindpurkar Sanjana Prashant	1154	8600889027	<i>Sanjana</i>
2	Govindpurkar Sony Shrikant	1155	8855033233	<i>Sony</i>
3	Rathod Vishali Sharnappa	1166	8640270766	<i>Rathod</i>
4	Chavan Payal Sanjay	1161	7276476515	<i>Payal</i>
5	Bagdure Revati Chandrashekar	1117	8010603044	<i>Revati</i>
6	Mhetre Pooja Suresh	1113	9309213582	<i>Pooja</i>
7	Pawar Suman Shepu	1153	9834182280	<i>Suman</i>
8	Jathar Saurabh Nagnath	1181	7083750141	<i>Saurabh</i>
9	Kamble Akash Laxman	1168	7219787552	<i>Akash</i>
10	Rajput Akash Sanjaykumar	1142	9284105456	<i>Akash</i>
11	Bansode Abhishek Rajendra	1186	9325402956	<i>Abhishek</i>
12	Dhamame Ashwini Gaourishankar	1107	9665049804	<i>Ashwini</i>
13	Kore Ankit Dhareppa	1115	7499759097	<i>Ankit</i>
14	Ghotale Vijay Mallikarjun	1184	7620266308	<i>Vijay</i>
15	Ghale Mahesh Nagnath	1018	7057715739	<i>Mahesh</i>
16	Sutar Pravin Chidanand	1185	9130373086	<i>Pravin</i>

9529300493

Dr. A.L. Birajdar
convenor
Dept. of Economics



PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR
B.A. Part- III

Subject: ECONOMICS

Certificate Course in Financial Markets

(With effect from June, 2021)

Total Lectures: 60

Total credits: 04

Marks: 50

Preamble

This industry oriented course is specially designed for those who want to make their career in financial institutions, broking houses, research houses and depository houses. This course will assist the students who wish to work as a arbitrager, executive or manager, investor or trader. This course provides a strong base of knowledge about financial market and its operations.

Syllabus

1. Basics of Financial Markets

(15 Lectures)

- 1.1 Meaning and structure of financial markets
- 1.2 Constituents of money market, Functions of money market, Role of money market
- 1.3 Role of capital market, Indian capital market, Features of capital market
- 1.4 Reforms in money market and capital market in India

2. Types of markets

(15 Lectures)

- 3.1 Equity market
- 3.2 Commodity market
- 3.3 Currency market
- 3.4 Derivatives market

3. Stock market.

(15 Lectures)

- 2.1 Meaning of stock market, Primary and secondary market
- 2.2 Functions of stock market
- 2.3 Longer term fixed-income capital markets, types of shares, Bonds
- 2.4 Link between savers and investment opportunities

4. Stock exchanges

(15 Lectures)

- 4.1 Basics of Mutual Fund, NAV, SIP, ELSS
- 4.2 National Stock Exchange
- 4.3 Bombay Stock Exchange
- 4.4 Role of SEBI



References

1. Jitendra Gala- Guide to Indian stock market
2. Deepak Shinde- Indian stock market
3. Ankit Gala & Khushboo Gala- Fundamental analysis of shares
4. Vinod Kumar, Atul Gupta, Manmeet Kaur- Financial Markets, institutions and financial services
5. Nathan Bell- Stock market investing for beginners
6. Raghu Palat- Fundamental analysis for investors
7. Ajay Shah, Susan Thomas, Michael Gorham- Indian Financial Markets
8. M. Y. Khan- Indian financial system
9. M. Y. Khan- Financial management
10. Dart & Sundharam- Indian economy
11. Mishra & Puri- Indian economy

Examination:

Total Marks: 50

Theory Exam: 40 Marks + Project work: 10 Marks





Seat No.	
----------	--

B.A (SEM-VI) (NEW)(CBCS) Examination March/April 2022

Certificate Course in Financial Market

Day & Date: Friday, 06-05-2022

Max. Marks: 40

Time: 10.00 AM To 12.00 AM

सूचना : 1) सर्व प्रश्न अनिवार्य आहेत.

2) उजवीकडील अंक गुण दर्शवितात.

प्र. 1 योग्य पर्याय निवडा

08

- 1) नाणेबाजारातील संघटित क्षेत्र खालीलपैकी ----- हे नाही.
 - 1) भारतीय रिझर्व्ह बँक
 - 2) व्यापारी बँक
 - 3) सहकारी बँक
 - 4) स्थानिक बँकर्स
- 2) राष्ट्रीय शेअर बाजाराचा निर्देशांक ----- हा आहे.
 - 1) सेन्सेक्स
 - 2) बँकेक्स
 - 3) रोलेक्स
 - 4) निफ्टी
- 3) विकास वित्तीय संस्था या ----- साठी स्थापन करण्यात आल्या.
 - 1) अल्पकालीन निधी उपलब्ध करून देणे
 - 2) कृषी व मुख्य क्षेत्राचा विकास वाढविण्यासाठी मदत करणे
 - 3) नाणेबाजाराचे नियमन करतात
 - 4) भांडवलबाजाराचे नियमन करतात
- 4) भारतीय प्रतिभूती विनिमय मंडळाची स्थापना ----- साली झाली.

6) भांडवल बाजाराची भूमिका

प्र. 3 खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर लिहा.

10

1) भांडवल बाजाराचा अर्थ सांगून भारतीय भांडवलबाजाराची वैशिष्ट्ये सांगा.

किंवा

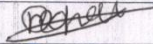
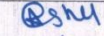
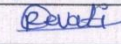
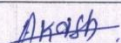
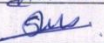
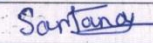
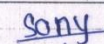
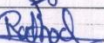
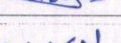
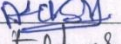
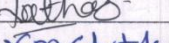
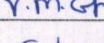
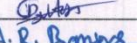
2) भारतीय नाणेबाजाराची भूमिका स्पष्ट करा.

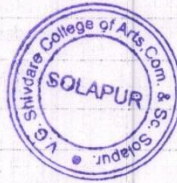
प्र. 4 भारतीय अर्थव्यवस्थेतील सेबीची भूमिका स्पष्ट करा.

10

Time: 10.00 AM to 12.00 AM
D: 6-5-2022

2021-2022
certificate course in Financial Market
Theory Exam Attendance
B.A III (Economics) Student List 2021-22

Sr. No.	Student Name	Roll No.	Signature
1	Ghale Mahesh Nagnath	1018	
2	Dhamame Ashwini Gaourishankar	1107	
3	Mhetre Pooja Suresh	1113	
4	Kore Ankit Dhareppa	1115	
5	Bagdure Revati Chandrashekar	1117	
6	Rajput Akash Sanjaykumar	1142	
7	Pawar Suman Shepu	1153	
8	Govindpurkar Sanjana Prashant	1154	
9	Govindpurkar Sony Shrikant	1155	
10	Chavan Payal Sanjay	1161	
11	Rathod Vishali Sharnappa	1166	
12	Kamble Akash Laxman	1168	
13	Jathar Saurabh Nagnath	1181	
14	Ghotale Vijay Mallikarjun	1184	
15	Sutar Pravin Chidanand	1185	
16	Bansode Abhishek Rajendra	1186	



Dr. A.L. Birajdar
Convenor

V.G. Shivdare collage of Arts, commerce &
2021-22 Science

Certificate Course in Financial Market

B.A III (Economics) Internal Exam (40 Marks)

Sr. No.	Student Name	Roll No.	Practical 10 mark	Theory 10 mark	Total Marks 50
1	Ghale Mahesh Nagnath	1018	8	28	36
2	Dhamame Ashwini Gaourishankar	1107	9	32	41
3	Mhetre Pooja Suresh	1113	9	32	41
4	Kore Ankit Dhareppa	1115	8	20	28
5	Bagdure Revati Chandrashekar	1117	9	32	41
6	Rajput Akash Sanjaykumar	1142	7	24	31
7	Pawar Suman Shepu	1153	8	31	39
8	Govindpurkar Sanjana Prashant	1154	10	31	41
9	Govindpurkar Sony Shrikant	1155	10	31	41
10	Chavan Payal Sanjay	1161	7	31	38
11	Rathod Vishali Sharnappa	1166	10	35	45
12	Kamble Akash Laxman	1168	7	28	35
13	Jathar Saurabh Nagnath	1181	9	35	44
14	Ghotale Vijay Mallikarjun	1184	10	29	39
15	Sutar Pravin Chidanand	1185	7	24	31
16	Bansode Abhishek Rajendra	1186	10	32	42



Dr. A.L. Birajdar



V. G. Shivdare College of Arts, Commerce & Science, Solapur

Attendance Sheet

Name of Department: Commerce

Class: B.A III - SEM - VI

Name of Teacher: Dr. Birajdar A.C.

Course Name: Certificate Course in Financial Market

Attendance for the Month: May 2022 Year: 2021-2022

TLC: 12

No.	Roll No.	Name of Student	19	19	20	20	21	21	22	22	23	23	24	24						TLP	TPA
1	1018	Ghale Mahesh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P							
2	1107	Dhamame Ashwini Gaourishankar	P	P	P	P	P	P	P	P	P	P	P	P							
3	1113	Mhetre Pooja Suresh	P	P	P	P	P	P	P	P	P	P	P	P							
4	1115	Kore Ankit Dhareppa	P	P	P	P	P	P	P	P	P	P	P	P							
5	1117	Bagdure Revati Chandrashekar	P	P	P	P	P	P	P	P	P	P	P	P							
6	1142	Rajput Akash Sanjaykumar	P	P			P	P	P	P	P	P	P	P							
7	1153	Pawar Suman Shepu	P	P	P	P	P			P	P	P	P	P							
8	1154	Govindpurkar Sanjana Prashant	P	P	P	P	P	P	P	P	P	P	P	P							
9	1155	Govindpurkar Sony Shrikant	P	P	P	P	P	P	P	P	P	P	P	P							
10	1161	Chavan Payal Sanjay	P	P	P	P	P	P	P	P	P	P	P	P							
11	1166	Rathod Vishali Sharnappa	P	P	P	P	P	P	P	P	P	P	P	P							
12	1168	Kamble Akash Laxman	P	P	P	P	P	P	P	P	P	P	P	P							
13	1181	Jathar Saurabh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P							
14	1184	Ghotale Vijay Mallikarjun	P	P	P	P	P	P	P	P	P	P	P	P							
15	1185	Sutar Pravin Chidanand	P	P	P	P	P	P	P	P	P	P	P	P							
16	1186	Bansode Abhishek Rajendra	P	P	P	P	P	P	P	P	P	P	P	P							

TLP = Total Lecture Present; TPA = Total Percent Attendance

Signature of the Teacher

Dr. Birajdar A.C.



Signature of the Head of Department

Principal

A.R. Bansode



V. G. Shivdare College of Arts, Commerce & Science, Solapur

Attendance Sheet

Name of Department: Economics

Class: B.A III SEM-VI

Name of Teacher: Dr. Birajdar A.L.

Course Name: Certificate Course in Financial Market

Attendance for the Month: May 2022

Year: 2021-2022

TLC: 36 18

No.	Roll No.	Name of Student	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	TLP	TPA
1	1018	Ghale Mahesh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
2	1107	Dhamame Ashwini Gaourishankar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
3	1113	Mhetre Pooja Suresh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
4	1115	Kore Ankit Dhareppa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
5	1117	Bagdure Revati Chandrashekar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
6	1142	Rajput Akash Sanjaykumar	P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	16	
7	1153	Pawar Suman Shepu	P	P	P	P	P	P	P			P	P	P	P	P	P	P	P	P	16	
8	1154	Govindpurkar Sanjana Prashant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
9	1155	Govindpurkar Sony Shrikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
10	1161	Chavan Payal Sanjay	P	P	P	P	P	P	P			P	P	P	P	P	P	P	P	P	16	
11	1166	Rathod Vishali Sharnappa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
12	1168	Kamble Akash Laxman	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
13	1181	Jathar Saurabh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
14	1184	Ghotale Vijay Mallikarjun	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
15	1185	Sutar Pravin Chidanand	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	
16	1186	Bansode Abhishek Rajendra	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	

TLP = Total Lecture Present; TPA = Total Present Attendance

Signature of the Teacher
Dr. Birajdar A.L.



Signature of the Head of Department

Principal



V. G. Shivdare College of Arts, Commerce & Science, Solapur

Attendance Sheet

Name of Department: Commerce

Class: B.A III SEM-VI

Name of Teacher: Dr. Girajdar A.L.

Course Name: certificate course in
Financial Market

Attendance for the Month: April 2022 Year: 2021-2022

TLC: 18

18+18+12=48

No.	Roll No.	Name of Student	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	TLP	TPA
1	1018	Ghale Mahesh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Mahesh</u>
2	1107	Dhamame Ashwini Gaourishankar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Ashwini</u>
3	1113	Mhetre Pooja Suresh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Pooja</u>
4	1115	Kore Ankit Dhareppa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Ankit</u>
5	1117	Bagdure Revati Chandrashekar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Revati</u>
6	1142	Rajput Akash Sanjaykumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	16	<u>Akash</u>
7	1153	Pawar Suman Shepu	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	16	<u>Suman</u>
8	1154	Govindpurkar Sanjana Prashant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Sanjana</u>
9	1155	Govindpurkar Sony Shrikant	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Sony</u>
10	1161	Chavan Payal Sanjay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	16	<u>Payal</u>
11	1166	Rathod Vishali Sharnappa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Rathod</u>
12	1168	Kamble Akash Laxman	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Akash</u>
13	1181	Jathar Saurabh Nagnath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Jathar</u>
14	1184	Ghotale Vijay Mallikarjun	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>V.M. Ghotale</u>
15	1185	Sutar Pravin Chidanand	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>Pravin</u>
16	1186	Bansode Abhishek Rajendra	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	18	<u>A.R. Bansode</u>

TLP = Total Lecture Present; TPA = Total Percent Attendance

Signature of the Teacher

Dr. Girajdar A.L.



Signature of the Head of Department

Principal



V. G. Shivdare College of Arts, Commerce & Science, Solapur

Attendance Sheet

Name of Department: Commerce

Class: B.A III

Name of Teacher: Kirti Somvanshi

Course Name: certificate course in Financial Market

Attendance for the Month: April 2022 Year: 2021-2022

TLC: 12

No.	Roll No.	Name of Student	25	26	27	28	29	30	31	TLP	TPA
1	1018	Ghale Mahesh Nagnath	P	P	P	P	P	P	P	12	Ashish
2	1107	Dhamame Ashwini Gaourishankar	P	P	P	P	P	P	P	12	Ashish
3	1113	Mhetre Pooja Suresh	P	P	P	P	P	P	P	12	Ashish
4	1115	Kore Ankit Dhareppa	P	P	P	P	P	P	P	12	Ashish
5	1117	Bagdure Revati Chandrashekar	P	P	P	P	P	P	P	11	Ashish
6	1142	Rajput Akash Sanjaykumar	P	P	P	P	P	P	P	11	Ashish
7	1153	Pawar Suman Shepu	P	P	P	P	P	P	P	11	Ashish
8	1154	Govindpurkar Sanjana Prashant	P	P	P	P	P	P	P	12	Ashish
9	1155	Govindpurkar Sony Shrikant	P	P	P	P	P	P	P	12	Ashish
10	1161	Chavan Payal Sanjay	P	P	P	P	P	P	P	10	Ashish
11	1166	Rathod Vishali Sharnappa	P	P	P	P	P	P	P	12	Ashish
12	1168	Kamble Akash Laxman	P	P	P	P	P	P	P	12	Ashish
13	1181	Jathar Saurabh Nagnath	P	P	P	P	P	P	P	12	Ashish
14	1184	Ghotale Vijay Mallikarjun	P	P	P	P	P	P	P	10	Ashish
15	1185	Sutar Pravin Chidanand	P	P	P	P	P	P	P	12	Ashish
16	1186	Bansode Abhishek Rajendra	P	P	P	P	P	P	P	12	Ashish

TLP = Total Lecture Present; TPA = Total Percent Attendance

Kirti Somvanshi

Signature of the Teacher

Kirti Somvanshi
(Sharemarket Advisor)



Signature of the Head of Department

Ashish

Principal



Certificate Course in '**Financial Markets**' Offered by
P.A.H. Solapur University, Solapur



&
V. G. Shivdare College of Arts, Commerce and Science, Solapur
(Department of Economics)
Academic Year :2021-2022

Certificate of Completion

This is to Certify that, Mr./Ms./Mrs. **VAISHALI SHARNAPPA RATHOD** has successfully completed
Thirty day's certificate course in '**Financial Markets**' Offered by P.A.H. Solapur University, Solapur and
Department of Economics, V. G. Shivdare College of Arts, Commerce and Science, Solapur as stated in B.A.-
III syllabus of academic Year :2021-22.

Congratulations..!!

Dr. A. L. Birajdar
Co-ordinator
(Dept. of Economics)



Dr. B. N. Kamble
Principal
V.G. Shivdare College, Solapur



Certificate Course in '**Financial Markets**' Offered by
P.A.H. Solapur University, Solapur



&
V. G. Shivdare College of Arts, Commerce and Science, Solapur
(Department of Economics)
Academic Year :2021-2022

Certificate of Completion

This is to Certify that, Mr./Ms./Mrs. **SAURBH NAGNATH JATHAR** has successfully completed
Thirty day's certificate course in '**Financial Market s**' Offered by P.A.H. Solapur University, Solapur and
Department of Economics, V. G. Shivdare College of Arts, Commerce and Science, Solapur as stated in B.A.-
III syllabus of academic Year :2021-22.

Congratulations..!!

Dr. A. L. Birajdar
Coordinator
(Dept. of Economics)



Dr. B. N. Kamble
Principal
V.G. Shivdare College, Solapur

V. G. Shivdare College of Arts, Commerce and Science, Solapur.

Skill Development/ Add-on / Certificate course

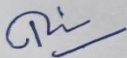
(Compilation Report)

Academic Year 2021-22

Department Economics

- Course Name : certificate course in financial Markets
- Course Duration : 60 Lectures
- Enrolled Students: 16
- Convener : Dr. Birajdar A.L.

This course work is run during the period of April 2022, benefited to students to uplift their knowledge in concern subject, hope it will be helpful for job enrichment.


CONVENOR



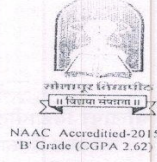

PRINCIPAL
PRINCIPAL
V.G. SHIVDARE COLLEGE OF
ARTS, COMMERCE & SCIENCE, SOLAPUR.

Certificate Course in Plant Tissue Culture

UNIVERSITY APPROVAL LETTER (2018-19)

सोलापूर विद्यापीठ कौशल्य विकासकेंद्र विभाग

सोलापूर पुणे महामार्ग, केगाव
सोलापूर-४१३२५५ (महाराष्ट्र)
ईपीएबीएस-०२१७-२७४४७७८ (११ लाईन्स)
विस्तृत क्र-१२३
फॅक्स नं.०२१७-२७४४७७०
संकेतस्थळ: <http://su.digitaluniversity.ac/www.sus.ac.in>
ईमेल: bcud@sus.ac.in, bcudavishkar@sus.ac.in



SOLAPUR UNIVERSITY Skill Development Center

Solapur-Pune National Highway, Kegaon
Solapur-413 255 (Maharashtra)
EPABX :0217-2744760/61/63/66/71/72/73/74/78/79
Fax No. 0217-2744777
Website: <http://su.digitaluniversity.ac/www.sus.ac.in>
Email : bcudsu@sus.ac.in
bcudavishkar@sus.ac.in

जा.क्र.सोविसो/कौशल्य विकासकेंद्र/२०१८/५२६०

दि. 22 JUN 2018

प्रति,

मा. प्राचार्य,

व्ही.जी.शिवदारे कॉलेज ऑफ आर्ट्स, कॉमर्स अँड सायन्स,
सोलापूर.

विषय:- कौशल्य विकास केंद्रातर्गत शैक्षणिक वर्ष २०१८-१९ व २०१९-२० शैक्षणिक वर्षासाठी
संलग्निकरणास मान्यता मिळणेबाबत...

संदर्भ:- आपले जा.क्र.६०१ व ६०१२ दि.१६/०२/२०१८ चा प्रस्ताव.

महोदय,

उपरोक्त विषयान्वये आपणास कळविण्यात येते की, कौशल्य विकासकेंद्रातर्गत आपल्या संस्थेत ६ महिने कालावधीतील १) टॅली ईआरपी-९ २) प्लॅट टिश्यु कल्चर प्रमाणपत्र अभ्यासक्रमाचा समावेश करण्यासाठी आपला प्रस्ताव प्राप्त झाला होता. सदर प्रस्तावास अनुसरून मा.कुलगुरू महोदयांनी गठीत केलेल्या समितीने आपल्या संस्थेस भेट देवून विद्यापीठास अहवाल सादर केला आहे. त्याचा तपशील खालीलप्रमाणे आहे.

अ.क्र.	अभ्यासक्रमाचे नाव	अटी	विद्यार्थी संख्या	शुल्क	पात्रता	कालावधी
१	टॅली ईआरपी-९, प्रमाणपत्र अभ्यासक्रम	-	२५	रु.२०००/-	12 th Pass	६ महिने
२	प्लॅट टिश्यु कल्चर प्रमाणपत्र अभ्यासक्रम	-	२५	रु.४१५०/-	12 th Pass in Science (AB/B Group)	६ महिने

आपणास आदेशान्वये कळविण्यात येते की, उपरोक्त प्रमाणे १) टॅली ईआरपी-९ २) प्लॅट टिश्यु कल्चर प्रमाणपत्र अभ्यासक्रमास शैक्षणिक वर्ष २०१८-१९ व २०१९-२० दोन वर्षासाठी संलग्निकरणास मान्यता देण्यात येत आहे. तसेच आपल्या संस्थेतील उक्त अभ्यासक्रमास आपण प्रवेशित विद्यार्थ्यांची यादी, शैक्षणिक पात्रता, अर्हता इत्यादी कागदपत्रे पडताळणीसाठी सोबत जोडलेल्या परिपत्रकनुसार कौशल्य विकासकेंद्राकडे जमा करावीत जेणेकरून प्रवेश निश्चिती करणे सोयीचे होईल.

V.K. Parade & Madam
Manmura V.S.
Shri A.K.R. V.S.
Chakre G.D.

Inward No. 104 Dt. 06/07/2018
V.G. SHIVDARE COLLEGE OF
ARTS, COMMERCE & SCIENCE, SOLAPUR

आपला विश्वासू

(Signature)

[प्रा.डॉ.व्ही.बी.पाटील]

विशेष कार्यासन अधिकारी
शैक्षणिक, संशोधन व विकास

Notice of Certificate Course in Plant Tissue Culture (2018-19)

व्ही. जी. शिवदारे कॉलेज ऑफ आर्ट्स, कॉमर्स अँड
सायन्स, सोलापूर

दि. 25/07/2018

सूचना

जैवतंत्रज्ञान विभाग

सर्व B.Sc.-Biotechnology व M.Sc. Biotechnology
मधील विद्यार्थ्यांना सूचित करण्यात येते की, कौशल्य
विकास केंद्र, पु. अ. हो. सोलापूर विद्यापीठ संलग्नित
Certificate Course in Plant Tissue Culture
विषयाचे नियमित तासिका दि. 11/8/2018 पासून
शकाळी 10.00 ते 11.00 या वेळेत होतील याची सर्व
विद्यार्थ्यांनी नोंद घ्यावी.

अद्याप ज्या विद्यार्थ्यांनी फॉर्म भरले नाहीत, त्यांनी
दि. 28/07/2018 पर्यंत डॉ. व्ही. एस. अडकी यांच्याकडे
फॉर्म भरून फी रु. 4150/- जमा करावेत.

(*)

Course In-charge
(Dr. V.S. Adki)



Enrolled Student List of Certificate Course in Plant Tissue Culture (2018-19)

V G Shivdare college of Arts, Commerce & Science Solapur Certificate Course in Plant Tissue Culture student list 2018-19					
SR. No	Name of Students	Class	Roll No	contact No	Receipt No
1	ALAGUNDAGI DHANANJAY B	M.SC II	804	9405840811	7186
2	KOLEKAR AMRUTA T.	B.SC III	3401	7218101168	7187
3	LOHOKARE SHRAVANI A	B.SC III	3412	9860177155	7188
4	PATEL DIKSHA A.	B.SC III	3419	8484048106	7189
5	SALGAR KOMAL R.	B.SC III	3461		7190
6	SHIKALGAR KHUSHBU J.	B.SC III	3463	8956339988	7191
7	SHALGAR NISHA N	B.SC III	3474	8805841811	7192

(X)4
Dr. V.S. Adki
(Course Co-ordinator)

V G SHIVDARE COLLEGE OF ARTS, COMMERCE & SCIENCE, SOLAPUR

V.G. SHIVDARE
College of Arts, Com. & Sc. Solapur
SOLAPUR

Syllabus of Certificate Course in Plant Tissue Culture (2018-19)

CERTIFICATE COURSE IN PLANT TISSUE CULTURE SYLLABUS

THEORY

Unit I. Plant breeding-

General idea- introduction to plant breeding, objectives of plant breeding, genetic variability And its role in plant breeding, methods of reproduction and breeding- in self pollinated, cross pollinated, vegetative propagated plants, heterocyst and inbreeding depression, genetic, physiological and biochemical basis of heterocyst. Organogenesis, factors affecting organogenesis, differentiation.

Unit II. Somatic embryogenesis

Embryogenesis - induction, development and maturation, factors, applications and synthetic seeds, molecular biology of somatic embryogenesis – induction, development, synchronizing somatic embryo development, hormonal regulation, late embryogenesis abundant (LEA).

Unit III. Exploits

Anther, pollen and ovary culture for production of haploid plants and homozygous lines, triploid production- methods and applications.

In vitro pollination and fertilization – methods, factors affecting seed setting after in vitro pollinations, applications, embryo culture, embryo rescue.

Risks and ethics of biotechnology

Unit IV. Gene expression –

Genes isolated from somatic embryos, expression of 'non-embryonic' genes during somatic embryogenesis, somatic embryo as a genetic system.

Unit V. Introduction to cell culture-

Totipotency, tissue culture technique to produce novel plants and hybrids, preparation and composition of tissue culture media. Callus initiation and maintenance, suspension culture: single cell clones. Cytodifferentiation.



Unit VI. Variation

Somaclonal and gametoclinal variations origin of somaclonal variations, mechanism underlying genetic variations, assessment of somaclonal variations, isolation of variants – disease resistant lines, herbicide resistant lines, stress tolerant lines.

Protoplast isolation – culture and fusion, selection of hybrid cells and regeneration of hybrid plants, symmetric and asymmetric hybrids, cybrids.

Unit VII. Cryopreservation-

Slow growth and DNA bank for germplasm conservation.

Unit VIII. Plant Transformation –

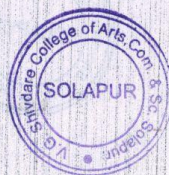
Plant Transformation applications for productivity and performance, production of transgenic plants resistant to herbicides, pathogens (Virus, fungi and bacteria), insect pests (Bt. Toxin gene) and abiotic stresses (drought, salt, chilling).

Unit IX. Genetic manipulation

Genetic manipulations in plants- Flower pigments, the time of flowering, production of male sterile plants. Antisense strategy,

PRACTICALS

1. Sterilization and preparation of media.
2. Isolation of explants, establishment and maintenance of culture.
Subculture of callus, organogenesis and transfer of plants to soil.
3. Micropropagation by proliferation of axillary bud.
4. Micropropagation by adventitious shoot proliferation.
5. Initiation and establishment of cell suspension cultures.
6. Microspore/ anther culture for haploid production.
7. Protoplast isolation and culture.
8. Embryogenesis and embryo culture, synthetic seeds.
9. In vitro pollination and culture of ovary/ ovule.
10. Density gradient centrifugation for isolation of chloroplast and mitochondria.
11. Isolation of DNA from chloroplast.
12. Isolation of total RNA from plant.
13. Demonstration of southern hybridization to check the plant transformation.
14. Isolation of DNA from plant.



Question Paper of Certificate Course in Plant Tissue Culture (2018-19)

Faculty of Science

Examination : Certificate course in Plant Tissue Culture

March/April 2019

Subject: Certificate Course in Plant Tissue Culture

Title of the Paper: Theory Paper for Certificate Course in Plant Tissue Culture

Time : 3.00 hours

Max. Marks: 100

N.B.

1. Figures to the right indicate full marks.
2. Draw a neat, well labeled, complete diagram wherever necessary.
3. Use of calculators, cell phones, or any other electronic gadgets is prohibited.
4. All questions are compulsory.

Q.1 Rewrite the following sentences by using correct alternative. 14 Marks

1) is a fusogenic agent used for protoplast fusion.

- a) polyethylene glycol b) mannitol c) glutamine d) teapot

2) is an osmotic used in preparation of protoplasts.

- a) mannitol b) HgCl_2 c) Sodium hypochlorite d) H_2O_2

3) is the culture of embryos excised from immature or mature seeds.

- a) embryo culture b) somatic embryogenesis
c) somaclonal variation d) organogenesis

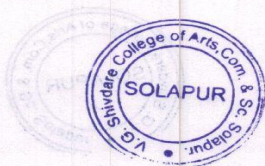
4) Establishment of cultures from an explants after freeing it of contaminants, inane environment free of these microorganisms is called as ---.

- a) cultivation b) aseptic culture c) contamination d) germination

5) is a vessel for sterilizing with steam under pressure.

- a) autoclave b) oven c) laminar d) burner

6) A cell or plant produced by the fusion of protoplasts with nucleus of one parent and cytoplasm of another or both parents is known as -----



8. Define cryopreservation.
9. Define axenic culture.
10. Write any 2 differences between somatic embryogenesis and somatic hybridization.
11. Enlist the enzymes used for protoplast isolation by enzymatic method.
12. Define plant tissue culture.

Q.3 Answer the following (any 5)

25 Marks

1. Draw a neat, well labeled diagram that explains protoplast isolation method.
2. Embryo culture
3. Explain in brief – soma clonal variation.
4. Sterilization techniques used in PTC laboratory
5. Culture media for PTC
6. Discuss in brief – Growth regulators used in PTC media

Q.4 Answer the following (any 3)

21 Marks

1. Root culture
2. Suspension culture
3. Callus culture
4. Artificial seeds

Q.5 Answer the following (any 2)

20 Marks

1. Organogenesis
2. General plant Tissue Culture Laboratory design & equipment for PTC
3. Haploid production – Anther and pollen culture



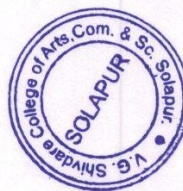
ATTENDANCE

Name of Teacher : Dr. V.S. Adki
Course : Certificate Course in Plant Tissue Culture (2018-19)
Date and Time : 01/09/2018 10.00 am - 11.00 am
Topic from syllabus : Somatic embryogenesis - Theory Exam

Sr. No.	Name of candidate	Class	Roll No.	Sign
1.	ALAGUNDAGI DHANANJAY B.	MSc-II	804	<u>Alagundagi</u>
2.	KOLEKAR AMRUTA T.	BSc-III	3401	<u>Amruta</u>
3.	LOHOKARE SHRAVANI A.	BSc-III	3412	<u>Shravani</u>
4.	PATEL DIKSHA A.	BSc-III	3419	<u>Diksha</u>
5.	SALGAR KOMAL R.	BSc-III	3461	<u>K.R. Salgar</u>
6.	SHIKALGAR KHUSHBU J.	BSc-III	3463	<u>Khushbu</u>
7.	SHALGAR NISHA N.	BSc-III	3474	<u>Nisha</u>

Signature of Staff :

Dr. V.S. Adki
(Course In-Charge)



Certificate Course in Plant Tissue Culture (2018-19)- Result



NAAC Accredited-2015
B Grade (CGPA 2.62)

SOLAPUR UNIVERSITY, SOLAPUR SKILL DEVELOPMENT CENTER

COURSE: CERTIFICATE COURSE IN PLANT TISSUE CULTURE

EXAMINATION HELD IN JAN - 2019

INSTITUTE NAME: V.G.SHIVDARE COLLEGE OF ARTS,
COMMERCE & SCIENCE, SOLAPUR

MARKS LEDGER (COLLEGE COPY)

Sr.no	Student Name	Seat No.	Theory Paper	Status	Practical Paper	Status	Grand total	Out of	Result	Percentage	Class
1	Alagundagi Dhananjay Balasaheb	2019707	53	P	69	P	122	200	Pass	61	First Class
2	Kolekar Amruta Tukaram*	2019708	53	P	75	P	128	200	Pass	64	First Class
3	Lohokare Shravani Atul*	2019709	64	P	78	P	142	200	Pass	71	Distinction
4	Patel Diksha Alpeshbhai*	2019710	70	P	74	P	144	200	Pass	72	Distinction
5	Salgar Komal Ramesh*	2019711	58	P	73	P	131	200	Pass	65.5	First Class
6	Shalgar Nisha Nagesh*	2019712	64	P	80	P	144	200	Pass	72	Distinction
7	Shikalgar Khushbu Jabbar*	2019713	58	P	80	P	138	200	Pass	69	First Class

* = Indicate Female Students
P = Indicate Pass in Subject
F = Indicate Fail in Subject
X = Indicate Previous Pass
AB = Indicate Absent



(Signature)
Dr. Prabhakar N. Kolekar
Coordinator
Skill Development Centre
Solapur University, Solapur.

Certificate Course in Plant Tissue Culture (2018-19)- Attendance

DAKSHIN SOLAPUR TALUKA SHIKSHAN MANDAL'S

V.G. Shivdare College of Arts, Commerce and Science, Solapur

Name of the Teacher Dr. V.S. Adki

ATTENDANCE SHEET CLASS -

Certificate Course in Plant Tissue Culture

Subject

Month

August, Sept.
2018

Roll No.	Name of the Student beginning with Surname	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Remarks	
1) 804	ALAGUNDAGI DHANANJAY B.	P	P	P		P	P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Alagundagi	
2) 3401	KOLEKAR AMRUTAT.		P	P	P	P	P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Kolekar	
3) 3412	LOHOKARE SHRAVANI A.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Lohokare	
4) 3419	PATEL DIKSHA A.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Patel	
5) 3418	SALGAR KOMAL R.		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	K.R. Salgar	
3461	SHIKALGAR KHUSHBU J.	P																																
6) 3463	SHIKALGAR KHUSHBU J.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Shikalgar	
7) 3474	SHALGAR NISHA N.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Shalgar	

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Signature of Staff



Certificate Course in Plant Tissue Culture (2018-19)- Certificate

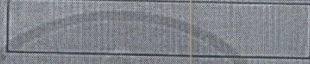
SOLAPUR UNIVERSITY SOLAPUR


सोलापूर विद्यापीठ
॥ विद्यया संपन्नता ॥
NAAC Accredited-2015
'B' Grade (CGPA-2.62)

Skill Development Center

CERTIFICATE

Sr. No. 2017 - 000998

This is to certify that with in signed 

Shri./Smt. Lohokare Shravani Atul

has passed Certificate Course In Plant Tissue Culture

Examination in Distinction Class in the Year Jan - 2019

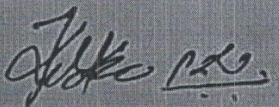
The Course was conducted from Jul - 2018 to Dec - 2018

by V. G. Shivdare College Of Arts, Commerce & Science, Solapur

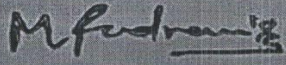
affiliated Skill Development Center, Solapur University, Solapur.

NAAC Accredited-2015
'B' Grade (CGPA-2.62)

ued on _____


Skill Development Center
Solapur University




Vice- Chancellor

V. G. Shivdare College of Arts, Commerce and Science, Solapur.

Skill Development/ Add-on / Certificate course

(Compilation Report)

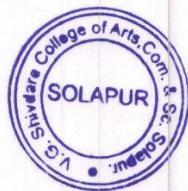
Academic Year 2018-19

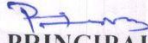
Department Biotechnology

- Course Name : Certificate Course In Plant Tissue Culture
- Course Duration : 6 months
- Enrolled Students: 07
- Convener : Dr. V.S. Adki

This course work is run during the period of 01/07/2018 to 31/12/2018, benefited to students to uplift their knowledge in concern subject, hope it will be helpful for job enrichment.


CONVENOR




PRINCIPAL