Estd.: June 2005



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

(Kannada Linguistic Minority Institute)

(Affiliated to P. A. H. Solapur University)

Jule Solapur-1, Vijapur Road, Solapur – 413004 Maharashtra Visit us at :www.vgshivdarecollege.com e-mail :vgs.biotechnology@rediffmail.com / vgsprincipal@sus.ac.in

Late Shri. V. G. Shivdare

Ex. M. L. A.

FOUNDER

Shri. R. V. Shivdare

Shri. I. R. Hatture

Dr. D. S. Sutrave

Phone: 0217 - 2303411

Fax

: 0217-2341380

PRESIDENT

SECRETARY

PRINCIPAL

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

Perspective/Strategic plan and Deployment

Perspective plan	Compliance
1. Curricular Aspects	
Introduction of new certificates courses in college Introduction of free carrier guidance and	During academic year college has applied for new UG/ PG certificate course program. Free carrier guidance and prashikshan kendra
prashikshan kendra center to the needy student. To seek permanent affiliation for university	center to needy enrolled students Final proposal to seek permanent affiliation is sent to the university
To organize various programs in relation with NEP program	Eminent personalities were invited and various workshops were organized by all departments.
To start NEP syllabus for PG course (M.Sc Biotechnology)	As per government and university NEP syllabus has been implemented to PG course during academic year

Perspective plan	Compliance
2. Teaching-Learning and Evaluation	
Updating of computers and ICT Facility	New projectors and computers were purchased
Purchase of new library books, New laboratory equipment's and chemicals	As per NEP 2020 new books and recent equipment's and chemicals were purchased.
Reforms in continuous internal evaluation (CIE) for better results	Students continuous internal evaluation is carried through Various periodical tests, assignments, tutorials, seminars,
	internal examinations etc.

Use of different software's in teaching-learning process as well as in administration	During academic year 2014-2015, Licensed Educare software in administration work was introduced. During academic year 2022-2023 windows compatible licensed software are purchased
Recruitment of qualified teaching and non-teaching staff	As per requirement, all Positions are recruited.
Implementation Mentor-Mentee system	Mentor-Mentee system was implemented in 2011 till date it is effective.
Encouragement to teaching as well as non-teaching faculty for updation of knowledge through participation in various courses (Orientation/ Refresher/ Short term/FDP).	All teaching and non-teaching faculty memebrs are motivated for participating in various courses such as FDP, Refresher ,Short term.

3. Research, Innovation and Extension	Compliance
To achieve the excellence in research by considering local problems	Different projects considering local as well as global problems were undertaken by UG and PG students
Establishment of Incubation center for creativity and knowledge transfer	Incubation center was established during academic year 2017. Jewamarut, Different plant growth enhancers were produced and sold in common society by biotechnology students.
To organize conferences/ Seminars/ Workshops etc.	Different workshops, conferences, international conferences are being arranged by college.
To motivate and encourage students as well as faculty to participate in various research activities through Avishkar Research Committee	Students and staff from all the departments are motivated and allowed to participate in college level Avishkar research festivals. Awardee from such festivals and conferences are further allowed to proceed to complete their research.
To organize IPR workshop	IQAC of college ensures organization of IPR workshops, Conferences related topic periodically.
To arrange various research competitions for students	In remembrances of great scientist <i>G.Mendel</i> every year various debates, poster competitions are arranged. In addition to this for UG Biotechnology students a special Certificate course in research methodology is also undertaken by Biotechnology department.
To start NCC - NSS extra unit	An extra NSS unit was stared from 2020
To encourage students for participation in various co-curricular and extension activities like NSS, DLLE, WDC, Sports, Cultural, etc.	All students are encouraged to participate in various co-curricular and extension activities like NSS, Sports, Cultural, etc. College has received college level state level, national level in culture and sports.
To conduct various extension programs for community engagement Participation of students in administration	Meritorious and extra talented students from all the departments are motivated to take participation in different college and university level committee.
MOU and linkages with other institutes, research institutes, industries and other bodies like NGO	College has active MOUS at national and local levels.

4. Infrastructure and Learning	Compliance
Resources	
Total computerization of college central library with INFLIBNET and Delnet	Institution has a common completely atomized central library with INFLIBNET for academic year (2010-2015). Onwards SOUL 2.0 and DELNET was purchased in the A.Y 2017.

Enhancement of infrastructure facilities/ new college building (Class room, seminar hall, open theatre, auditorium hall, library, girls and boys common room, washrooms, etc.)	As per need infrastructure is upgraded periodically.
Modification in CCTV in college premises.	College premise is secured through CCTV. Upgradation is undertaken during A.Y 2019 - 2020
Upgradation and extension of science laboratory.	As per syllabi and research orientation all laboratory were extended and modified.
Introduction of botanical garden in unused area.	College premise has medicinal and botanical garden in unused areas
Upgradation of administrative office, guest house,	All needy area of administration were well
principal cabin, vice principle cabin and IQAC	furnished as per need, and full automated with
room	modern recent computers.
	IQAC documentation room is updated with separate cupboards for record keepings.
Enhancement of sport facility through indoor	College has separate multipurpose hall for
stadium, open ground, etc.	indoor games, as well as ground for outdoor
	games.
Development of college canteen Development of	1
parking shade Modification of drinking water	especially for differently abled students.
facility To develop the physical facility for differently abled students (Ramp facility)	There is a separate parking for boys and girls.

5. Students support and progression	Compliances
To provide scholarship of various government and non-government agencies to students.	Office assistance is provided regarding different scholarships to all students.
To register Alumni Association	Institute has registered alumni association in During academic year 2021-2022
To organize large number of capability enhancement programs such as career	College organizes various capability enhancement programs like soft skill development, Yoga mediation personality development program, Cam Pro 2019 etc.
Encouragement of students for participation in competitive examination department	Carrier guidance center aware and guide students through about various competitive examinations after UG and PG courses.
To provide free internet and Wi-Fi	For academic purpose college offer free high speed internet through Wi-Fi service to all staff and students
To arrange workshops/ guest lectures regarding preparation of competitive examination	College arranges different workshops and guest lectures on Competitive exams after PG course like SET, NET, and GATE.
To encourage students for higher education	All UG and PG students are guided and motivated for their higher studies.
To arrange campus interview for graduated students	Campus interviews for both PG and UG students are proposed, communication with various agencies has been started from A.Y 2015.

Book bank scheme for all students	Book bank scheme for all students is provided at department level.
To organize various camps for students (PAN card/ Bank	College organized different activities like
account opening)	Voter registration etc.
Renovation in first AID facility for students as well as	College renovates first AID facility every
faculty	year.

6. Governance, Leadership and Management	Compliance
Development of youth and nation by providing quality education using institutes vision and mission.	College has effective deployment method in providing its own vision and mission to all needy students and to the society as well.
Implementation of E- governance in academic and in administrative work	Safe e- governance is started in all departments of college by the from A.Y 2014
Organization of different training program for teaching and non-teaching faculty members.	Various training programs like Modi- Leepi, Faculty developments, Personality development, up gradation of E- governance and e- content developments, Laboratory safety programs, Environment cleanliness, were undertaken for teaching and non-teaching faculty members
Felicitation of teaching and non-teaching for their extra-ordinary work	Every year, during prize distribution program teachers and non-teaching staff members are felicitated for their extra ordinary work. Their achievements are published annually in 'Biotalent'
To encourage students and faculty by providing funds for participation in various activities like conference/seminars/workshops, etc.	
To take quality initiatives through IQAC for academic development as well as promoting quality culture of institute	College IQAC ensures academic excellence
	Student, staff requirements about academic and other related co-curricular are provided as per need
7. Institutional Values and Best Practices	Compliance
Create awareness about Human rights, Women constitutional rights, voter's right. Parliament of religions, minority's rules and rights and gender	College creates awareness about Human rights, Women constitutional rights, voter's right. Parliament of religions, minority's rules and
equity programmes in students, staffs and local commnity.	rights and gender equity programs in students, staffs and local community.

To celebrate the national, state, District as well as institutional importance days	National, state, district as well as important days are renowned by arranging different program with students, staff and local community
Installation of solar energy in college campus	10KV capacity solar systems has been installed during A.Y 2014-2015
To impart Human values and professional ethics	Institute has conducted different Human values and professional ethics seminars and created awareness among staff and students.
To maintain clean and green campus through green practices	Clean and green practices and their maintenance of green campus, is been monitored and audited by Internal and external environmental auditor
To create 'Lab to Land culture'	New hydrophonic, vermicompost, organic acid production has been started. And effectively run the department o biotechnology

Syllabus of the Tissue culture certificate course

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.

Uint 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.



Result of the Tissue culture certificate course

Unit VI. Variation

Somaclonal and gametoclonal 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 asymmetris hybrids, cybrids.

Unit VII. Cryopreservation-

Slow growth and DNA bank for germplasm conservation.

Uint 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

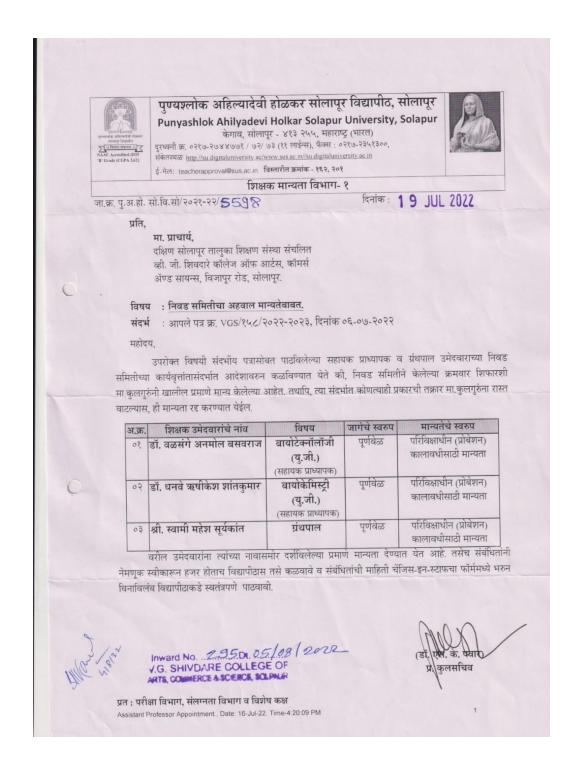
Genetic manipulations in plants- Flower pigments, the time of flowering, production of male sterile plants. Antisense strategy,

PRACTICALS

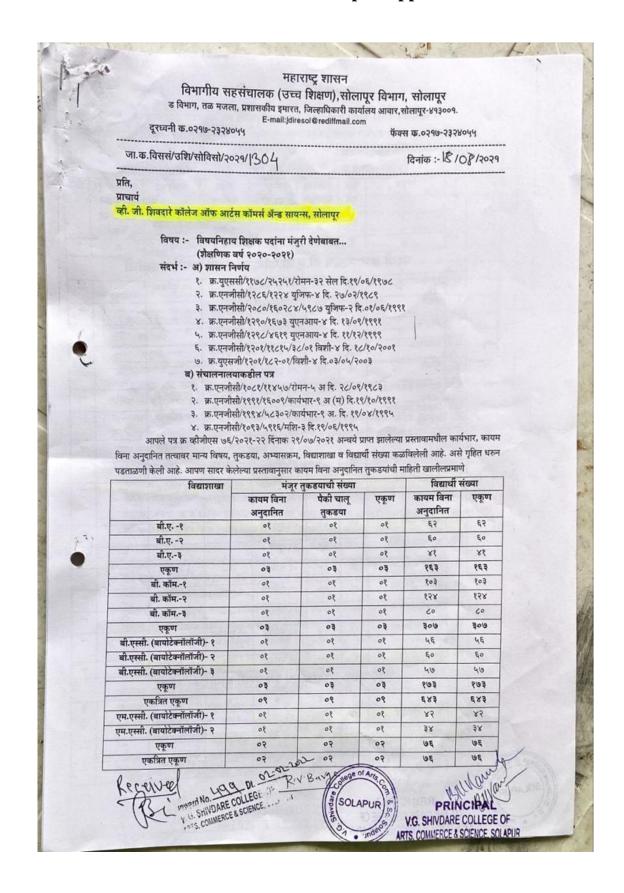
- 1. Sterilization and preparation of media.
- Isolation of explants, establishment and maintenance of culture. Subculture of callus, organogenesis and transfer of plants to soil.
- 3. Micropropagation by proliferation of axillary bud.
- 4. Micropropagation by adventitious shoot proliferation.
- 5. Initiation 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.



Marklist of the Tissue culture certificate course Teacher's appointment letter



Universities' letter of post approval



	40	संदर्भाषीय शास ोल्या कार्यधारानुसार सं सक प्रदांचा मान्यता देणी	पश्चित विष	श्यापुड नमुद	असणा-या ए	dies and mer?	ानुषंगाने प्राप्त अ सार आपल्या मह		
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	1	1	3	×	4	3	9	6	
	1	पदवी अ	भ्यास	क्रम बी.	ए.बी.कॉम	ा, बी.एर्स	बायोटेक्नॉ	लॉजी	
	1	हंप्रजी	90	34	०२ पूर्णवेळ		०२ पूर्णवेळ		1
	1	मताखे	50	35	०२ पूर्णकेळ		***	,	-
	1	इतिहास	90	36	०२ पूर्णवेळ				-
1	×	अर्थशाख	90	50	०१ पूर्णबेळ	०१ पूर्णवेळ	****		
	1	र्युगरा विकास	90	53	०१ पूर्णवेळ	०१ पूर्णबेळ			
	8	वाणिञ्य विद्यासाखा	03	48	०३ पूर्णवेळ	०२ पूर्णबेळ	०१ पूर्णवेळ	***	
	0	बिझनोर रेन्युलोटर केमकर्क	90	68	०१ तासिका	***	०१ तासिका		
	4	बिझनेस स्टेटिस्टिक्स	90	0.8	०१ तासिका		०१ तासिका		
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निवन पदे या कार्यालयाच्या मंजुरी शिवाय भरण्यात येव नयेत.

	मंजूर पदे	भरलेली पर्द	रिक्त पर्द
ų:	वी अभ्यासक्रम बी.ए.बी.व	हॉम, बी.एस्सी बायोटेक्नॉलॉजी	
प्राचार्य	90	90	***
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गा.शि.संचालक	90	90	****
पूर्णवेळ शिक्षक	90	90	88
अर्घवेळ		***	****
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	पदव्युत्तर अभ्यासक्रम ए	म.एस्सी बायोटेक्नॉलॉजी	
पूर्णवेळ शिक्षक	08	90	69
तासिका	90		90
एक्षा	04	90	80

कार्यभारानुसार मंजुर पदांच्या मर्यादित आपल्या महाविद्यालयांत वरीलप्रमाणे जादा पदे/पूर्वीच्या पदांस खालील अटोच्या अधिन राहून या कार्यालयाची अनुमती देण्यात येत आहे.

१. आपल्या महाविद्यालयातील वर्ग/तुकडया/विषय निहाय विद्यार्थी संख्या ही प्रत्यक्षात असणे आवश्यक आहे.

 व्याख्याने /प्रात्याक्षिके/टयुरोरियल (पाठ निर्देशन) प्रोजेक्ट वर्क (प्रकल्प कार्य) याकरिता नमुद असणा-या तासिका शासनाने विहित केलेल्या नियमानुसार असणे जरुरीचे आहे.

 प्रात्याक्षिकाकरिता विज्ञान शाखातील प्रथम, द्वितीय व तृतीय वर्ष विज्ञान वर्गाकरिता असणारा गट (बेच) किमान २०,१६,१२ व २०,१६ याप्रमाणे संख्या असावी.

४. विषय निहाय दाखाविलेल्या तासिका प्रत्यक्षात वेळापत्रकामध्ये असणे आवश्यक आहे. १२ तासिका किंवा त्यापुढील तासिका असणा-या व १८/२० तासिकापर्यंत कार्यभार अपूरा असणा-या अधिव्याख्यात्यांना कमी पडणारा कार्यभार कनिष्ठ विभागाकडील किंवा विभाग नसल्यास त्याचा विषयाचा जादा कार्यभार आवश्यक आहे.

५. सदर पदावरील नियुक्त्या प्रचलित असलेल्या शासनाच्या सर्व संबंधित नियमानुसार करण्यात याव्यात.

६. विषयाची/विद्याशाखेची/तुकडीची किमान विद्याधी संख्या शासनाने वेळीवेळी विहीत केलेल्या नियमानुसार असावी.

 सर्व संबंधित विषय/ तुकडया १००% अनुदान पात्र ठरिवल्येल्या बाबतची शासन पत्रे/ आदेश महाविद्यालयाकडे उपलब्ध असणे आवश्यक आहे.

८. पुढील शिक्षणिक वर्षांमध्ये विद्यार्थी संख्येत घट होण्यामुळे तसेच अन्य कारणामुळे अनुदानपात्र कार्यभार कमी इ-गाल्यास त्यानुसार शिक्षक पदांची संख्या कमी करणेत येईल.

९. नवीन पदावरील नियुक्ती करण्यापूर्वी अतिरिक्त शिक्षकांची यादी विभागीय सहसंचालक तसेच शिक्षण संचालनायाचे स्तरावरुन प्राप्त करुन घ्यावी. शासन निर्णय दि.१३/०२/२००० व दि.१६/०६/२००० नुसार पात्र नसलेल्या (सेट/नेट) परीक्षा उर्तीण नसलेल्या तसेच खुल्या प्रवर्गातील उमेदवाराची भरती करण्यास बंदी आहे. अशा नेमणूका तासिका तत्वावर गणल्या जातील. शासन पत्र दि.०२/०७/२००१ नुसार २/३ रिक्त पदे भरण्याबाबत या कार्यालयाची पूर्वपरवानगी आवश्यकता आहे. तासिका तत्वावरील एका शिक्षकांस ७ तासिकंपेक्षा जास्त तासिका देवू नयेत. दिल्यास तो अनुदान अमान्य करण्यात येईल.

सदर पदावरील नियुक्त्यामूळे झालेला वेतन व भृत्यावरील खर्च संबंधित आर्थिक वर्षांच्य अनुदान निर्धारणसमयी उपरोक्त अटीची पूर्तता होत असल्यास यो कार्यालयाकडून अनुदानाकरिता मान्य ठरविण्यात येईल अञ्चया तो अनुदानाकरिता अमान्य झाल्यास्मृहिक सर्वस्वी महाविद्यालय जबाबदार राहील.

PRINCIPAL

V.G. SHIVDARE COLLEGE OF

ARTS, COMMERCE & SCIENCE, SOLAPUR.

SOLAPUR

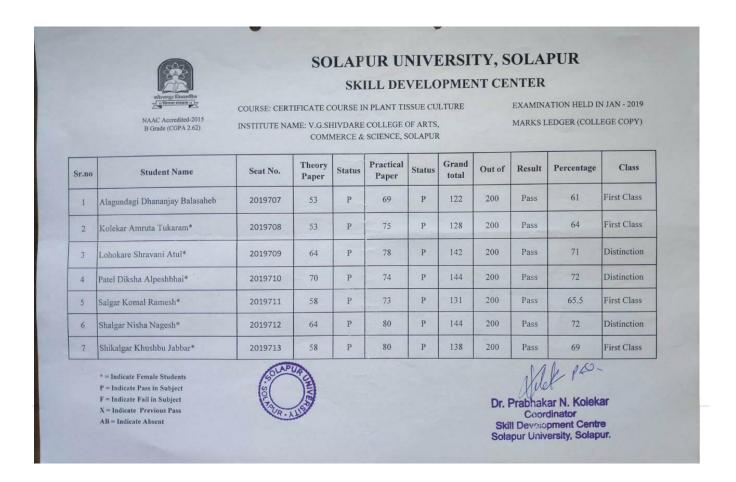
हिन् ८००९ ६ विभागीय सहसंचालक(उन्नि) सोलापूर विभाग, सोलापूर

Perspective/Strategic plan and Deployment

Example: Tissue culture certificate course

The short term courses will make additional values in student's academics so college decided to introduce short term certificate course which will be beneficial for students. This circular was initially introduced by Solapur University dated 22 June 2018. With that reference college decided to start such courses in campus. Principal and various staff members decided to start 2 certificate course in Tally (for commerce student) and Plant Tissue culture (for Biotechnology student). Various meeting were conducted to finalize the certificate course designing syllabus structure time table adjustment. Two separate co-coordinator were appointed for smooth working of course which communicate with university for fess certificate and examination. The certificate course in Plant tissue culture and Tally was started on July 2018. Total 7 students were admitted for Plant tissue culture and total 28 students admitted for Tally course.

The institutional Strategic/ perspective plan is effectively deployed Example – Certificate course in Plant Tissue culture



Certificate of the FDP and tissue culture

