2. Linkage Internship, on-the-job training, project work, student / faculty exchange and collaborative research

2022-23

1. **Summer research at iisr kolkatta** https://gsck.ac.in/research.php#mrepro
2. **Paper publication:- two research paper published in collaboration by physics (https://scholar.google.co.in/citations?user=-dyiWAIAAAAJ&hl=en) and chemistry dept (https://scholar.google.co.in/citations?user=K6nJ4zoAAAAJ&hl=en)**
3. **In-House summer research.**

https://www.gsck.ac.in/pdf/Consolidated_report_on_Summer_Research_2022-23.pdf?v=1

2021-22

1. **Joint research project by English dept.**
   https://gsck.ac.in/research.php#mrepro
2. **One joint conference by chemistry dept.**
3. **NET/SET Guidance session on competitive examinations in Chemical Science**
4. **In-House summer research.**

https://www.gsck.ac.in/pdf/Consolidated_report_on_Summer_Research_2021-22.pdf

2020-21

1. **Summer research. https://gsck.ac.in/research.php#mrepro**
2. **Dr H S Chandak visited department of Chemical Sciences, IISER Kolkata for collaborative research as a visiting scientist. For the synthesis and computational aspects of Pi conjugated systems.**
3. **In-House summer research.**

https://www.gsck.ac.in/pdf/Consolidated_report_on_Summer_Research_2020-21.pdf

2019-20

1. **Ssummer research work . https://gsck.ac.in/research.php#mrepro**
2. **Dr H S Chandak working in collaboration with Dr Das for testing the efficacy and rationale for the synthetic compounds against cancer cell lines and outcome is a joint publication in Prestigious The FEBS journal. https://scholar.google.co.in/citations?user=K6nJ4zoAAAAJ&hl=en**
3. **In-House summer research.**

https://www.gsck.ac.in/pdf/Consolidated_report_on_Summer_Research_2019-20.pdf

2018-19

1. **Summer research work.** **https://gsck.ac.in/research.php#mrepro**

G S Science Arts and Commerce college, Khamgaon

A report on In-house Summer Research Program (Online) 2019-20

As per policy for promotion of Summer Research, online summer research program was conducted during the academic year 2019-20. Due to COVID -19 pandemic, it was conducted in an online mode. Students applications were invited in online mode by the IQAC. A total of 116 students applied for the summer internship under the mentorship of five mentors. A few students were shortlisted based on their academic record and availability of IT infrastructure with them.

Summer research program was successfully completed under following three mentors:

1. Dr D S Talwankar (Area of Research : Ethno-medicinal Plant)
2. Dr A D Bhosale (Area of Research: Commerce and Business Management)
3. Dr H S Chandak (Area of Research : Computational Chemistry and Understanding chemical footprints from Human Life)

It is noteworthy to mention that Dr H S Chandak have tried to build a linkage with **Dr Sanjio Zade, IISER Kolkata** to conduct training session on the use of Gauss View and Gaussian software. Periodic virtual meetings with students were conducted on Zoom/ Google Meet platform. Dr Zade sir attended all the meetings The recorded videos of the training sessions were uploaded on YouTube and links were shared with the students to get better insight of the topic.

Sr No	Name of the mentor	No. of students who completed Summer Research	Link to report by mentor
1.	Dr D S Talwankar	02	https://tinyurl.com/tm6mvkma
2.	Dr A D Bhosale	05	https://tinyurl.com/hy3w9fbb
3.	Dr H S Chandak	09	https://tinyurl.com/y2z7ekjh

Following students successfully competed in-house summer research program:

S. No.	Name of the student	Mentor	Department	Link to report
1.	Anuja Bawaskar	Dr D S Talwankar	Botany	https://tinyurl.com/tm6mvkma
2.	Samidha S Ugale	Dr D S Talwankar	Botany	https://tinyurl.com/tm6mvkma
3.	Divya S Dhole	Dr A D Bhosale	Commerce	https://tinyurl.com/hy3w9fbb
4.	Sakshi N Chopda	Dr A D Bhosale	Commerce	https://tinyurl.com/hy3w9fbb
5.	Vaishnavi V Khandare	Dr A D Bhosale	Commerce	https://tinyurl.com/hy3w9fbb
6.	Hemlata C More	Dr A D Bhosale	Commerce	https://tinyurl.com/hy3w9fbb
7.	Aparna G Mankar	Dr A D Bhosale	Commerce	https://tinyurl.com/hy3w9fbb
8.	Roshani Tiwari	Dr H S Chandak	Chemistry	https://tinyurl.com/roshanitiwari
9.	Bhargav N Bhatti	Dr H S Chandak	Chemistry	https://tinyurl.com/bhargavbhatti
10.	Ankita D Kale	Dr H S Chandak	Chemistry	https://tinyurl.com/ankitakale
11.	Vaishnavi.N.Fursule	Dr H S Chandak	Chemistry	https://tinyurl.com/vaishnavifursule
12.	Anmol Khanchandani	Dr H S Chandak	Chemistry	https://tinyurl.com/anmolkhanchandani

13.	Rutuja Yadgire	Dr H S Chandak	Chemistry	https://tinyurl.com/rutujayadgire
14.	Sarika K. Bavane	Dr H S Chandak	Chemistry	https://tinyurl.com/sarikabawane
15.	Neha S Lakhani	Dr H S Chandak	Chemistry	1. https://tinyurl.com/nehafootprints 2. https://tinyurl.com/neahdft
16.	Trupti M Nemane	Dr H S Chandak	Chemistry	https://tinyurl.com/truptinemane

Some of the significant outcomes of these projects are:

1. Research aptitude among the student has been developed.
2. Students learned to search literature and write reports.
3. Students perspective about use of different items have been changed. They now look for the contents in the product, their effects and side effects before using any item.
4. They are showing willingness to work as ambassador for creating awareness among the society.
5. Their confidence level has been raised so that they can come up with new ideas and try new experiments.

Dr. H S Chandak
(Coordinator, IQAC)

Dr. D. S. Talwankar
(Principal)

Principal
G.S.Sci.,Arts & Commerce
College, Khamgaon-444303

G. S. SCIENCE, ARTS & COMMERCE COLLEGE KHAMGAON-444303
Dist. Buldana (M.S.)

Internal Quality Assurance Cell

A report on In-house Summer Research Program (Online) 2020-21

As per policy for promotion of Summer Research, online summer research program was conducted during the academic year 2020-21. Due to COVID -19 pandemic, it was conducted in an online mode. A workshop for teachers has been organized for creating awareness among the mentors for In-House Summer Research Program of the college on 23rd June 2021. Mentors were made aware about their role as a mentor and timeline for execution of the program. Students applications were invited through a Google form by the IQAC. They were given a choice to select a mentor and area of research. More than 200 students applied for the summer internship under the mentorship of 28 mentors.

Snapshot 1: Brochure of the In-House Summer Research Program

A few students were shortlisted based on their academic record and availability of IT infrastructure with them. Summer research program was successfully completed under following seven mentors:

1. Dr A D Bhosle (Commerce- 19 students)
2. Dr A V Padghan (Botany- 2 students)
3. Dr D M Nagrik (Chemistry- 1 student)
4. Dr H S Chandak (Chemistry- 8 students)
5. Dr K S Gulhane (Commerce- 3 students)
6. Dr P E Ajmire (Computer Science- 8 students)
7. Dr P V Ubale (Statistics- 5 students)

Despite of the impact of COVID-19, all mentors conducted periodic virtual meetings (and occasionally offline meetings) with students on Zoom/ Google Meet platform.

One of the mentor, Dr A D Bhosale, department of commerce conducted a concluding ceremony wherein an external peer Dr Altaf Shaikh from SP Pune University was invited as external peer. Under the mentorship of Dr A D Bhosale, students did study on various aspects including accidental insurance, unemployment problem, special economic zone in Maharashtra etc. The findings from project entitled "Feasibility Study of Proposed Khamgaon Jalana Railway Track" were hand over to Hon'ble Akashji Fundkar, MLA, Khamgaon constituency. Dr P V Ubale, department of Statistics also submitted copy of project reports to Principal Dr D S Talwankar.

Snapshot 2: Dr Bhosale and Ku Vaishnavi V. Khandare handing over the report to Hon'ble Akashji Fundkar, MLA, Khamgaon constituency

Snapshot 3: Dr P V Ubale submitting reports to The Principal Talwankar and Secretary Dr P N Bobdey

It is noteworthy to mention that Hon'ble Vice-President Shri A P Jhunjhunwala sponsored a fellowship in the fond memory of freedom fighter Late Purshottamji Motilalji Jhunjhunwala. A scholarship of Rs 500 each to all the 22 students from Commerce faculty was sponsored by him.

सोमवार २० सप्टेंबर २०२१ दैनिक प्रश्नकाल

गो.से महाविद्यालयात उन्हाळी संशोधन सादर करणाऱ्या विद्यार्थ्यांना शिष्यवृत्ती जाहीर

खामगाव-स्थानिक भोसे महाविद्यालयातील वाणिज्य विषयाचे वरिष्ठ प्राध्यापक डॉ आनंद भोसले यांच्या मार्गदर्शनात वाणिज्य व व्यवस्थापन शाखेत तब्बल १९ विद्यार्थ्यांनी विविध विषयावर उन्हाळी संशोधन केले होते. सदर विद्यार्थ्यांच्या या उत्कृष्ट संकल्पनेबद्दल त्यांचा सत्कार म्हणून विद्यालयाकडून महाविद्यालयाचे उपाध्यक्ष अशोक झुनझुनवाला यांच्यातर्फे स्वातंत्र्य सेनानी पुरुषोत्तम मोतीलाल झुनझुनवाला यांच्या स्मरणार्थ विद्यार्थ्यांना शिष्यवृत्ती दिली जाणार असल्याची माहिती प्रा.डॉ.आनंद भोसलेने प्रश्नकालशी बोलतांना दिली. उन्हाळी संशोधन सादर करणाऱ्या १९ विद्यार्थ्यांचे अनुकरण करत इतर विद्यार्थ्यांना सुद्धा प्रेरणा मिळावी या हेतूनेच सदर विद्यार्थ्यांना शिष्यवृत्ती बोजना देऊन पुरस्कृत करण्यात आले असल्याचे झुनझुनवाला यांनी सांगितले. महाविद्यालयाचे उपाध्यक्ष अशोक झुनझुनवाला यांनी जाहीर केलेल्या या संशोधन शिष्यवृत्तीचे महाविद्यालयाचे अध्यक्ष डॉ. दादासाहेब बोबडे, डॉ. प्रशांत बोबडे सचिव, प्राचार्य डॉ. धनंजय तळवणकर यांनी स्वागत केले आहे. तसेच त्यांचे आभारही मानले आहेत. प्रस्तुत उन्हाळी संशोधन महाविद्यालयातील इतर विद्यार्थ्यांनी पुढीलवर्षी अधिकाधिक संशोधन करावे, यासाठी त्यांना प्रेरणा मिळावी म्हणून त्यांच्या माहितीसाठी प्रा आनंद भोसले यांनी महाविद्यालयाच्या ग्रंथालयात सदर विद्यार्थ्यांनी सादर केलेले सर्व एकोणवीस उन्हाळी संशोधनाच्या प्रति महाविद्यालयाचे ग्रंथपाल प्रा सुनील जाधव यांना दिल्या आहेत. उन्हाळी संशोधक सर्व विद्यार्थ्यांचे सर्व स्तरातून कौतुक होत आहे.

विद्यार्थ्यांना प्रोत्साहन देण्यासाठी शिष्यवृत्ती

प्रतिकूल परिस्थितीत सुध्दा अनेक विद्यार्थ्यांमध्ये शिक्षण घेण्याची धडपड दिसून येते. अशा सर्व विद्यार्थ्यांना प्रोत्साहन मिळावे म्हणूनच आमचे वडील स्वातंत्र्य सेनानी स्व.पुरुषोत्तमजी मोतीलालजी झुनझुनवाला यांच्या स्मरणार्थ प्रति विद्यार्थी पाचशे रुपये शिष्यवृत्ती जाहीर केली आहे. तरी जास्तीत जास्त विद्यार्थ्यांनी असे संशोधन सादर करून नावलौकिक मिळवावा, असेही उपाध्यक्ष अशोक झुनझुनवाला यांनी सांगितले.

Snapshot 4: Press note published in the daily Prashnakaal about scholarship for SRP

Additionally, our institute provided a provided a scholarship of Rs 500 each.

Total Scholarship to students of Commerce faculty = 500 x 22= Rs 11,000/-
Total Scholarship to students of Science faculty = 500 x 24= Rs 12,000/-
Total scholarship provided to the students= 23,000/- (Twenty Three Thousand only)
Scholarship was distributed to the students on 14th October 2021.

A list of the students who successfully completed In-house Summer Research Project 2020-21with a link to their report is appended below. Following **46 students** successfully competed in-house summer research program:

S.N.	Name of the student	Class	Name of the mentor	Title of the project	Link to the report
1.	Ankita V. Purohit	B.Com	Dr A D Bhosle	Minute Study of Accidental Insurance in India (2019-20)	https://drive.google.com/open?id=1nMUxW2ZJLt-7Az-Hzd4S1hjag_u2qHBY
2.	Tanaya A. Mate	B.Com II	Dr A D Bhosle	Commercial Study on Availability of Loans by the Bank and Response from Borrowers in the Financial Year of 2019-2020 in India	https://drive.google.com/open?id=1DppmC9PMraTd8SFx-GkNSG-XiEKSmiiy
3.	Divya S. Dhole	B.Com II	Dr A D Bhosle	Minute Study of Unemployment Problem in India (19-20)	https://drive.google.com/open?id=1S16P8wqefrXBYGGix4SinZdXLlhkVvEz
4.	Ruchika K. Vyas	B.Com II	Dr A D Bhosle	Analytical Study of Medical Business in India (2019-20)	https://drive.google.com/open?id=1mmOJMTQA3ld5XvN_hutkdN8F_CwTXrCf
5.	Vaishnavi Sahu	B.Com II	Dr A D Bhosle	Analytical Study of Special Economic Zone in Maharashtra	https://drive.google.com/open?id=1rsw0EmMqGIH0KUxI-AvRUAo-WWBUPMLD
6.	Harshad R. Dhondge	B.Com III	Dr A D Bhosle	Minute Study on Indian agricultural Labour	https://drive.google.com/open?id=1kVvuuOKGuMvnaqVzOXbFbKO5oIeeRWx9
7.	Shubhangi V. Unhale	B.Com III	Dr A D Bhosle	A Commercial Study on GST in India (2019-2020)	https://drive.google.com/open?id=1bUxg-GGFfoaOXkMfiuq-M87f1yKsf4FY
8.	Bhagwat B. Nimbokar	B.Com III	Dr A D Bhosle	Analytical study of Life Insurance with	https://drive.google.com/open?id=1XzM9

				special reference to Covid-19	W8XL6kuayTLiHyeVTK2chjmBjSHZ
9.	Vaishnavi V. Khandare	B.Com III	Dr A D Bhosle	Feasibility Study of Proposed Khamgaon Jalana Railway Track	https://drive.google.com/open?id=15LTYE40e4WqNBxz0XCUMNcR8AZTdS36h
10.	Nikhil V. Devale	B.Com III	Dr A D Bhosle	Study on Proposed new railway tracks in Maharashtra with special reference to economic development to Maharashtra (2019-20)	https://drive.google.com/open?id=13Jjz150_jZOy4Y4aquMs7QzFEil7kNTp
11.	Vishakha V. Tantak	B.Com III	Dr A D Bhosle	Minute Study of Child Labour Problems in India	https://drive.google.com/open?id=1YzRFyUEXLTJ3jt15itTnTWGGYml_zI2j
12.	Sakshi A. Gupta	B.Com III	Dr A D Bhosle	Minute Study of Retail Business in India (2019-20)	https://drive.google.com/open?id=1B_WT3Pdo6DSmQ45K28T7lKVL_kW8TO0H
13.	Vaishnavi V. Kale	B.Com III	Dr A D Bhosle	"Minute Study on Status of Purchasing Power of Indian Consumers in India (2019-2020)	https://drive.google.com/open?id=1RR3T_ZXKXmvrRhduUV-SCILBa92cgdnx
14.	Ujwala S. Satao	B.Com III	Dr A D Bhosle	Minute Study of Process of Industrialization in India	https://drive.google.com/open?id=1Wm0hVAc4RjRqPIQsxQkmtDLU_3NMKYDp
15.	Ankita T. Kalpande	M.Com	Dr A D Bhosle	Ghrahak Jagruti Chalval Ek Vishelynatmak Adhayan	https://drive.google.com/open?id=1XL7Q0PVxIdxq6mAwFM7J1iaI4wJd5T0h
16.	Ashwini J. Sanap	M.Com I	Dr A D Bhosle	Bhartatil laghu v kutir udyoganche vishleshanatmak adyayan	https://drive.google.com/open?id=19qkCaFso69N4mq-1Gknb70O9deTxtAK8
17.	Gayatri V. Thite	M.Com I	Dr A D Bhosle	महाराष्ट्रातील घाऊक व्यापाराचे महत्त्व	https://drive.google.com/open?id=1JnvxivtLmmWu7IVoGiYp0LAwWTWnCHDt
18.	Dipali B. Aochar	M.Com I	Dr A D Bhosle	कृषी उत्पन्न बाजार समित्यांचे विशेषणात्मक अध्ययन	https://drive.google.com/open?id=1cnwEM2wxbOV2O2b_vMEdlCaAcc1HjYiN
19.	Gaytri S. Bhore	M.Com I	Dr A D Bhosle	झपाट्याने होणारे शहरीकरण आणि खेड्यांचा होणारा ऱ्हास यातील समस्यांचे विश्लेषणात्मक अध्ययन	https://drive.google.com/open?id=1mOfML1j5RymP6IvmBtVGBlVyjOmlv_lO
20.	Vishakha L. Bhopale	B.Sc lll	Dr A V Padghan	Taxonomy and Systematic Study of Some Plants of Family Fabaceae (leguminosae)	https://drive.google.com/open?id=12ZZTiL9eF4bVsi6bTQBPAExd4BnMJc0v
21.	Ashwini D. Tayade	B.Sc lll	Dr A V Padghan	Taxonomy and Systematic Study of Some Plants of Family Malveceae	https://drive.google.com/open?id=1T9w60AJOo1qWNbGYrnmxz3VJegVIszYz
22.	Bhargav N. Bhatti	B.Sc II	Dr D M Nagrik	Production of Bio-ethanol from Rice	https://drive.google.com/open?id=1aAyL5rtAX3vvBo1JEVQhnzbc4X1w09Qr

23.	Gayatri R. Nerkar	B.Sc II	Dr H S Chandak	To study the Milk Products	https://drive.google.com/open?id=1QPDOjzCAKjnI1A68FhaOg5bEwLP-VXiq
24.	Dipali S. Paraskar	B.Sc lll	Dr H S Chandak	To Study the Chemical Footprint in Fertilizers Product and Understanding their Effects on the Soil and Human Beings	https://drive.google.com/open?id=12PDrxa04Tjt5SOMblbwBNfNMzagaSmUJ
25.	Komal S. Ingle	M.Sc I (Chem)	Dr H S Chandak	To Study the Chemical footprint in water	https://drive.google.com/open?id=1VjS7qrPodDrVacfJvYAptZkmR8SDMgI8
26.	Shital S. Ingle	M.Sc I (Chem)	Dr H S Chandak	To Study the Chemical Footprint in veterinary medicine / product	https://drive.google.com/open?id=1hdrxF7C-yhf2uCUbaOV5LtSibh_0V4SZ
27.	Mayuri S. Banherkar	M.Sc I (Chem)	Dr H S Chandak	Mosquito Repellent	https://drive.google.com/open?id=1Mv-A2gusIoxx5NhBITj8DXVBjtpMJoBC
28.	Ashwini R. Mhasal	M.Sc I (Chem)	Dr H S Chandak	Plastic Degradation	https://drive.google.com/open?id=1UYGYU4teucYU0I0HXbt8bfgEVvdSQU-N
29.	Arti V. Ghive.	M.Sc I (Chem)	Dr H S Chandak	To Study Formulation and Evaluation of Shampoo and their Effects	https://drive.google.com/open?id=1mDGeNyYp68Xo1V-wVg0_CebUhsbRGGWP
30.	Pragati D. Ghive	M.Sc I (Chem)	Dr H S Chandak	Medicines Sold Over the counter and their effects on Human health	https://drive.google.com/open?id=1FdEHvRkhzrTRqqDAmDQttYOfXWaTpp9s
31.	Dnyaneshwari B. Rahate	B.Com I	Dr K S Gulhane	Corona mule athrvyavdtyecha zalela parinam	https://drive.google.com/open?id=1yebBZDbsgb7D2pgylIb-_K9IBJZZJrVe
32.	Bhagyashree R. Bharambe	B.Com I	Dr K S Gulhane	Effect of covid -19 on Indian Education and Economy	https://drive.google.com/open?id=19No6gTYu_uM9kK4nfudRX6JdE47mYyqO
33.	Chaitali G Raut	M.Com II	Dr K S Gulhane	1) covid-19 भारतीय कृषी क्षेत्रावर झालेला परिणाम	https://drive.google.com/open?id=1A2_iMze2agSRqL9dcQhc8_2Oy2epuiad
34.	Tushar Patil	B.Sc I	Dr P E Ajmire	Wireless Electric Current Detector	https://drive.google.com/open?id=1bMJ1NL1lqipYbXCa4K9cAs2sD65JCEdu
35.	Sakshi S. Jadhao	B.Sc I	Dr P E Ajmire	Animating Transformation of Matrix	https://drive.google.com/open?id=1DSIKqCWWOa4kqTXqnWOkTH3CRL1sLdi7
36.	Mrunal Chavan	B.Sc I	Dr P E Ajmire	Animation on Bubble Sort	https://drive.google.com/open?id=1nUJYoHTvMCYieqn0LXH_ImX6jzOemu5x
37.	Vijay P. Chopade	B.Sc II	Dr P E Ajmire	AI ChatBot Based On Python	https://drive.google.com/open?id=1QckyMiFQEouvgUae5DO3uZrjUKf3iMAZ
38.	Sandesh S. Rakhonde	B.Sc lll	Dr P E Ajmire	Configuring Cloud for Networking	https://drive.google.com/open?id=1Z-4uJ5qCL5h8QMwljT40k2DxADC2I9L6

39.	Sampada V. Gadekar	B.Sc lll	Dr P E Ajmire	Feature Extraction from Audio to Recognize Musical Ragas	https://drive.google.com/open?id=17LoByNNVBzz85bdrF4GRQ-FaV6A0hl0-
40.	Yogita R. Dawale	B.Sc lll	Dr P E Ajmire	Website of Computer Science Department	https://drive.google.com/open?id=1rBKffV3nploXoAB9mPPIIERTajooeEJI
41.	Tejas V. Zamre	M.Sc I (CS)	Dr P E Ajmire	3D Simulation Dissection of Frog Using Augmented Reality	https://drive.google.com/open?id=1vsBWqOrzQHy1EbT8Y9cF7x3aqIIPiJQz
42.	Shravani S. Kulkarni	B.Sc I	Dr P V Ubale	R: A Language for Data Analysis and Graphics Free Software Environment for Statistical Computing	https://drive.google.com/open?id=1u2938rVtqcDNOatT4GnSyru-2lefR_TH
43.	Jyoti G. Daberao	B.Sc I	Dr P V Ubale	Survey Sampling Plays a Vital Role in Design of Qualitative Research	https://drive.google.com/open?id=1nIMfUVw-ive-IgpK_FLx3K7UDXIfKGbb
44.	Namrata G. Tekade	B.Sc II	Dr P V Ubale	Optimal Stopping Problem and its Utility in Statistics	https://drive.google.com/open?id=1jnVdVcN4XL3ZoIB2kOjbcMx8cN3UouRo
45.	Ashwini S. Patade	B.Sc II	Dr P V Ubale	Data Analysis and Kernel Density Plots by using R Software	https://drive.google.com/open?id=1dtDGYcglY2HO_SUnCnKW6mq9vXQgRWNw
46.	Sakshi S. Patil	B.Sc II	Dr P V Ubale	A Unified Theory of Secretary Problem with 1/e Law to the Best Choice	https://drive.google.com/open?id=1wPRnB6BeIfQKTLRIzEWT9LoqRylBp5yQ

Some of the significant outcomes of these projects are:

1. Research aptitude among the student has been developed.
2. Students learned to search literature and write reports.
3. Students perspective about use of different items have been changed. They now look for the contents in the product, their effects and side effects before using any item.
4. They are showing willingness to work as ambassador for creating awareness among the society.
5. Their confidence level has been raised so that they can come up with new ideas and try new experiments.
6. Some interesting findings were shared with the Government / policymakers.

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(Coordinator, IQAC)

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Internal Quality Assurance Cell

A report on In-house Summer Research Program 2021-22

As per policy for promotion of Summer Research, online summer research program was conducted during the academic year 2021-22. Names of the interested mentors were invited through a Google form in which their research area was also asked. Total 17 mentors showed their willingness to guide the sudents. Students applications were invited through a Google form by the IQAC. They were given a choice to select a mentor and area of research. About 160 students applied for the summer internship under the mentorship of 17 mentors.

Snapshot 1: Brochure of the In-House Summer Research Program

A few students were shortlisted based on their academic record and availability of IT infrastructure with them. Summer research program was successfully completed under following mentors:

1. Dr A D Bhosle (Commerce- 12 students)
2. Dr A A Tayade (Computer Science- 6 students)
3. H S Chandak (Chemistry- 5 students)

4. Dr M O Wankhade (Statistics- 2 students)
5. Dr P S Bodkhe (Computer Science- 1 students)
6. Dr P E Ajmire (Computer Science- 3 students)
7. Dr P V Ubale (Statistics- 6 students)
8. Dr D S Talwankar (Botany - 3 students)

Students worked in the laboratory and get hands-on experience on various laboratory skills. Mentors conducted on-line and in-person meetings with the students. The introduced them with the concepts of research method and research methodology. They were also made aware about formulation of a research problem.

Significant achievement: It is noteworthy to mention that one of the students **Ms Anjali Kailsah Bhonge** extended her research work and submitted the proposal for **WEnyan scholarship (a project funded by BASF**) by Pune Knowledge cluster. She will receive a fellowship of Rs 15000/ month for six months to undertake her masters project during session 2022-23.

All the students who undertook in-house summer research were awarded with a institutional scholarship of Rs 500 each. Total 33 scholars were awarded with a scholarship of Rs 500 each. It is noteworthy to mention that Hon'ble Vice-President Shri A P Jhunjhunwala sponsored a fellowship in the fond memory of freedom fighter Late Purshottamji Motilalji Jhunjhunwala. A scholarship of Rs 500 each to all the 11 students from Commerce faculty was sponsored by him. Remaining 22 students were awarded with a institutional scholarship of Rs 500 each.

Scholarship distribution to the scholars who completed In-house Summer Research during 2021-22

A list of the students who successfully completed In-house Summer Research Project 2021-22 with a link to their report is appended below. Following **38 students** successfully competed in-house summer research program:

S.N.	Name of the student	Class	Name of the mentor	Title of the project	Link to the report
1.	Aditi Vasant Deshpande	B.Sc II CSM	A A Tayde	Website of Computer Science Department	https://drive.google.com/open?id=1IEBSqf8f7FKoBFI1SAHW_i_6bivjy3Xg
2.	Ram Gajanan Thomble	BCA III	A A Tayde	"VIRTUAL OS"	https://drive.google.com/open?id=1No8Ht8bUCinr5tIlqbF8eoDSJzZSnSoY
3.	Krishnakumar Vijay Sharma	BCA-I	A A Tayde	Website of Best Career Opportunities After BCA	https://drive.google.com/open?id=1eef8iYvaWxZ7Doza8XYyaBnUQfzT7-FB
4.	Sakshi Santosh Jadhao	BSc II	A A Tayde	Website of Home Decor	https://drive.google.com/open?id=1mnp5RQoayz8tYBPUz1XEBwDJ74wkLmcY
5.	Tushar Samadhan Patil	BSc II	A A Tayde	Website on Resturant Management	https://drive.google.com/open?id=1pglgyNT6F-Z7YBlUeTpKJbuEmseWiYiK
6.	Mrunal Chavan	Bsc III	A A Tayde	Animation on Insertion Sort	https://drive.google.com/open?id=1Hg6TAOL5jAUp-I_WZdKzW_bnDrUV65KW
7.	Yogita Jagannatha Patale	B.Com I	A D Bhosale	Economical and social study oc general transportation during covid period	https://drive.google.com/open?id=15Mfg2oLxBRbLQ4yxiwFWZm5OGqNfrRew
8.	Samiksha Uddhav Bhise	B.Com I	A D Bhosale	ECONOMIC STUDY OF BANKING HABITS IN INDIA (2020-21)	https://drive.google.com/open?id=1qkD0B72y7Y8kT4d37V1s8QQsJq9a42ki
9.	Nikhil Gulve	B.com 2 II	A D Bhosale	Commercial study of business marketing structure of vidharbha region	https://drive.google.com/open?id=15CJkOF6TpW7pklq5Cks4TmRxAwyLkO5G
10.	Shruti Sanjay komte	B.Com I	A D Bhosale	Commercial study of banking system in India 2021-2022	https://drive.google.com/open?id=1IeDQDpABEqK6N9pJTllZuA4i6wVyps0P
11.	GayatriI Vaishwambar	B.Com I	A D Bhosale	Critical study of Insurance Business in	https://drive.google.com/open?id=1iqf

	Patale			India 2020-2021	1UAKygS5lbHd5sZZUDrMZuE7cWq_1
12.	Shraddha Anil Madiwale	B.com II	A D Bhosale	Commercial study of business financial corporation in India	https://drive.google.com/open?id=1hMGSN4L_yZiEi8SVpA1dvmMkmYqE4V2u
13.	Sakshi Ramesh Wankhade	B.com II	A D Bhosale	Infrastructural Study Of MIDC in Maharashtra	https://drive.google.com/open?id=1rcJbRO8a3gXVptFdtBRQ7-VXkgAfoDcO
14.	Mamta Rajendra Paraskar	B.Com I	A D Bhosale	critical study of accidental insurance business in Vidarbha	https://drive.google.com/open?id=1I3CH87iEwj9NULpbUQxGzyYxkRTAo8UT
15.	Ankita Sanjay Wankhade	B.Com I	A D Bhosale	Economical Survey of Computer Literacy of India 2020-21	https://drive.google.com/open?id=1JTS50J7ooMyNAi0Z6qRyucWistbMJozi
16.	Vaishanavi Santosh Hage	B.Com I	A D Bhosale	Impact of covid-19 on Two-Wheeler market in India	https://drive.google.com/open?id=1h-TZxiwCoYoiUYeNyPRFvm0VBmC09wi8
17.	Harish Sjivajirao Itey	BCOM II	A D Bhosale	Critical Study of Non-Banking Organization In India 20-21	https://drive.google.com/open?id=1D7kyyaM35hP9lRoVT6qScYVH3TuJvDhm
18.	Tejaswini Prakash Bhople	M.Sc 1	H S Chandak	One Pot Synthesis Of Disulfide by S-S coupling Using different Thiols	https://drive.google.com/open?id=1KjFbAmRXXrHFcG0UnPIoFr8Uckt2F-Po
19.	Anjali Kailash Bhonge	MSc I (Chemistry)	H S Chandak	Synthesis of Alkynyl Sulfide form Substituted Disulfide and Ester by using CuI	https://drive.google.com/open?id=1o2YX-uAHo_f9_Q3QINeurIXcWVR-OU07
20.	Kalyani Kisan Patil	MSc I (Chemistry)	H S Chandak	Green synthesis of alkynyl sulfide by using CuO nanoparticles	https://drive.google.com/open?id=1f8AdSsnBG1PVoNRdPXp-2dsJXI2AttQs
21.	Monika Manohar Nimbalkar	MSc I (Chemistry)	H S Chandak	"Synthesis of Alkynyl Ester from Propargyl alcohol and 4-halo/nitro Derivative of Aromatic Carboxylic Acid via Steglich Esterification"	https://drive.google.com/open?id=1FFSjToh_CoQ8fw9Y_v11tP640c3oReda
22.	Pratap Gunji Gadrya	MSc I (Chemistry)	H S Chandak	Synthesis of aromatic alkynyl ester from propargyl alcohol and 4-methyl/methoxy derivative of aromatic carboxylic acid via	https://drive.google.com/open?id=1KiSKbPfg2HKOG4jz1ubRGDhXHbp1mxP3

				steglich estrification.	
23.	Ku Priya Rajput	MSc I (Chemistry)	H S Chandak		https://drive.google.com/open?id=1hiH7Pg3KqPUBgUMTmGTVYJRHZS3wzfZs
24.	Prajakta Gajanan Tekade	BSc III	M O Wankhade	"Forecasting of Gold Price in India using Auto Regressive Integrated Moving Average Model of the time series"	https://drive.google.com/open?id=1hVv1sqXdqttfPe7CoaEhLRbZSlQNiiPB
25.	Vaishnavi Anil Kalane	BSc lll	M O Wankhade	Linear Programming Model For Crop Allocation to Major Crops in Saline Tract of Akot Tahsil, Maharashtra	https://drive.google.com/open?id=1oqpbH952KyNSSe99FPE0BGQ9m36hesHx
26.	Ram Gajanan Thomble	BCA III	P E Ajmire	REAL TIME FACE ATTENDANCE SYSTEM USING MACHINE LEARNING	https://drive.google.com/open?id=1f14yQ5XJmkN7bmOjd3AWTj8nH0GjmaDC
27.	Namrata Gajanan Tekade	BSc III	P E Ajmire	To find the color contrast using MATLAB	https://drive.google.com/open?id=1PUEd3QivogKH7Wn6900rJCMKIRc3JhYq
28.	Vaishnavi Sanjay Tikar	M.Sc.-I CS	P E Ajmire	“Use of IOT in Daily Life”	https://drive.google.com/open?id=1sSNig9Z6E6JotZXLGOOdfVbgQHx0dlzE
29.	Prajakta Gajanan Tekade	B. Sc III	P S Bodkhe	Finding Lanes For The Self Driving Cars	https://drive.google.com/open?id=1VIp6KJXg14Ks5vlHTsKBfO9lDhQWZXai
30.	Pooja Ramesh Najardhane	BSC II	P V Ubale	"Bullying is curse to nation : A Statistical perspective study"	https://drive.google.com/open?id=1tozuv8iMOh0ib1dVoYtFLo-4cnluZ6E1
31.	Ashwini Suresh Patade	BSc III	P V Ubale	Roll of cloud computing in storage of big statistical data	https://drive.google.com/open?id=16W6mT3AMc31jBku-4RcQh8OaClzfncL0
32.	Prajakta Gajanan Tekade	BSc III	P V Ubale	“BIG DATA ANALYTICS AND IT’S STATISTICAL PERSPECTIVE STUDY”	https://drive.google.com/open?id=1kRqZE7uAkcbLRRXcQrVtGNarkiQq7QAX
33.	Sakshi Shivaji Patil	BSc III	P V Ubale	Statistical study of new approach quadratic assignment problem and its application.	https://drive.google.com/open?id=1z55P1hkhYfZoZNtdOWuCyKLShhHf_0xw

34.	Shruti Vinod Sanjore	BSc III	P V Ubale	A New Approach to Solve Transportation Problems	https://drive.google.com/open?id=1d8GTEPuIbC2IJeu9SRmupZafbLdBHw9-
35.	Namrata Gajanan Tekade	BSC III	P V Ubale	Study of Linear Assignment Problem And it's Application in Statistics	https://drive.google.com/open?id=1kI32sF3-hKCwnyEoBJKQ6OLtLZ7_C3mA
36.	Bhavana Pardeshi	BSc II	D S Talwankar	Preparation of Herbal Hairwash from Locally Available Plants	$% & '(()* + ,- $./ & -$!
37.	Ashwini Suratsing Chavan	BSc-II	D S Talwankar	Herbal Hair Wash From Locally Available Plants	01 /23. 45 ! 6 &78 %9
38.	Dhanashree Charansing Tomar	B.sc I	D S Talwankar	Herbal hairwash	$% & '(()* + ,- $./ & -$!

Some of the significant outcomes of these projects are:

1. Research aptitude among the student has been developed.
2. Students learned to search literature and write reports.
3. Students perspective about use of different items have been changed. They now look for the contents in the product, their effects and side effects before using any item.
4. They are showing willingness to work as ambassador for creating awareness among the society.
5. Their confidence level has been raised so that they can come up with new ideas and try new experiments. Ms Anjali Bhonge received WEnyan scholarship of Rs 15500/ month for six months to undertake her masters project

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In-house Summer Research Program 2023

Conceptualized by Research Advisory Committee

(An initiative of IQAC)

A report on In-house Summer Research Program 2022-23

As per policy for promotion of Summer Research, online summer research program was conducted during the academic year 2022-23. Names of the interested mentors along with alumni of the G.S.College were invited through a Google form in which their research area was also asked. Total 30 mentors showed their willingness to guide the students. Students' applications were invited through a Google form by the IQAC. They were given a choice to select a mentor and area of research. About 288 students applied for the summer internship under the mentorship of 30 mentors.

Snapshot 1: Brochure of the In-House Summer Research Program

A few students were shortlisted based on their academic record and availability of IT infrastructure with them. Summer research program was successfully completed under following mentors:

1. Dr A D Bhosle (Commerce- 17 students)
2. Dr A A Tayade (Computer Science- 19 students)
3. H S Chandak (Chemistry- 11 students)
4. Dr M O Wankhade (Statistics- 5 students)
5. Dr P E Ajmire (Computer Science- 5 students)
6. Dr D S Talwankar (Botany- 2 students)
7. Dr P V Ubale (Statistics- 5 students)
8. Dr A V Padghan (Botany - 2 students)
9. Mrs. S G Waychal (Sanskrit- 2 students)
10. Dr. M S Gayakwad (Commerce – 5 students)
11. Prof. V U More (Marathi – 2 students)
12. Dr. V S Athawar (Statistics – 2 students)
13. Dr. S. T. Warade (Economics – 1 student)
14. Dr. R R Gawhale (Economics – 1 student)
15. Dr. K. S. Gulhane (Commerce – 2 students)
16. Dr. G. B. Kale (Zoology – 3 students)
17. Dr. D. M. Nagrik (Chemistry – 2 students)
18. Shri C A Umesh Agrawal (Commerce – 1 student)

Students worked in the laboratory and get hands-on experience on various laboratory skills. Mentors conducted on-line and in-person meetings with the students. They introduced them with the concepts of research method and research methodology. They were also made aware about formulation of a research problem.

All the students who undertook in-house summer research were awarded with a institutional scholarship of Rs 500 each. Total 86 scholars were awarded with a scholarship of Rs 500 each. It is noteworthy to mention that Hon'ble Vice-President Shri A P Jhunjhunwala sponsored a fellowship in the fond memory of freedom fighter Late Purshottamji Motilalji Jhunjhunwala. A scholarship of Rs. 500 each to all the 24 students from Commerce faculty was sponsored by him. Remaining 63 students were awarded with a institutional scholarship of Rs. 500 each.

List of the students who successfully completed In-house Summer Research Project 2021-22 with a link to their report is appended below. Following **87 students** successfully competed in-house summer research program:

Sr. No.	Name of The Student	Class during the session 2022-23	Name of the mentor	Title of the project	Link to access PDF of project
	Arpita A. Narkhede	MSc 1 (Comp Sci)	A A Tayde	Solar System	https://drive.google.com/open?id=1W2I3UukWoIoRb9BwVzZVzop8x9P4mYzJ
	Ashwini A. Borse	MSc 1 (Comp Sci)	A A Tayde	Implementation Of Flag	https://drive.google.com/open?id=1AyDwXjrXGlelUFIRcfPERuItGvKWrJwu
	Ashwini S. Patade	MSc 1 (Comp Sci)	A A Tayde	Website of registration vehicle	https://drive.google.com/open?id=1eJSjwT12sK_f1BWrym2Fdi5FqI8gk3Ya
	Bhagyashri P. Patil	MSc 1 (Comp Sci)	A A Tayde	Flower shop landing page	https://drive.google.com/open?id=1oIAI3UJlZI56nSbikN6xFiEy0qn8lpXW
	Dhanashree S. Dhake	Bsc II (CAPE)	A A Tayde	Website of Diamonds	https://drive.google.com/open?id=1_kdDHnNJAjrb02wJmoGz370aHia0fULM
	Gauri R. Pathak	MSc 1 (Comp Sci)	A A Tayde	Tic-Tac-Toe Game	https://drive.google.com/open?id=16lS99INjvv2AcJZRG8cmkM4RwTGHx5lF
	Gauri S. Bharate	MSc 1 (Comp Sci)	A A Tayde	Website of Gym Workout	https://drive.google.com/open?id=1ip4ig5dMACrG9KZV2elHiFwHgedAdkg2
	Komal S. Tathe	MSc 1 (Comp Sci)	A A Tayde	My Online Meal	https://drive.google.com/open?id=1KYbqbs7x8Mz1cQ2SGrtTxeutZUtoTwlk
	Krishnakumar V. Sharma	BCA-II	A A Tayde	Scope of IT Sectors	https://drive.google.com/open?id=1_5y8lSUl7RxcaNhQT56mbJi0UyFqKrks
	Payal S. Thakare	MSc 1 (Comp Sci)	A A Tayde	Graphics design of Tajmahal	https://drive.google.com/open?id=1QOmoWXk5wuN5VjVVHzlm3sIXGwWyKlje
	Payal V. Thakare	B.Sc. II (Comp.Sci.)	A A Tayde	Resume and CV Format	https://drive.google.com/open?id=1iSWByUxWdIG24TTvAhLu61l-PsW5wAZ2
	Pragati S. Deoche	MSc 1 (Comp Sci)	A A Tayde	Animation of Rocket launching	https://drive.google.com/open?id=1RMMstwk2wZ7TemJJ0c4jtpx8oiw1LA8T
	Renuka S. Zaparde	B.Sc. 1 (Comp.Sci.)	A A Tayde	"Website of Various Template of Forms"	https://drive.google.com/open?id=1IcomtAxKRgI6YlxZfJu_HN3sfdNtL6_I
	Sampada R. Joshi	B.Sc. 1 (Comp.Sci.)	A A Tayde	Website of Soil	https://drive.google.com/open?id=1OskmbBBoWtseyWap3aDrLKww5-UQcGGJ

	Snehal A. Bharambe	MSc 1 (Comp Sci)	A A Tayde	Solar system	https://drive.google.com/open?id=1WYfM5DiVtgxp-Nofjw-v9c7NMkMQiocK
	Sonal S. Thakare	B.Sc. 1 (Comp.Sci.)	A A Tayde	Web development.	https://drive.google.com/open?id=1C9eOIcap-FU5SrCNSI5DZgpVFsI80RkM
	Swati B. Shelkar	MSc 1 (Comp Sci)	A A Tayde	Parking booking system	https://drive.google.com/open?id=1JiyIUKrBobiupUxdTtoqsTWGqLHLLYJh
	Vaishnavi A. Kalne	MSc 1 (Comp Sci)	A A Tayde	Jungle animation	https://drive.google.com/open?id=14E8ejEGYIBf3eqn9sHOASVMyrscovWrn
	Tushar S. Patil	BSc III (Comp.Sci.)	A A Tayde	Music player	https://drive.google.com/open?id=1WehLYQikZFEGR1OcmeqwbBqvG1XxyLtT
	Aarti G. Pawar	B.com II	A D Bhosale	A study of poverty problem in Maharashtra	https://drive.google.com/open?id=1y1L8kPiTUDb9kGxgf8CVl9dO1EpFqiH9
	Akshad S. Sharma	B.Com. I	A D Bhosale	A Study on growth of employment in India from the year 2014- 2022	https://drive.google.com/open?id=1xUPp4pizDHHatXvyQdCGiAvaRt1ziocF
	Ankita S. Wankhade	B.Com II	A D Bhosale	Purchasing Tendency of Indian Consumer Towards Online Trading/Business	https://drive.google.com/open?id=1XsUhxorM1mWffSdqzuJheYu6_QpJVfyx
	Ashish O. Tayade	B.Com. II	A D Bhosale	Expenses incurred on higher education in India	https://drive.google.com/open?id=1zAwvoQ_puXhjwS0FTVw5Pd1y6qHdaRqo
	Dipali S. Dahi	B. Com I	A D Bhosale	A study of entertainment industries in India from last five years	https://drive.google.com/open?id=1wBtLYCmGx_gcKQmYVHzg6S3jgBi2o82i
	Gayatri V. Patale	B.Com ll	A D Bhosale	Growing E-commerce sector in India	https://drive.google.com/open?id=1K0rACfKEKsQi4VzqaSKahTE5O2a_Wmxw
	Harsha R. Rathi	B.Com II	A D Bhosale	Changes in purchasing power of Indian peoples since from last decades (2012 to 2022)	https://drive.google.com/open?id=1oCc41OpiwPC0DIi02H8uHN6EYACk4GV9
	Komal A. Hage	B. Com. I	A D Bhosale	A study of transportation services of business in India last five years	https://drive.google.com/open?id=10FRXsChK5soXrUXUE1paqCgpoRyL0-U_
	Mukta D. Ghuikar	B. Com. I	A D Bhosale	A study on deflation in real estate business in india from last 5 year	https://drive.google.com/open?id=1kRsfgr53HXCfc0bZklos5lbvtkX9Ddgz
	Payal S. Kalaskar	B.Com I	A D Bhosale	SIP investment business in India from last two year	https://drive.google.com/open?id=1op8K6pxWgRTRbqjHb-b9Kd4lBfAil0W5
	Pooja G. Chambhate	B.Com I	A D Bhosale	A Study on E-commerce business in india from last five years	https://drive.google.com/open?id=1RKuVFHZr7tFoP81INDdwH-vOvrflDYBW
	Poonam G. Satav	B. Com I	A D Bhosale	A study on inflation in business in India From Last two years	https://drive.google.com/open?id=1K2CZy-cHRH4ejVerRsMyQKPMBFrx3pjx
	Poonam V. Mundhe	B Com I	A D Bhosale	A study of e- banking business in India in last 2 year	https://drive.google.com/open?id=1885UiRycvFXCEgHDl9-jfBQLYRSbm2jl

	Sakshi R. Ghanokar	B.Com II	A D Bhosale	Study on start- up in india(2022-23)	https://drive.google.com/open?id=182AvmuSscoCIEdIVngwnJxAQcYJS_U2M
	Sushant S. Sarkate	B.Com I .	A D Bhosale	Study on growth of unemployment problem in India from 2014-2022	https://drive.google.com/open?id=1lK5qnhNQvMt2wlvkChCIMu4JyOU5j6Pw
	Tejaswini D. Bhagat	B.Com II	A D Bhosale	A study of jandhan Yojana	https://drive.google.com/open?id=1I0KhUailb-Z2siTzsVMLa0X87WZept-B
	Vaishnavi R. Bhopale	B.Com I	A D Bhosale	A study on start-up business in India last two year	https://drive.google.com/open?id=16L4YyAZJilfeBBW55BdegqTWZcTVNcfg
	Dnyaneshwar H. Gaygol	MSc I (Botany)	A V Padghan	Taxonomic Study of Fabaceae Family	https://drive.google.com/open?id=19rwViu7o3PUgw7KhGPCxsopLHbkA8ThU
	Vaishnavi A. Gadekar	MSc I (Botany)	A V Padghan	Taxonomy and systematic study of malvaceae family	https://drive.google.com/open?id=1dKQX82k-ypOelaFRydTOegCsyxD2PB4h
	Jarar Beg Najir Beg	BSc I (Chem.)	D M Nagrik	Bio-ethanol production from citrus Sinensis	https://drive.google.com/open?id=14sycluOtZly3daljXb4LHaHNYKxbwZ6K
	Om V. Adel	BSC - III (CZ - Micro)	D M Nagrik	Bio - ethanol Production from Madhuca longifolia (Mahua)	https://drive.google.com/open?id=1JEepWVpyPL_St9NFXXlLWxr6h2Et9GdB
	Dnyaneshwar H. Gaygol	MSc I (Botany)	D S Talwankar	Study traditional medicinal plant in khamgaon region	https://drive.google.com/open?id=1sss0luy9u7T_M_UwiIWP6431YqD889LJ
	Sagar Ware	B.Sc. II (CBZ)	D S Talwankar	Documentation of wild medicinal plants from atali region	https://drive.google.com/open?id=1T61nMsw5aeQdlmPUW3P9Bcw_iFRSdaTK
	Akanksha V. Satao	MSc II (Zoo.)	G B Kale	Biodiversity Aspects of Dragonflies in Khamgaon Area of Buldhana District"	https://drive.google.com/open?id=1u6NTcJ6ncNuUzwMh3RJ-AumRKvWDvtdS
	Mohini K. Shejole	MSc II (Zoo.)	G B Kale	Study of Biodiversity and Habitat Associationship of Moths Near by Shegaon Town in Khamgaon Buldhana District	https://drive.google.com/open?id=159bnTkXAcCwLfHNbxMYKQAAuTFsoiGV_
	Nandini V. Satao	MSc II (Zoo.)	G B Kale	Distribution of Butterfies in Khamgaon taluka of Buldhana District in Maharashtra	https://drive.google.com/open?id=1cKDVTIglNpnUVgQkKP8eprcVkiWQlkOb
	Aishwarya M. Dhopate	MSc 1 (Chem)	H S Chandak	Regio and Stereoselective Hydrothiolation of Terminal Alkynes by Using cuso4/Na-Ascorbate	https://drive.google.com/open?id=1BD8yryk9RJLvix0NynKGlyogLSA_IjLe
	Anuradha S. Jadhav	MSc 1 (Chem)	H S Chandak	"A Facile stereoselective synthesis of (Z)-Vinyl Sulfides via Hydrothiolation of Alkynes with Thiols".	https://drive.google.com/open?id=1nKztTy2oyv-dytSUE_8hFhDOKlNAXntd
	Barkha G. Panjawani	Msc II (Chem.)	H S Chandak	Multicomponent synthesis of substituted amino pyridine	https://drive.google.com/open?id=1McnHDIAqt2CataZYosdo70fC5Yqz60b5
	Pathan Yasmin Taslim Khan	MSc 1 (Chem)	H S Chandak	Metal free synthesis N-ligated phthalimide derivatives	https://drive.google.com/open?id=1tVN194T88bOq9_xVMFuDR3P_O-OpRRb3

	Pawankumar D. Chavhan	MSc 1 (Chem)	H S Chandak	Regio and streioselectivity of hydrothiolation in alkyne	https://drive.google.com/open?id=1avkdNok2N69aomPjUtVFSxT268OIXsq7
	Poonam R. Patil	MSc 1 (Chem)	H S Chandak	Multi component synthesis of substituted 3-H pyrrole derivatives.	https://drive.google.com/open?id=1RhIRsWven6GJmmPTklaB8Z2tPiVbgwVv
	Priyanka S. Jumale	MSc 1 (Chem)	H S Chandak	Synthesis of N-Hydroxy and N-Acetoxy Hypervalent Iodine Reagents from 2-Iodobenzoic acid	https://drive.google.com/open?id=120Nc3RXITuVxBWwQR5NQXDuot5-Un_7U
	Riya .P. Agrawal	B.Sc.III (Chem)	H S Chandak	Biogenic cuo-nps mediated stereoselective Synthesis of (Z)-Vinyl Thioether via "Thiol-Yne-Click" reaction	https://drive.google.com/open?id=19JzN-Mnl1GfG77D8bM8hHVcn0bHPnOV1
	Rupali P. Bhalerao.	MSc 1 (Chem)	H S Chandak	"Synthesis of Phenacyl Chloride from Acetophenone by Using NCS"	https://drive.google.com/open?id=1hqAZFQLJ7I4jEi2fYgqh4MUeV1H5xDTR
	Swati P. Janokar	MSc 1 (Chem)	H S Chandak	"Thiol-Yne-Click" Reaction Between Aromatic Alkynes and Thiols Catalyzed by Biosynthesized cuo- nps Catalyst	https://drive.google.com/open?id=1bDNwqwU6IMQ3MsNo1chp0lfELbr0WkE9
	Vaishali N. More	MSc 1 (Chem)	H S Chandak	A facial transformation of Acetophenone into alph bromo acetophenone by an NBS-mediated one-pot strategy using p-tsoh and silica gel	https://drive.google.com/open?id=1MB8nAGsmOaI6b3-JzmftrqSKfsQFllNn
	Bhagyashree R. Bharambe	Bcom lll	K S Gulhane	भारतातील वाढत्या बेरोजगारीची कारणे	https://drive.google.com/open?id=17NQurux4lTp9fnL_6uEuo1tpd12mx3bQ
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	Ankita J. Wagh	BSc II	M O Wankhade	A Study on the Problems Faced by Girls for Education in Rural Areas of Jalgaon Jamod, Maharashtra	https://drive.google.com/open?id=1NCpMcyNRPN6baDIuCAPYhMl7JWdrb66e
	Gayatri P. Dhole	BSc II	M O Wankhade	A study of Liquor and Tobacco Consumption in Umara Atali, Khamgaon, Maharashtra	https://drive.google.com/open?id=1U4XRyzhttGNvXyxZefpjePhcYst_up-Y
	Mukteshwar B. Joshi	B.Sc II	M O Wankhade	Development of Computer Code for Computing Index Number in C Language	https://drive.google.com/open?id=1C39oRtS7xTa_7q5QZoy255BlRAx-zwAW
	Sakshi G. Jadhav	Bsc II	M O Wankhade	A study of Trend and forecast analysis of prices of fertilizer Urea in Maharashtra"	https://drive.google.com/open?id=1jDru1UI0SG-gLjQUC8nLUc372BTl5Pcm
	Sakshi P. Deshmukh	Bsc II	M O Wankhade	"A Study of Live Stock trend in Datala and Nandura "	https://drive.google.com/open?id=1UWV1Jae8QsMKt6EuF-Bax5Bc3KK7t41T
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				college students"	BwsTepGMKTI
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	Swati A. Borde	B. COM. - I	M S Gaikwad	"A study of buying behaviour of urban female consumers towards cosmetic products"	https://drive.google.com/open?id=1k1Rlvi6-pn7TFmY1feqItyZyJ4hlCAid
	Gauri G. Pardhi	B. COM. I	M S Gaikwad	"A study on consumer behaviour towards online shopping"	https://drive.google.com/open?id=1t3CkEy88sBLrvUGTQ5cqVBbXkSPWSP-8
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	Ganesh P. Bhise	B.Sc II (CSM)	P E Ajmire	"Interactive Information System of some preserved specimen of Animals in Zoology Laboratory of G. S. Science, Arts and Commerce College, Khamgaon by Using QR Code"	https://drive.google.com/open?id=1tKrKCYRgphBs-8CmAF1sNJW54qymHs_e
	Sakshi S. Nagpure	BCA l	P E Ajmire	Face detection & Face recognition	https://drive.google.com/open?id=1Z-Qbp41EPP_LDU0MKCnGrLdFyQBeqWyc
	Suvarna V. Shimbre	BCA II	P E Ajmire	Visualization and Image Processing for Cyber Security	https://drive.google.com/open?id=1TONpWBY7rEqe9nHTf0nIHE8LjyjowPLr
	Ankita D. Gotarkar	Bsc I	P V Ubale	Statistical analysis of emotional index of India	https://drive.google.com/open?id=1Mrv-zXfzhBZIR2iHhrn0ozI8aVdBVF5t
	Bhavana S. Patale	BSc l	P V Ubale	Quantile regression and its estimation"	https://drive.google.com/open?id=18smLwVLFMGDm5v08tJRRaTjCKEJHm1V2
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	Nikita R. Anasane	BSC I	P V Ubale	Information about different type of technology and its utility	https://drive.google.com/open?id=1wL4aYLzvcLqBPhyAiJVazdlDBGFM2AXk
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	Vaishali V. Mundhe	M.A.I	R R Gawale	ढोरपगावातील अॅटोरिक्षा चालविणाऱ्या चालकांच्या आर्थीक स्थितीचे अध्ययन	https://drive.google.com/open?id=1obb2nA9cFsnW2fv1n8miuSV4mzX6P4Cj
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	Dipeeka Belokar	B.A. II	S G Waychal	"भगवद्गीतेतील १६ व्या अध्यायातील नैतिक	https://drive.google.com/open?id=1pNCfM7El7GCJfEw33k_ta

				मुल्यांची आजच्या काळात आवश्यकता”	bFYevFSJROU
	Nikita D. Pawar	MA I	S T Warade	Economic study of soyabean producer farmers in pimpri gawali gram	https://drive.google.com/open?id=1Cl5yEjvCFnlm1BKyLW1ffjGLCmvTx5tK
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	Ashutosh K. Thombare	B.A ll	V U More	इयत्ता पहिली ते सातवी च्या मराठी पाठ्यपुस्तकातून वैज्ञानिक अभिव्यक्ती	https://drive.google.com/open?id=1ilHHxHLrF5kSOV1ywR_9_1VP28uo6h8C
	Gayatri V. Ghanokar	B.Sc II	V U More	संत तुकारामांच्या अभंगातील वैज्ञानिक दृष्टिकोन	https://drive.google.com/open?id=1ym871gK_V2Acn2DGtgYDcfKpgi8Kv9xM
	Pallavi G. Dane	BCom I	CA Umesh P Agrawal	Summer research on Hotel Industry	https://drive.google.com/open?id=1sy_AIVJtnA0_PcgfaKqExznqTt4XFwf8

Some of the significant outcomes of these projects are:

1. Research aptitude among the student has been developed.
2. Students learned to search literature and write reports.
3. Student's perspective about use of different items have been changed. They now look for the contents in the product, their effects and side effects before using any item.
4. They are showing willingness to work as ambassador for creating awareness among the society.
5. Their confidence level has been raised so that they can come up with new ideas and try new experiments.
6. A financial assistance in the form of scholarship of Rs 4543/ each has been awarded to Ms Anju Paliwal, Ms Rutuja Yadgire and Mr Akshay Ingle of MSc I (Chemistry) for successful completion of summer research at IISER Kolkata.

Dr P V Ubale	Dr H S Chandak	Dr D S Talwankar
Coordinator, RAC	Coordinator, IQAC	Principal

भारतीय विज्ञान शिक्षा एव अनुसंधान संस्थान कोलकाता
(भारत सरकार के शिक्षा मंत्रालय के अधीन एक स्वायत्त संस्थान)
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA
(An autonomous Institute established by Ministry of Education, Government of India)

SRP-2023/058 **July 17, 2023**

TO WHOMSOEVER IT MAY CONCERN

This is to certify that

Anju Shivdas Paliwal

a student of

Amravati university

has satisfactorily completed a Summer Project
on

"Conjugated polymer nanoparticles for photocatalysis"

Under the supervision of

Prof. Sanjio S. Zade
of

Department of Chemical Sciences

(Project Duration: 6/23/2023 to 8/10/2023)

Kripabandhu Ghosh	Sangita Sen	Rumi De
Kripabandhu Ghosh	**Sangita Sen**	**Rumi De**
Coordinator Summer Research Project	**Coordinator Summer Research Project**	**Coordinator Summer Research Project**

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CERTIFICATE

It is certified that the summer research work included in the project report entitled ***"Synthesis of Norbornene-Based Dopamine Derivatives as New Potential Antibacterial Agent"*** has been carried out by **Mr. Akshay Janglu Ingle** under my supervision and guidance. The content of this project report has not been submitted elsewhere for the award of any academic and professional degree.

Signature of Supervisor

August 9th ,2023

(Dr. Raja Shunmugam)

IISER Kolkata

Project Supervisor

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Article

Michael Adduct of Sulfonamide Chalcone Targets Folate Metabolism in Brugia Malayi Parasite

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Abstract: A series of Michael adducts of malononitrile and sulfonamide chalcones were synthesized, characterized, and evaluated for their antifilarial activity. Out of 14 compounds, N-(4-(4,4-dicyano-3-p-tolylbutanoyl)phenyl)benzenesulfonamide showed favorable drug-likeness properties with marked antifilarial effects at micro-molar dosages. Apoptosis in *Brugia malayi* microfilariae was confirmed by EB/AO staining, MTT assay, and cytoplasmic cytochrome c ELISA. Since chalcone and folate synthesis pathways share the same substrate, we hypothesize a structural analogy-based inhibition of folate metabolism by this compound. Molecular docking against a pre-validated BmDHFR protein showed more favorable thermodynamic parameters than a positive control, epicatechin-3-gallate. The compound significantly suppressed the DHFR activity in a parasite extract in vitro. Our hypothesis is also supported by a significant reversal of DHFR inhibition by folate addition, which indicated a plausible mechanism of competitive inhibition. These results demonstrate that targeting filarial folate metabolism through DHFR with consequent apoptosis induction might be rewarding for therapeutic intervention. This study reveals a novel rationale of the structural analogy-based competitive inhibition of DHFR by Michael adducts of sulfonamide chalcones.

Keywords: Michael adducts; sulfonamide chalcone; antifilarial; dihydrofolate reductase; folate metabolism

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1. Introduction

Lymphatic filariasis (LF) poses a risk to about 863 million people in 47 countries worldwide, with a huge burden of consequent disability [1]. Failing in eliminating LF by 2020, the WHO has set a new target of achieving LF elimination by 2030 by introducing triple-drug therapy (IDA): ivermectin, diethylcarbamazine (DEC), and albendazole. However, this preventive chemotherapy strategy is facing many challenges, including setbacks due to COVID-19, poor drug acceptability among communities due to a lack of awareness, and lack of training of health workers [2–4]. Moreover, the threat of disease re-emergence due to insufficient mosquito vector control programs and possible drug resistance is a matter of concern. The absence of a prophylactic vaccine complicates it further. All these compelling issues make antifilarial drug research a dire necessity, in consonance with the mandate of drug research for filarial diseases set out by WHO (TDR) [5].

The most accepted mechanism of DEC action entails eliciting a host inflammatory response against the filarial parasite. Although DEC targets the folate pathway as well, its direct role in filaricidal action is still obscure [6]. Evidence suggests the apoptotic effect of DEC on the parasite in vitro [7], although it is not sufficient for filaricidal action. In our previous work, certain herbal extracts rich in polyphenolic/flavonoid ingredients have shown efficacy against *Brugia malayi* parasites [8]. Since the shikimate pathway of folate and flavonoid biosynthesis shares a precursor called chorismite [9], a possible structural resemblance-based inhibition of folate metabolism by flavonoids through dihydrofolate

reductase (DHFR) inhibition can be contemplated. A similar rationale with consequent apoptosis was demonstrated with the flavonoids derived from tea [10].

Chalcones are flavonoid metabolites that are being extensively studied for their spectrum of actions on various cellular metabolic processes [11]. Interestingly, chalcones and their derivatives have proven antiparasitic effects [12]. Recently, we have shown the antifilarial activity of sulfonamide chalcones with consequent apoptosis induction; however, the mechanism is unclear [13]. Comprehensibly, a close association between folate pathway inhibition and apoptosis can be envisioned due to the crucial role of folate in the nucleic acid synthesis required for cell proliferation. Against this backdrop, we have undertaken this study to ascertain the antifolate effects of Michael adducts of sulfonamide chalcones in the human lymphatic filarial parasite.

2. Materials and Methods

2.1. Chemistry

All solvents and chemicals were obtained commercially and were used as received. Melting points were determined in an open capillary and were not corrected. The reaction's progress was checked using pre-coated TLC plates. The synthesized compounds were characterized based on chemical properties and spectral analysis. IR spectra were recorded using a spectrometer instrument (Bruker India Scientific Pvt Ltd., Mumbai, India). NMR spectra were recorded with a Bruker Avance II at 400 MHz as well as a Bruker DMX spectrometer at 500 MHz (^{1}H) and 125 MHz (^{13}C) using $CDCl_3$ or DMSO-d_6 as the solvent (Supplementary Materials) (Bruker Scientific LLC, MA, USA). All chemical shifts are reported in ppm and have been referenced to tetramethylsilane using residual ^{1}H or ^{13}C signals of the deuterated solvents as internal standards. Electron spray ionization mass spectra were recorded on a Bruker microTOFQ spectrometer (Bruker Scientific LLC, Marlton, MA, USA). Elemental analyses (C, H, N) were obtained using a Carlo Erba 1108 analyzer (EA Consumables, LLC, Marlton, NJ, USA). Synthesis of sulfonamide chalcones (1a-n) was achieved by the Claisen–Schimdt condensation of sulphonamide ketones with substituted aromatic aldehydes [13].

2.1.1. General Method of Synthesis

A suspension of sulfonamide chalcone (1a-n) (1.25 mmol) and malononitrile (1.25 mmol) in the presence of piperidine (0.375 mmol) in 0.5 mL aqueous ethanol (1:1) was stirred at room temperature for an appropriate time. After completion of the reaction, as indicated by TLC, the product was simply separated by filtration under suction to afford a product of sufficient purity. The crude compound was recrystallized in ethanol, if necessary.

(4-(4,4-dicyano-3-phenylbutanoyl)phenyl)benzenesulfonamide (**3a**)

White solid; (yield 0.50 g, 94%); mp: 179–180 °C; Rf 0.5 (30% EtOAc:Hexane); IR: 2966 (Ar C-H str), 1593 (C=O str), 1464 (asymm. S=O str), 1156 (symm. S=O str) cm^{-1}; ^{1}H NMR (400 MHz, DMSO-d_6) (Figure S1). δ: 10.88 (s,1H, NH), 7.86–7.81 (m, 4H, Ar-H), 7.64–7.59 (m, 3H, Ar-H), 7.43–7.41 (m, 2H, Ar-H), 7.36–7.28 (m, 3H, Ar-H), 7.21–7.19 (m, 2H, Ar-H), 5.18 (d, 1H, J = 6.0 Hz, H_1), 4.00 (m, 1H, H_2), 3.71 (dd, 1H, J = 21.8 Hz, 9.6 Hz, H_3) 3.5 (dd, 1H, J = 18.2 Hz, 12.4 Hz, H_4) ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S2) δ: 194.53, 142.35, 139.00, 137.46, 132.98, 130.78, 129.48, 129.16, 128.28, 127.88, 126.36, 117.58, 113.13, 112.84, 48.44, 39.99, 28.88; HRMS (ESI) (Figure S3): m/z: calculated for $C_{24}H_{19}N_3NaO_3S$ is 452.1045 found 452.1099 $[M+Na]^+$.

N-(4-(4,4-dicyano-3-(4-methoxyphenyl)butanoyl)phenyl)benzenesulfonamide (**3b**)

White solid; (yield 0.46 g, 81%); mp: 191–193 °C; Rf 0.45 (30% EtOAc:Hexane); IR: 2966 (Ar C-H str), 1590 (C=O str), 1464 (asymm. S=O str) 1228 (symm S=O str) cm^{-1}; ^{1}H NMR (500 MHz, DMSO-d_6) (Figure S4) δ: 7.87–7.83 (m, 4H, Ar-H), 7.64–7.61 (m, 1H, Ar-H), 7.58–7.55 (m, 2H, Ar-H), 7.35–7.33 (m, 2H, Ar-H), 7.21–7.19 (m, 2H, Ar-H), 6.91–6.89 (m, 2H, Ar-H), 5.13 (d, 1H, J = 6.0 Hz, H_1), 4.00 (dd, 1H, J = 12.92 Hz, 7.55 Hz, H_2), 3.94

(dd, 1H, J = 17.05 Hz, 7.9 Hz, H_3), 3.67 (dd, 1H, J = 17.8 Hz, 11.95 Hz, H4); ^{13}C NMR (125 MHz, DMSO-d_6) (Figure S5) δ: 194.40, 159.00, 143.39, 142.78, 136.49, 130.83, 129.55, 129.43, 129.29, 129.15, 126.64, 117.66, 113.79, 113.14, 112.96, 54.80, 40.16, 38.84, 29.21; HRMS (ESI) (Figure S6): m/z: calculated for $C_{25}H_{21}N_3NaO_4S$ is 459.1253, found 459.3528 $[M+Na]^+$.

N-(4-(3-(4-chlorophenyl)-4,4-dicyanobutanoyl)phenyl)benzenesulfonamide (**3c**)

White solid; (yield 0.50 g, 82%); mp: 182–183 °C; Rf 0.36 (30% EtOAc:Hexane); IR: 3333 (N-H str), 2879 (Ar C-H str), 1674 (C=O str), 1328 (asymm. S=O str), 1158 (symm. S=O str) cm^{-1}; ^{1}H NMR (500 MHz, DMSO-d_6) (Figure S7) δ: 10.97 (s,1H, NH), 7.85–7.56 (m, 7H, Ar-H), 7.45–7.20 (m, 6H, Ar-H), 5.17 (d,1H, J = 5.36 Hz, H_1), 4.02 (m, 1H, H_2), 3.70–3.76 (m, 2H, H_3, H_4) ^{13}C NMR (125 MHz, DMSO-d_6) (Figure S8) δ: 194.85, 142.75, 139.28, 136.91, 133.50, 133.06, 130.27, 129.94, 129.63, 128.73, 126.82, 117.96, 113.43, 113.13, 46.11, 39.29, 29.18; HRMS (ESI) (Figure S9): m/z: calculated for $C_{24}H_{18}ClN_3NaO_3S$ is 486.0655 found 486.0478 $[M+Na]^+$ and 488.0465 $[M+Na+2]^+$.

N-(4-(3-(4-bromophenyl)-4,4-dicyanobutanoyl)phenyl)benzenesulfonamide (**3d**)

White solid; (yield 0.51 g, 82%); mp: 23–212 °C; Rf 0.55 (30% EtOAc:Hexane); IR: 3335 (N-H str), 2963 (Ar C-H str), 1603 (C=O str), 1329 (asymm. S=O str), 1158 (symm. S=O str) cm^{-1}; ^{1}H NMR (400 MHz, DMSO-d_6) (Figure S10) δ: 7.86–7.83 (m, 4H, Ar-H), 7.66–7.61 (m, 1H, Ar-H), 7.58–7.56 (m, 3H, Ar-H), 7.41–7.39 (m, 2H, Ar-H), 7.22–7.20 (m, 3H, Ar-H), 5.20 (d, 1H, J = 6.0 Hz, H_1), 4.00 (d, J = 0.92 Hz, 1H, H_2), 3.73 (dd, 1H, J = 17.95, 9.45 Hz, H_3), 3.49 (dd, 1H, J = 17.95, 12.25 Hz, H_4); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S11) δ: 193.98, 142.47, 132.93, 129.55, 128.84, 128.12, 126,38, 118.45, 45.95, 39.85, 26.08; HRMS (ESI) (Figure S12): m/z: calculated for $C_{24}H_{18}BrN_3NaO_3S$ is 530.0150 found 531.0126 $[M+Na]^+$ and 532.0155 $[M+Na+2]^+$.

N-(4-(4,4-dicyano-3-(3,4,5-trimethoxyphenyl)butanoyl)phenyl)benzene-sulfonamide (**3e**)

White solid; (yield 0.62 g, 96%); mp: 187–188 °C; Rf 0.55 (30% EtOAc:Hexane); IR: 3188 (N-H str), 2966 (Ar C-H str), 1588, (C=O str), 1329, (asymm. S=O str), 1125 (symm. S=O str) cm^{-1}; ^{1}H NMR (400 MHz, DMSO-d_6) (Figure S13) δ:7.74–7.72 (m, 1H, Ar-H), 7.55–7.36 (m, 5H, Ar-H), 7.26–7.24 (m, 1H, Ar-H), 6.92 (d, J = 8.56 Hz, 1H, Ar-H), 6.82 (s, 1H, Ar-H), 6.66 (d, J = 8.72 Hz, 1H, Ar-H), 6.57 (s, 1H, Ar-H), 5.60 (s, 1H, H_1), 4.49 (d, J = 11.76 Hz, 1H, H_2), 4.23 (d, J = 11.76 Hz 1H, H_3), 4.3 (dd, J = 12.62 Hz, 3.28 Hz, 1H, H_4), 3.82 (s, 6H, 2(MeO)), 3.70 (s, 3H, MeO); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S14) δ: 197.33, 152.64, 140.52, 139.48, 137.66, 136.61, 132.43, 130.27, 129.76, 128.16, 126.23, 125.79, 120.16, 114.36, 113.80, 36.19, 59.93, 55.84, 55.44, 44.31, 38.95, 22.92; CHN Analysis: Anal. calcd for $C_{27}H_{25}BrN_3O_6S$ (519.14): C, 62.42; H, 4.85; N, 8.09%. Found: C, 62.39; H, 4.83; N, 8.08.

N-(4-(3-(2-chlorophenyl)-4,4-dicyanobutanoyl)phenyl)benzenesulfonamide (**3f**)

White solid; (yield 0.43 g, 75%); mp: 181–182 °C; Rf 0.55 (30% EtOAc:Hexane); IR: 3270 (N-H str), 2899 (Ar C-H str), 1663 (C=O str), 1358 (asymm. S=O str), 1156 (symm. S=O str) cm^{-1}; ^{1}H NMR (400 MHz, DMSO-d_6) (Figure S15) δ: 3.82 (s, 1H, NH), 7.85–7.83 (m, 4H, Ar-H), 7.61–7.57 (m, 2H, Ar-H), 7.54–7.51 (m, 2H, Ar-H), 7.49–7.44 (m, 1H, Ar-H) 7.35–7.28 (m, 2H, Ar-H), 7.24–7.22 (m, 2H, Ar-H), 5.21 (brs,1H, H_1), 4.54 (d, 1H, J = 6.00 H_2), 3.75 (dd, 1H, J = 18.06, 8.36 Hz, H_4), 3.62 (dd, 1H, J = 18.04, 5.06 Hz, H_3); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S16) δ: 194.06, 142.73, 139.36, 135.15, 133.97, 132.87, 130.73, 129.63, 129.48, 129.44, 129.06, 128.08, 127.41, 126.58, 117.77, 112.51, 40.22, 36.11, 27.75; CHN Analysis: Anal. calcd for $C_{24}H_{18}ClN_3O_3S$ (493.93): C, 62.13; H, 3.91; 9.06%. Found: C, 62.02; H, 3.84; N, 8.96%.

N-(4-(4,4-dicyano-3-p-tolylbutanoyl)phenyl)benzenesulfonamide (**3g**)

White solid; (yield 0.38 g, 70%); mp: 191–192 °C; Rf 0.4 (30% EtOAc:Hexane); IR: 3333 (N-H str), 2881 (Ar C-H str), 1677 (C=O str), 1399 (asymm. S=O str), 1157 (symm. S=O str) cm^{-1}; ^{1}H NMR(400 MHz, DMSO-d_6) (Figure S17) δ: 3.85 (s, 1H, NH), 7.85–7.83 (m, 4H,

Ar-H), 7.61–7.51 (m, 3H, Ar-H), 7.32–7.30 (m, 2H, Ar-H), 7.24–7.22 (m, 2H, Ar-H) 7.16–7.14 (m, 2H, Ar-H), 5.12 (d, 1H, J = 5.64 Hz, H_1), 3.94 (d, 1H, J = 3.88 Hz H_2), 3.66 (dd, 1H, J = 18.04 Hz, 8.00 Hz, H_4), 3.47 (dd, 1H, J = 17.88 Hz, 6.00 Hz, H_3), 2.29 (s, 3H, Me); ^{13}C NMR (30 MHz, DMSO-d_6) (Figure S18) δ: 194.48, 142.67, 139.37, 137.42, 134.46, 132.89, 129.94, 129.46, 129.09, 129.04, 127.87, 126.58, 117.79, 113.12, 112.82, 40.21, 38.96, 29.04, 20.63; CHN Analysis: Anal. calcd for $C_{25}H_{21}N_3O_3S$ (443.52): C, 67.70; H, 4.77; N, 9.47%. Found: C, 67.54; H, 4.66; N, 9.44%.

N-(4-(4,4-dicyano-3-(4-methoxyphenyl)butanoyl)phenyl)4-methylbenzene-sulfonamide (**3h**)

White solid; (yield 0.49 g, 84%); mp: 162–164 °C; Rf 0.57 (30% EtOAc:Hexane); IR: 3458 (N-H str), 2966 (Ar C-H str), 1671 (C=O str), 1305 (asymm. S=O str), 1151 (symm. S=O str) cm^{-1}; ^{1}H NMR(400 MHz, DMSO-d_6) (Figure S19) δ: 3.74 (s, 1H, NH), 7.84–7.80 (m, 2H, Ar-H), 7.77–7.71 (m, 2H, Ar-H), 7.40–7.30 (m, 4H, Ar-H), 7.23–7.18 (m, 2H, Ar-H) 6.89–6.83 (m, 2H, Ar-H), 5.3 (d, 1H, J = 5.84 Hz, H_1), 3.93 (dd, 1H, J = 12.74 Hz, 6.96 Hz, H_2), 3.75 (s, 3H, MeO), 3.70–3.62 (m, 1H, H_4), 3.46 (dd, 1H, J = 17.8 Hz, 11.8 Hz, H_3), 2.34 (s, 3H, Me); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S20) δ: 194.49, 159, 143.39, 142.78, 136.49, 130.83, 129.55, 129.48, 129.29, 129.15, 126.64, 117.66, 113.79, 113.14, 112.84, 54.87, 40.21, 38.96, 29.17, 20.97; CHN Analysis: Anal. calcd for $C_{26}H_{23}N_3O_4S$ (473.54): C, 65.95; H, 4.90; N, 8.87%. Found: C, 65.85; H, 4.86; N, 8.87%.

N-(4-(3-(4-chlorophenyl)-4,4-dicyanobutanoyl)phenyl)-4-methylbenzene-sulfonamide (**3i**)

White solid; (yield 0.51 g, 86%); mp: 178–179 °C; Rf 0.67 (30% EtOAc:Hexane); IR: 3443, (N-H str), 2968 (Ar C-H str), 1678 (C=O str), 1333 (asymm. S=O str), 1160, (symm. S=O str) cm^{-1}; ^{1}H NMR(400 MHz, DMSO-d_6) (Figure S21) δ: 3.72 (s, 1H, NH), 7.83–7.81 (m, 2H, Ar-H), 7.73–7.71 (m, 2H, Ar-H), 7.46–7.44 (m, 2H, Ar-H), 7.37–7.36 (m, 2H, Ar-H) 7.31–7.29 (m, 2H, Ar-H), 7.23–7.21 (m, 2H, Ar-H), 5.15 (d, 1H, J = 6.08 Hz, H_1), 4.01 (d, 1H, J = 6.56 Hz, H_2), 3.68 (dd, 1H, J = 17.96 Hz, 9.96 H_4), 3.51 (dd, 1H, J = 17.96 Hz, 12.36 Hz, H_3), 2.35 (s, 3H, Me); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S22) δ: 194.15, 143.34, 142.85, 136.46, 136.28, 133.22, 130.66, 129.76, 129.47, 129.38, 128.43, 126.62, 117.62, 112.79, 112.52, 40.22, 38.97, 28.74, 20.98; CHN Analysis: Anal. calcd for $C_{25}H_{20}ClN_3O_3S$ (477.96): C, 62.82; H, 4.22; N, 8.79%. Found: C, 62.64; H, 4.39; N, 8.57%.

N-(4-(3-(4-bromophenyl)-4,4-dicyanobutanoyl)phenyl)4-methylbenzene-sulfonamide (**3j**)

White solid; (yield 0.57 g, 88%); mp: 192–194 °C; Rf 0.5 (30% EtOAc:Hexane); IR: 3450(N-H str), 2966 (Ar C-H str), 1679 (C=O str), 1295, (asymm. S=O str), 1161 (symm. S=O str) cm^{-1}; ^{1}H NMR(400 MHz, DMSO-d_6) (Figure S23) δ: 3.71 (s, 1H, NH), 7.83–7.81 (m, 2H, Ar-H), 7.73–7.71 (m, 2H, Ar-H), 7.52–7.50 (m, 2H, Ar-H), 7.40–7.48 (m, 2H, Ar-H) 7.31–7.29 (m, 2H, Ar-H), 7.23–7.21 (m, 2H, Ar-H), 5.15 (d, 1H, J = 6.24 Hz, H_1), 3.99 (dd, 1H, J = 13.46 Hz, 7.12 Hz, H_2), 3.67 (dd, 1H, J = 17.98 Hz, 9.96 Hz, H_4), 3.50 (dd, 1H, J = 18.06 Hz, 12.32 Hz, H_3), 2.35 (s, 3H); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S24) δ: 194.09, 143.32, 142.85, 136.7, 136.44, 131.36, 130.61, 129.44, 129.35, 126.6, 121.64, 112.73, 112.47, 40.23, 38.98, 28.63, 21.00; CHN Analysis: Anal. calcd for $C_{25}H_{20}BrN_3O_3S$ (522.41): C, 57.48; H,15.30; N, 8.04%. Found: C, 57.21; H, 3.52; N, 7.89%.

N-(4-(4,4-dicyano-3-(4-isopropylphenyl)butanoyl)phenyl)-4-methylbenzene-sulfonamide (**3k**)

White solid; (yield 0.48 g, 80%); mp: 175–176 °C; Rf 0.42 (30% EtOAc:Hexane); IR: 3450 (N-H str), 2966 (Ar C-H str), 1682 (C=O str), 1294 (asymm. S=O str), 1160 (symm. S=O str) cm^{-1}; ^{1}H NMR (400 MHz, DMSO-d_6) (Figure S25) δ: 3.76 (s, 1H, NH), 7.85–7.83 (m, 2H, Ar-H), 7.73–7.71 (m, 2H, Ar-H), 7.36–7.30 (m, 4H, Ar-H), 7.23–7.20 (m, 4H, Ar-H), 5.14 (d, 1H, J = 5.80 Hz, H_1), 3.95 (dd, 1H, J = 12.64 Hz, 6.48 Hz, 1H, H_2), 3.68 (dd, 1H, J = 18.00 Hz, 3.24 Hz, 1H, H_3) 3.50 (dd, 1H, J = 17.94 Hz, 11.92 Hz, H_4), 2.87 (sept, 1H, J = 6.88 Hz, $CH(CH_3)_2$), 2.34 (s, 3H, Me), 1.20 (d, 6H, J = 6.88 Hz, $CH(CH_3)_2$); ^{13}C NMR (100 MHz, DMSO-d6) (Figure S26) δ: 194.48, 148.2, 143.4, 142.78, 136.46, 134.83, 130.78, 129.57, 127.94, 126.65, 126.39, 117.62, 113.13, 112.87, 40.19, 38.94, 33.06, 29.03, 23.93, 20.98; CHN Analysis:

Anal. calcd for $C_{28}H_{27}N_3O_3S$ (485.60): C, 69.26; H, 5.60; N, 8.65%. Found: C1, 69.03; H, 5.39; N, 8.42%.

N-(4-(3-(2-chlorophenyl)-4,4-dicyanobutanoyl)phenyl)-4-methylbenzene-sulfonamide (**3l**)

White solid; (yield 0.50 g, 85%); mp: 182–184 °C; Rf 0.53 (30% EtOAc:Hexane); IR: 3458 (N-H str), 2966 (Ar C-H str), 1663 (C=O str), 1342 (asymm. S=O str), 1158 (symm. S=O str) cm^{-1}; ^1H NMR(400 MHz, DMSO-d_6) (Figure S27) δ: 3.79 (s, 1H, NH), 7.85–7.83 (m, 2H, Ar-H), 7.73–7.71 (m, 2H, Ar-H), 7.61–7.59 (m, 1H, Ar-H), 7.49–7.47 (m, 1H, Ar-H) 7.36–7.30 (m, 2H, Ar-H), 7.22–7.20 (m, 2H, Ar-H), 5.24 (d, 1H, J = 5.56 Hz, H_1), 4.54 (s,1H, H_2), 3.77 (dd, 1H, J = 22.08 Hz, 8.48 Hz H_4), 3.59 (dd, 1H, J = 18.08 Hz, 5.44 Hz, H_3), 2.34 (s, 3H, Me); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S28) δ: 194.11, 143.46, 142.82, 136.43, 135.22, 133.97, 130.62, 129.62, 129.55, 129.5, 128.13, 127.47, 126.67, 117.61, 112.61, 40.19, 36.08, 27.82, 20.97; CHN Analysis: Anal. calcd for $C_{25}H_{20}ClN_3O_3S$ (477.96): C, 62.82; H, 4.22;N, 8.79%. Found: C, 62.54; H, 3.98; N, 8.51%.

N-(4-(4,4-dicyano-3-p-tolylbutanoyl)phenyl)-4-methylbenzenesulfonamide (**3m**)

White solid; (yield 0.44 g, 77%); mp: 167–168 °C; Rf 0.48 (30% EtOAc:Hexane); IR: 3432 (N-H str), 2973 (Ar C-H str), 1682 (C=O str), 1334 (asymm. S=O str), 1162 (symm. S=O str) cm^{-1}; ^1H NMR(400 MHz, DMSO-d_6) (Figure S29) δ: 3.75 (s, 1H, NH), 7.84–7.82 (m, 2H, Ar-H), 7.73–7.71 (m, 2H, Ar-H), 7.35–7.30 (m, 4H, Ar-H), 7.22–7.18 (m, 2H, Ar-H), 7.16–7.14 (m, 2H, Ar-H), 5.13 (d, 1H, J = 6.12, Hz, H_1), 3.95 (dd, 1H, J = 6.16 Hz, 7.52 Hz, H_2), 3.67 (dd, 1H, J = 17.95, Hz 7.96 Hz, H_4), 3.49 (dd, 1H, J = 17.90 Hz, 6.04 Hz, H_3), 2.34 (s, 3H, Me), 2.29 (s, 3H, Me); ^{13}C NMR (100 MHz, DMSO-d6) (Figure S30) δ: 194.42, 143.38, 142.77, 137.42, 136.44, 134.43, 130.78, 129.53, 129.42, 129.02, 127.86, 126.64, 117.62, 113.08, 112.78, 40.2, 38.95, 29.02, 20.98, 20.63; CHN Analysis: Anal. calcd for $C_{26}H_{23}N_3O_3S$ (457.54): C, 68.25; H, 5.07; N, 9.18%. Found: C, 68.02; H, 5.21; N, 8.98%.

N-(4-(3-(3-chlorophenyl)-4,4-dicyanobutanoyl)phenyl)-4-methylbenzene-sulfonamide (**3n**)

White solid; (yield 0.53 g, 90%); mp: 183–184 °C; Rf 0.52 (30% EtOAc:Hexane); IR: 3462 (N-H str), 1667 (C=O str), 1303 (asymm. S=O str), 1154 (symm. S=O str) cm^{-1}; ^1H NMR (400 MHz, DMSO-d_6) (Figure S31) δ: 3.81 (s, 1H, NH), 7.86–7.84 (m, 2H, Ar-H), 7.74–7.72 (m, 2H, Ar-H), 7.54 (s, 1H, Ar-H), 7.42–7.30 (m, 5H, Ar-H), 7.23–7.21 (m, 2H, Ar-H), 5.26 (br s, 1H, H_1), 4.03 (t, 1H, J = 6.68, Hz, H_2), 3.73 (dd, 1H, J = 18.3 Hz, 3.0 Hz, H_4), 3.53 (dd, 1H, J = 17.9 Hz, 11.96 Hz, H_3), 2.35 (s, 3H, Me); ^{13}C NMR (100 MHz, DMSO-d_6) (Figure S32) δ: 194.21, 143.38, 142.9, 139.95, 136.46, 133.41, 130.63, 130.08, 129.53, 129.49, 128.16, 28.3, 126.65, 117.6, 112.76, 40.19, 38.94, 28.71, 20.98; CHN Analysis: Anal. calcd for $C_{25}H_{20}ClN_3O_3S$ (477.96): C, 62.82; H, 4.22; N, 8.79%. Found: C, 62.54; H, 4.01; N, 8.51%.

2.1.2. Biological Activity

Microfilariae Collection

The model animals *Meriones unguiculatus* (jirds) and *Mastomys natelansis* (mastomys) were used in this study to ensure patency of the filarial infection as per the guidelines of the Committee for the Purpose and Control of Experimental Animals. Microfilariae (Mf) were obtained by lavage of the peritoneal cavities of jirds with an intra-peritoneal filarial infection of 3 months or more duration. The collected Mf were washed with RPMI-1640 medium (ThermoFisher Scientific, Branchburg, NJ, USA) (containing 20 g/mL gentamycin, 30 g/mL penicillin, and 30 g/mL streptomycin), plated on sterile plastic Petri dishes, and incubated at 37 °C for 1 h to remove peritoneal exudate cells. The recovered Mf were then repeatedly washed using RPMI-1640 with antibiotics and used for in vitro experiments [14].

In Vitro Screening of Compounds for Antifilarial Activity

The efficacy of the compounds used to affect Mf viability in vitro was assessed by the extent of parasite motility. A stock solution of 2 mM concentration in DMSO was prepared for each chalcone derivative. Further dilutions were made in sterile isotonic sodium

chloride solution to obtain a desired final concentration in the 0.5–500 µM range. The highest concentration of DMSO used with the compounds was <1%. Hence, 1% DMSO was used as a comparable vehicle control. Staurosporine (20 µM, standard apoptosis inducer) (Millipore Sigma, Darmstadt, Germany) was used as a positive control [15]. Approximately 300 Mf in 300 µL sodium chloride solution were introduced into each vial for each test drug (over a dose range of 1–30 µM) along with the vehicle control and incubated on a shaking incubator (Scigenics Biotech, India) at 37 °C for 30 min at 150 rpm. After incubation, the Mf were washed with RPMI-1640 medium and 30 Mf were plated in each well (each individual sample in triplicate) of sterile 24-well culture plates (Nunc, Denmark) containing 300 µL of RPMI-1640 medium. The plates were re-incubated at 37 °C for 48 h in a 5% CO_2 incubator (pre-optimized conditions). Mf motility was assessed by microscopy (Nikon Diaphot, TMD inverted microscope, Tokyo, Japan). Each experiment was repeated thrice to check reproducibility. Percent inhibition in terms of loss of motility was determined as described earlier [13]. We selected IC_{100} for an effective antifilarial molecule to ensure the proposed complete apoptotic effect.

Determination of Lethal Dose of Chalcone Derivatives

The cytotoxicity of the chalcone derivative was evaluated by a trypan blue dye exclusion assay. Peripheral blood mononuclear cells (1×10^6 cells/mL) derived from healthy human volunteers with informed consent were exposed to varying concentrations of compounds for 48 h followed by a 1 min incubation with trypan blue (0.2 mg/mL). The cells were observed under a Nikon light microscope (Tokyo, Japan), and the viable cell ratio was calculated by counting the stained and unstained cells separately. Viable cells do not take up trypan blue, while non-viable cells with porous membranes stain blue. The cytotoxicity of compounds was evaluated, and the 50% cytotoxic concentration (CC_{50}) was determined [13].

Molecular Docking Studies

Since the three-dimensional structure of the *B. malayi* DHFR protein is not available in the Protein Data Bank (PDB), homology-dependent modeling was used to construct a three-dimensional protein structure using a homologous template protein (FZJ_A protein; GI:122920266), and structure validation was performed using ProSa-web, as previously described [16]. For molecular docking, a PDB file of the template protein was used. The molecular structure of the ligands was drawn using an online small-molecule topology generator (The GlycoBioChemPRODRG2 Server), after which molecular docking was performed using the AutoDock tool version 4.2. Consequently, the free energy levels of binding and inhibition constants were derived from the software-mediated analysis of the molecular docking.

DHFR Enzyme Assay

For the enzyme assay, all reagents were freshly prepared. DHFR activity was measured in the homogenate prepared from the untreated parasite. Mf extract was obtained by homogenizing the Mf in buffer A (0.5 mol/L Tris buffer, pH 7.5) containing a protease inhibitor cocktail (Sigma Aldrich, India) in a Remi type RQ127A homogenizer (Maharashtra, India). The homogenate was centrifuged at 5000× *g* for 20 min at 4 °C to remove debris and the resulting supernatant was further centrifuged at 30,000× *g* for 60 min at 4 °C. The supernatant containing the DHFR enzyme was collected and used for the enzyme assay.

Folic acid (FH_2) stock solution (25 mg in 1.5 mL of 2-mercaptoethanol and 6.0 mL buffer A) was diluted in buffer B (0.05 mol/L Tris buffer, pH 7.5), yielding a final reaction solution of 0.34 g/L. The NADPH/DHFR reaction solution consisted of 0.4 mL NADPH stock solution (50 mg in 3 mL buffer A) and 0.8 mL Mf supernatant. FH_2 reaction solution (130 µL) was added to each well of the 96-well flat-bottom plate. In the test well, compound **3g** (20 µL diluted in buffer B) was added at a final concentration of 38 µM in the reaction mixture. A control well was used that was devoid of any drug. The microplate was shaken

on a plate shaker for 1 min; then NADPH/DHFR reaction solution (50 µL) was added to each well, and the microplate was shaken again on a plate shaker for 1 min. The absorbance of each well was read in a microplate reader (Agilent Synergy HTX Multi-Mode Reader, CA, USA) at 37 °C at 340 nm and 490 nm (reference) using a kinetic mode with a reading interval of 20 s for a duration of 18 min [17].

Folate Reversal Studies

Mf was pre-treated with 30 mM folic acid in RPMI-1640 medium for 1 h at 37 °C. Control Mf was incubated in RPMI-1640 medium only. After the incubation, the control and folic acid-pre-treated Mf were washed with RPMI-1640 medium and treated with **3g** at its IC_{90} concentration (34 µM) as described above. We used IC_{90} in this experiment because IC_{100} may permanently and irreversibly predispose Mf to apoptosis, which may not be suitable for observing the reversal of the antifilarial effect. The Mf were incubated for 48 h in 5% CO_2 at 37 °C. Mf motility was assessed by microscopy.

MTT Assay

The control and **3g**-treated Mf (at IC_{100} concentration) were washed with 0.05 M phosphate-buffered saline (PBS, pH 7.2). The Mf were incubated in 30 µL of PBS containing 0.5 mg/mL MTT (Sigma Aldrich). After 2 h incubation, the Mf were washed by centrifugation, and DMSO was added to the Mf pellet to dissolve dark blue crystals of formazan. The mixture was transferred to a 96-well microtiter plate and read at 595 nm using DMSO as a blank [18].

Acridine Orange–Ethidium Bromide (AO/EB) Staining for Determination of Apoptosis

Dual staining with AO/EB was performed according to the standard protocol [13]. The dye mix consisted of 30 µg/mL AO and 30 µg/mL EB in phosphate-buffered saline. The Mf (negative control as well as Mf treated with **3g** or staurosporine for 48 h) were washed and re-suspended in 25 µL cold PBS, followed by the addition of 5 µL AO/EB dye mix. The stained Mf were viewed under a fluorescence microscope (Nikon E600 Fluorescence microscope, Tokyo, Japan) with the excitation filter set at 480/30 nm and the barrier filter at 535/40 nm.

Cytochrome c ELISA

Vehicle- or compound-treated Mf were lysed with RIPA buffer (Himedia Laboratories Pvt Ltd., Maharashtra, India) for 1 h in the presence of protease inhibitors. The Mf lysates were centrifuged at 300× *g* for 3 min at 4 °C to remove cell debris, and the supernatants were centrifuged at 16,000× *g* for 20 min at 4 °C to pellet mitochondria and obtain a post-mitochondrial supernatant fraction.

The cytochrome c ELISA kit (Invitrogen, Maharashtra, India) was used to estimate cytochrome c protein content in the post-mitochondrial supernatant fraction as per the manufacturer's instructions. Measurements were performed in duplicate, and the cytochrome c content was analyzed at 450 nm.

2.1.3. Statistical Analysis

All experiments were performed in triplicate and the results are expressed as mean ± SD. Statistical significance was calculated using Student's *t* test using SPSS version 16.0 (IBM, Armonk, NY, USA). The level of α error was limited to 5%.

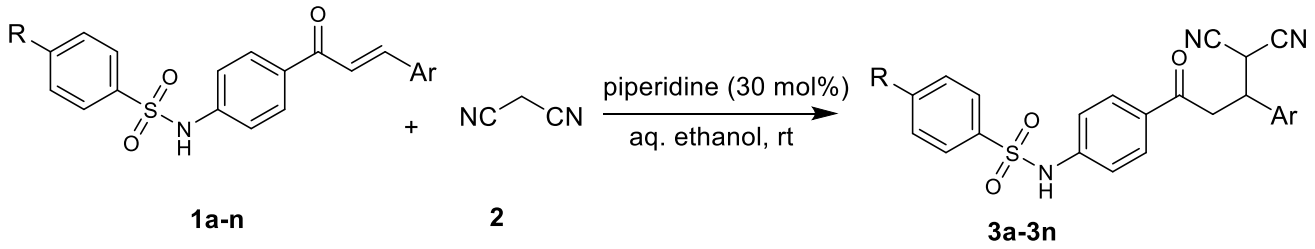
3. Results and Discussion

3.1. Chemistry

The synthesis of Michael adducts was achieved by the reaction of sulfonamide chalcones **(1a-1n)** with compound **2** in moderate to high yields (70–96%) (Table 1). It has been observed that the substitution of the phenyl ring linked with β carbon of the double bond of reactant **1** has an influence on the rate of reaction. The electron-donating substituent

posed some challenges, and lengthened the reaction time, while the electron-withdrawing substituent reduced the reaction time.

Table 1. Synthesis of Michael adducts (**3a-3n**).



1a-n **2** **3a-3n**

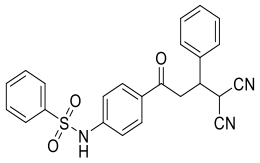
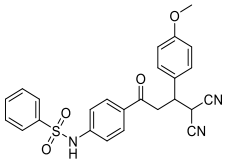
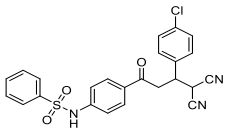
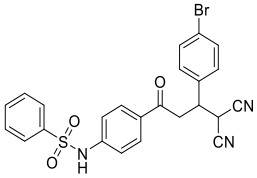
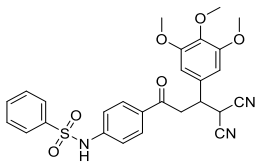
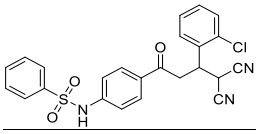
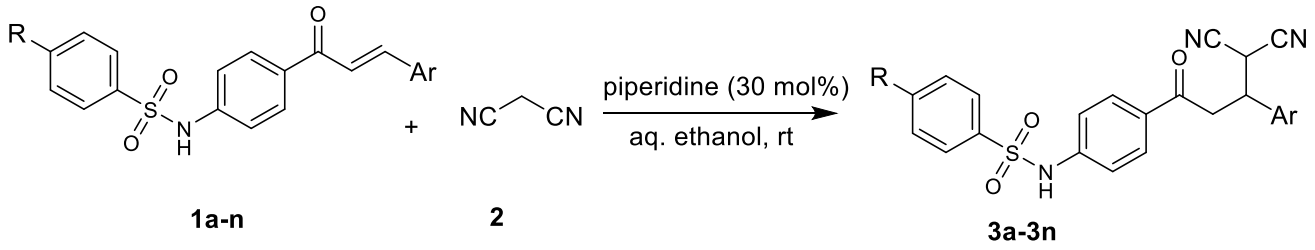
Entry	R	Ar	Product	Time (min)	Yield (%)	Mp (°C)
3a	H	-Ph		15	94	179–180
3b	H	-4-MeO-C_6H_4		20	81	191–193
3c	H	-4-Cl-C_6H_4		5	87	182–183
3d	H	-4-Br-C_6H_4		5	82	210–212
3e	H	-4-$(MeO)_3$-C_6H_2		30	96	187–188
3f	H	-2-Cl-C_6H_4		5	75	181–182

Table 1. *Cont.*



1a-n **2** **3a-3n**

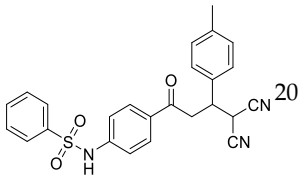
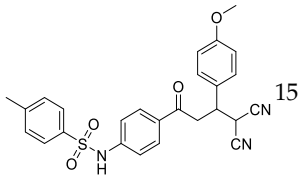
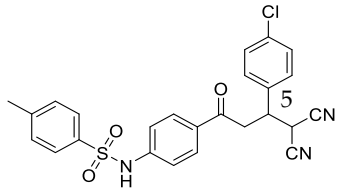
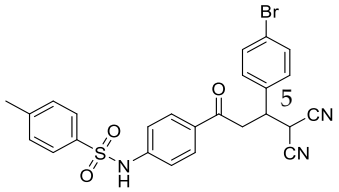
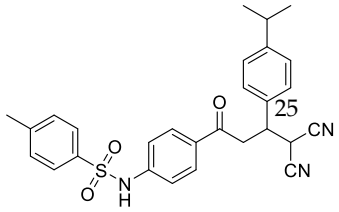
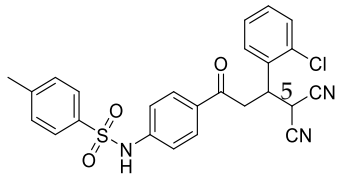
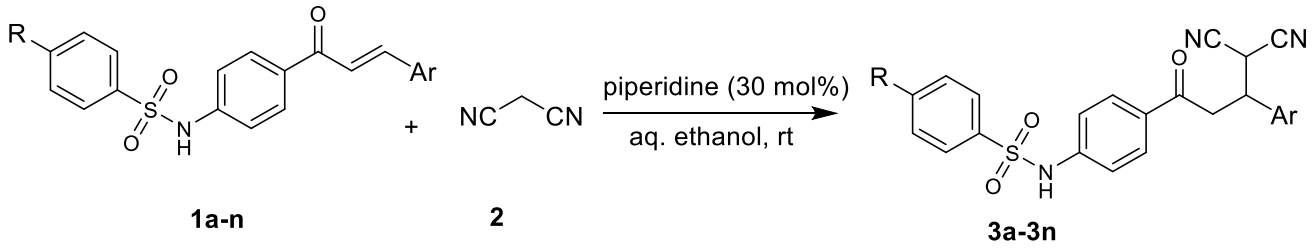
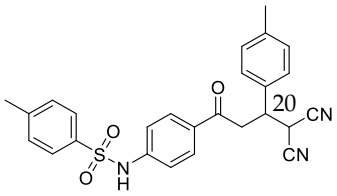
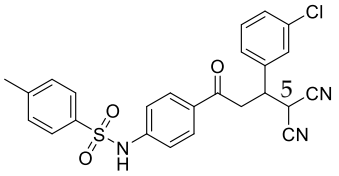
Entry	R	Ar	Product	Time (min)	Yield (%)	Mp (°C)
3g	H	-4-CH_3-C_6H_4		20	70	191–192
3h	-CH_3	-4-MeO-C_6H_4		15	84	162–164
3i	-CH_3	-4-Cl-C_6H_4		5	86	178–179
3j	-CH_3	-4-Br-C_6H_4		5	88	192–194
3k	-CH_3	-3-iPr-C_6H_4		25	80	175–176
3l	-CH_3	-2-Cl-C_6H_4		5	85	182–183

Table 1. *Cont.*



Entry	R	Ar	Product	Time (min)	Yield (%)	Mp (°C)
3m	-CH_3	-4-CH_3-C_6H_4		20	77	167–168
3n	-CH_3	-3-Cl-C_6H_4		5	90	183–184

The structures of the newly synthesized Michael adducts were characterized by IR, ^{1}H, ^{13}**C**, mass spectrometric and elemental analysis. The IR spectrum clearly indicates that N-H stretching at the absorption band was observed around 3200 cm^{-1}, while a characteristic stretching frequency was observed at 2200–2250 cm^{-1} due to cyano groups. Characteristic symmetric and asymmetric stretching of the -SO_2NH group were also observed around 1380 and 1350 cm^{-1}, respectively. In the ^{1}H spectrum, a broad singlet of N-H was observed around δ 3.8. There was a doublet around δ 6.0 for the H_1 proton (Figure 1). The H_2 proton resonated as a doublet or multiplets around δ 4.0. The H_3 and H_4 protons resonated as doublets of doublets around δ 3.9 and δ 3.6, respectively. The ^{13}C NMR spectra showed the requisite number of distinct resonances in agreement with the designated structure. The ESI-MS of the compounds showed molecular ion peaks at their respective m/e values.

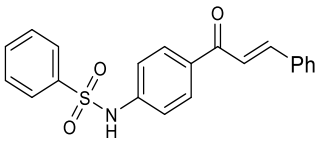
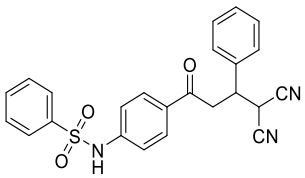
Figure 1. General representation of Michael adducts showing different hydrogens.

3.2. Biology

Chalcones, which are flavonoid metabolites, are expected to target the DHFR protein. Therefore, after minimizing the total interaction energies using a molecular dynamics program (obminimize tool, Open Babel), we studied the interaction of the Michael adducts (MA) of sulfonamide chalcones with *B. malayi* DHFR in silico. We found a measurably better interaction between these than what was observed with the basic structure of the

chalcone compound (Table 2). Therefore, we further explored their effects on *B. malayi* in vitro.

Table 2. In silico structure optimization of chalcone compound.

Compound	Chalcone	Michael Adduct (MA)
Structure		
Free energy of binding (ΔG_b)	−6.93 kcal/Mol	−9.46 kcal/Mol
Inhibition constant (Ki)	8.31 µM	115.69 nM
Hydrogen bonding	Gly116:HN::O:Chalcone	Gly116:HN::OS:MA

3.3. Antifilarial Activity and Cytotoxicity

The present work was designed to evaluate the antifilarial effects of chalcone derivatives and explore a possible antifolate action. The in vitro screening of 14 Michael adducts was performed, of which 4, namely, **3c**, **3g**, **3i**, and **3l**, showed pharmacological activity in terms of 100% loss of motility of all parasites in the culture (Table 3). This is in sharp contrast to DEC, which was shown to have no in vitro effect on the parasite. Other Michael adducts showed outcomes similar to that caused by the vehicle control, exhibiting no microfilaricidal activity up to 500 µM. The lowest IC_{100} value was observed with **3g**; therefore, we selected it for the mechanistic study. The IC_{50} value of **3g** was 23 µM.

Table 3. Antifilarial activity of Michael adducts of sulfonamide chalcone.

Compound	IC_{100}
3c	114 ± 9 µM
3g	38 ± 1 µM
3i	132 ± 4 µM
3l	210 ± 0 µM

The cytotoxicity of **3g** against human PBMCs was assessed by a trypan blue dye exclusion assay. The CC_{50} was 100 µM. These findings confirm the results of previous reports on various chalcone derivatives as potent antifilarial agents [13,19]. The sulfonamide chalcone derivatives used in this study are the products of the Michael addition reaction, reminiscent of the physiological xenobiotics disposal system that operates through glutathione-based Michael adducts [20]. The pharmacological significance of such agents as potential anticancer agents is also evident [21].

3.4. DHFR as a Target

The DHFR enzyme catalyzes the conversion of folic acid into dihydro-folic acid (FH_2) and tetrahydro-folic acid (FH_4), which are the feeders for the thymidine biosynthetic reaction in DNA synthesis. This makes DHFR a very lucrative drug target. As a proof of this principle, the approach to targeting this enzyme is exploited in the development of several antimicrobial and anticancer drugs, such as trimethoprim and methotrexate, respectively [22,23]. DHFR is present in numerous nematodes, including Dirofilariaimmitis, Litomosoides carinii, Dipetalonemaviteae, and Onchocerca volvulus [6]. Due to the paucity of research on *B. malayi*, the proteome database of this parasite lacks details on this protein. However, we found a genetic sequence of the *B. malayi dhfr* gene (EDP2873.1), and confirmed its actual expression as derived from the reported proteomic analysis [24]. In silico

studies have proven DHFR to be a possible target for antifilarial drug development [16]. A similar bioinformatics-based approach was used to analyze the structure–activity relationship. As can be seen, all four compounds showed favorable docking in the nM range against *B. malayi* DHFR (Table 4). The presence of a p-tolyl group (4-Me-C6H4) in **3g** is responsible for the orientation of a sulfonyl group (O=S=O) of **3g** towards the Leu29 of BmDHFR to form a hydrogen bond (Figure 2). In contrast, the replacement of Me from a tolyl group with Cl (4-Cl-C6H4) in **3c** has been found to be responsible for the orientation of the O=S=O of **3c** in an opposite direction to Leu29. In the case of **3i** and **3l**, the presence of a 4-Me group on benzene-sulfonamide (which is absent in **3c** and **3g**) hindered the orientation of the O=S=O group towards Leu29. However, the presence of 2- or 4-chlorophenyl on the 4,4-dicyanobutanoylphenyl of **3c**, **3i**, and **3l** is responsible for these compounds' antifilarial activity. A positive control epicatechin gallate (ECG) showed favorable binding against BmDHFR with a higher inhibition constant in the μM range.

Table 4. Computationally derived free energy of binding and inhibition constant of Michael adducts of sulfonamide chalcones and ECG against BmDHFR target protein homology model.

Compound	ΔGb	Ki	Hydrogen Bonds
3c	−9.58 kcal/Mol	94.52 nM	No H-bond formed
3g	−9.54 kcal/Mol	101.83 nM	NH of Leu29 of BmDHFR: sulfonyl group (O=S=O) of **3g**
3i	−9.87 kcal/Mol	58.61 nM	No H-bond formed
3l	−9.41 kcal/Mol	125.65 nM	No H-bond formed
ECG	−7.82 kcal/Mol	1.84 μM	NH of Leu29 of BmDHFR: H of ECG

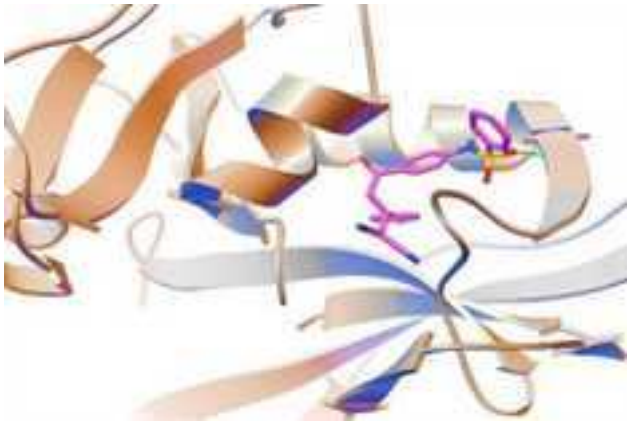


Figure 2. Molecular docking of **3g** with *Brugia malayi* DHFR protein. A p-tolyl group (4-Me-C6H4) directs a sulfonyl group (O=S=O) of **3g** towards Leu 29 of BmDHFR to form a hydrogen bond (green line).

To validate the antifolate activity of **3g**, the DHFR activity in the Mf extract was determined spectrophotometrically using FH_2 as a substrate in the presence of NADPH. As shown in Figure 3, a gradual decrease in absorbance over time was observed in a controlled reaction mixture (control 1) due to the consumption of chromogenic NADPH by active DHFR to convert FH_2 to FH_4. The addition of **3g** to the reaction mixture manifested a line parallel to the horizontal axis over time (a test), indicating the non-utilization of NADPH due to the **3g**-mediated inhibition of the DHFR activity. However, the initial absorbance level in this test is well below the corresponding level for control 1 (represented as a dashed line in Figure 3). To find out whether this is because of a possible interaction between **3g** and NADPH, only these two substrates (without Mf extract) were added in the buffer. The resulting absorbance was subtracted from the corresponding value of control 1 to obtain a second control line (control 2). This secondary control represents the available unbound chromogen (NADPH) in the presence of **3g**.

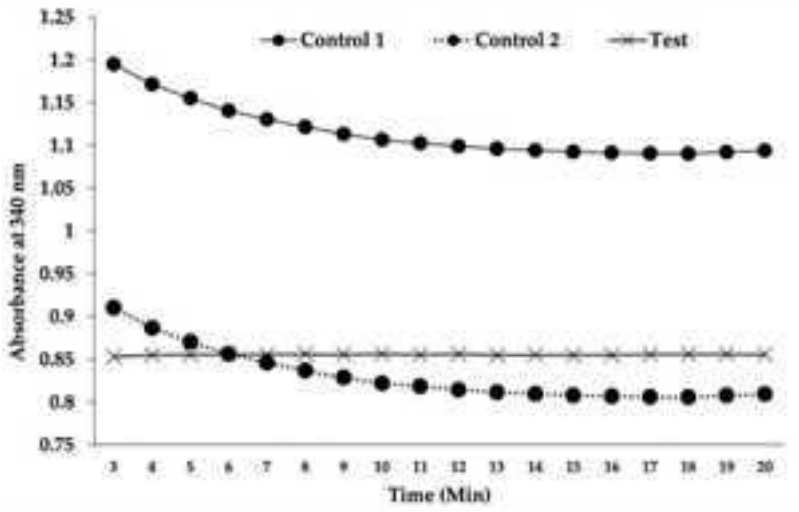


Figure 3. Change in absorbance of the reaction mixture at 340 nm over time. Data were obtained from 3 independent experiments set out to check for reproducibility. Control 1: Reaction mixture without **3g**. Control 2: Corrected control 1 line after deduction of absorbance obtained by drug-mediated hypochromicity of NADPH. **Test**: Reaction mixture with **3g** (38 μM).

As shown in the figure, control 2 had an onset of absorbance equal to that of the test; however, it showed the expected gradual decline in absorbance over time. Therefore, it can be surmised that **3g** inhibits DHFR, as reflected by the trajectory of the higher absorbance by the unutilized NADPH in the test than in control 2 (after correction for the hypochromicity of NADPH due to the possible masking effect of chalcone on the actual absorbance of NADPH). This phenomenon can be attributed to a possible hindrance in absorbance by a purine base of NADPH due to its juxtaposition with the ring structure of chalcone, similar to the hypochromicity emerging due to the base stacking effect of hybridized DNA. This experiment was conducted per the previously described method [17], in which methotrexate was used as the standard DHFR inhibitor. Notably, methotrexate is an effective inhibitor of *B. malayi* DHFR [25,26]. Although the present experiment lacked a positive control (methotrexate), having considered similar procedures utilized in previous studies and in our work, we are confident about the accuracy of our experimental results, and believe that they will be quite reproducible. Based on this mechanistic insight, we will include this positive control in our future studies to develop a more potent and safer anti-filarial derivative.

To further confirm the antifilarial action of **3g** through DHFR inhibition, the possible reversal effect was studied using a DHFR substrate, folic acid. It was observed that folic acid could significantly reverse the antifilarial effect of **3g**. An almost 50% reduction in motility loss was observed in folic acid-pre-treated Mf, followed by **3g** treatment, compared with only **3g**-treated Mf (at IC_{90} dose), which showed the expected 90% loss of motility. This reversal in the presence of the substrate strongly suggests a mechanism of competitive inhibition carried out by the Michael adduct. As mentioned above, chalcones, which are structurally related to flavonoids, are expected to bear a resemblance to folate, a biological DHFR substrate. Therefore, **3g** may act as a competitive inhibitor of DHFR.

3.5. Induction of Apoptosis

During the proliferative phase of the cell cycle, the demand for DNA synthesis increases. In this context, chalcone-induced DHFR inhibition may act as an apoptotic trigger. Therefore, our experimental evidence implies the necessity of detecting apoptosis as a consequence of DNA synthesis failure due to DHFR inhibition. For the detection of **3g**-induced apoptosis, the Mf were stained with EB/AO and observed under a fluorescence microscope (Figure 4). In EB/AO dual staining, AO permeates all cells, making the nuclei appear green, and EB is taken up by the cells only when the cytoplasmic membrane's integrity

is lost, staining the nuclei red. Therefore, viable cells have a normal green nucleus; early apoptotic cells have a bright green nucleus, with condensed or fragmented chromatin; late apoptotic cells show condensed and fragmented orange chromatin; cells directly killed by necrosis have a structurally normal orange nucleus. The Mf treated with staurosporine or **3g** showed orange–yellow fluorescence, indicating a loss of cell membrane integrity due to apoptotic damage. In contrast, the negative control (DMSO-treated Mf) was stained green, which implied an intact cell membrane.

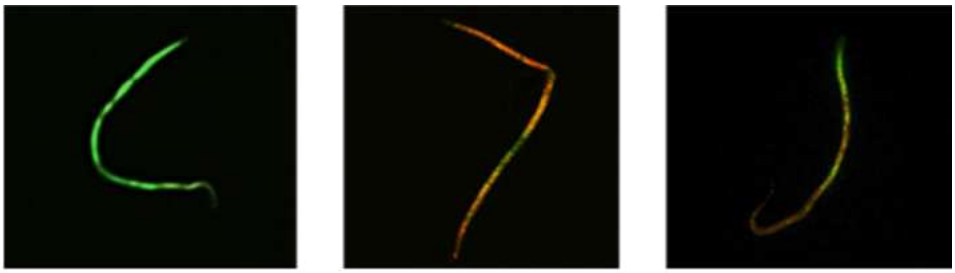


Figure 4. Acridine orange/ethidium bromide differential staining of Mf treated with (**A**) DMSO (a negative control), (**B**) staurosporine (20 µM, a positive control), or (**C**) **3g** (38 µM). Staurosporine or **3g**-treated Mf shows orange–yellow fluorescence, indicating apoptotic damage. In contrast, the DMSO-treated Mf was stained green, which indicates an intact cell membrane.

Further, the MTT assay was performed to assess the **3g**-induced loss of cell viability. There was a 26.3% decrease in the formation of colored formazan in the **3g**-treated Mf (Figure 5). Both these results in congruence suggest the induction of the apoptotic process by this chalcone derivative.

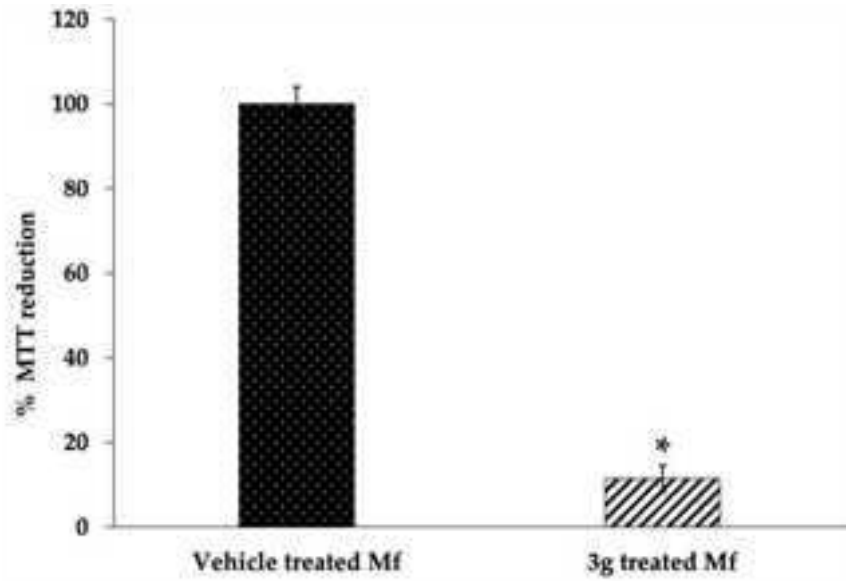


Figure 5. MTT reduction in **3g** (38 µM) treated Mf. Results are shown as mean ± SD. * $p \leq 0.005$.

A determination of cytoplasmic cytochrome c was carried out in order to yield confirmatory evidence of apoptosis. The Mf treated with **3g** or staurosporine showed markedly higher cytoplasmic cytochrome c release than that of the negative control (Figure 6). These results clearly substantiate the premise of apoptosis induction because of mitochondrial damage.

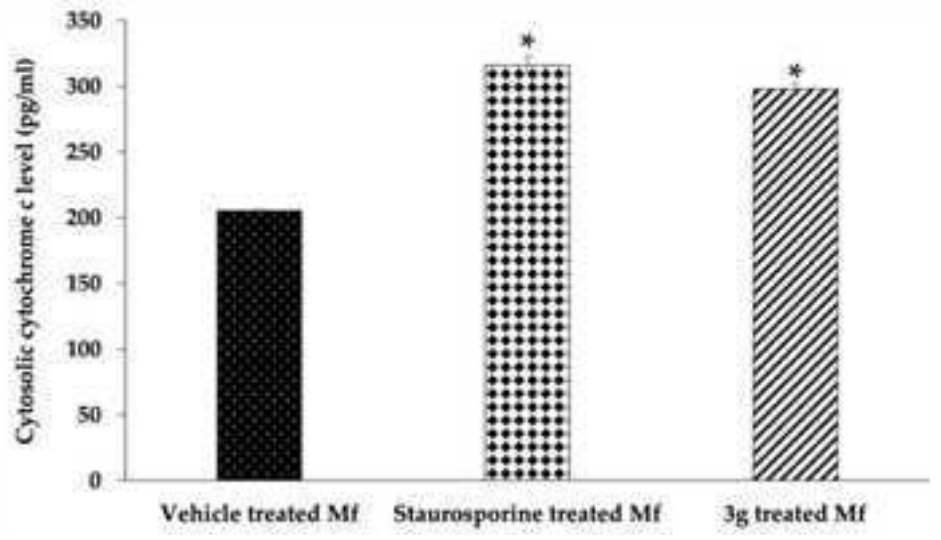


Figure 6. Cytosolic cytochrome c estimation in Mf treated with DMSO (a negative control), staurosporine (20 μM, a positive control), or **3g** (38 μM). Results are shown as mean ± SD. * $p \leq 0.05$ compared to DMSO treated Mf.

The results of the study confirm DHFR inhibition and the consequent apoptosis as the major mode of operation of chalcones against human lymphatic parasites. Based on the experimental findings, the role of the Michael adduct of sulphonamide chalcone as a potential chemotherapeutic agent against LF can be inferred. Future research goals include the further structural optimization of this molecule to increase its therapeutic index, as well as animal studies to establish it as a potent antiparasitic lead molecule.

4. Conclusions

Exploiting apoptotic impact through the structural analogy-based inhibition of DHFR was shown to be a successful method of antiparasitic drug development. The synthesis and characterization of sulfonamide chalcone-based Michael adducts, followed by the demonstration of their apoptotic rationale, reveals their therapeutic potential.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/biomedicines11030723/s1. NMR spectra of synthesized Michael adducts (Figures S1–S32).

Author Contributions: Conceptualization, P.S.B., K.G. and H.C.; data curation, K.G. and H.C.; formal analysis, P.S.B., S.P.B., N.S.T., K.G., N.P.A. and H.C.; funding acquisition, K.G. and H.C.; investigation, P.S.B., S.P.B., S.C., N.S.T., L.J., K.G. and N.P.A.; methodology, P.S.B., S.P.B., S.C., N.S.T., L.J., K.G., N.P.A. and H.C.; project administration, K.G. and H.C.; resources, K.G. and H.C.; software, P.S.B., N.S.T., L.J. and K.G.; supervision, K.G. and H.C.; validation, P.S.B., N.S.T., K.G. and H.C.; visualization, P.S.B., S.P.B., N.S.T., L.J., K.G. and H.C.; writing—original draft, P.S.B., S.P.B., N.S.T., K.G., N.P.A. and H.C.; writing—review and editing, P.S.B., S.P.B., N.S.T., K.G. and H.C. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: Animal experiments were approved by the Institutional Animal Ethics Committee of the Mahatma Gandhi Institute of Medical Sciences (Approval Code: MGIMS/IAEC/July/10/2014. Date: 24 July 2014).

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

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Conflicts of Interest: The authors declare no conflict of interest.

References

1. World Health Organization (WHO). Lymphatic Filariasis. 2022. Available online: https://www.who.int/health-topics/lymphatic-filariasis#tab=tab_1 (accessed on 1 December 2022).
2. Kulkarni, P.; Thomas, J.J.; Dowerah, J.; Narayana Murthy, M.R.; Ravikumar, K. Mass Drug Administration Programme against Lymphatic Filariasis-an Evaluation of Coverage and Compliance in a Northern Karnataka District, India. *Clin. Epidemiol. Glob. Health* **2020**, *8*, 87–90. [CrossRef]
3. Yajima, A.; Ichimori, K. Progress in the Elimination of Lymphatic Filariasis in the Western Pacific Region: Successes and Challenges. *Int. Health* **2020**, *13*, S10–S16. [CrossRef] [PubMed]
4. Tripathi, B.; Roy, N.; Dhingra, N. Introduction of Triple-Drug Therapy for Accelerating Lymphatic Filariasis Elimination in India: Lessons Learned. *Am. J. Trop. Med. Hyg.* **2022**, 29–38. [CrossRef] [PubMed]
5. Behm, C.A.; Bendig, M.M.; McCarter, J.P.; Sluder, A.E. WHO/TDR Scientific Working Group on "RNA Interference as a Means of Identifying Drug Targets for Filariasis Report. 2004. Available online: https://www.semanticscholar.org/paper/For-the-Web-Only-Who%2Ftdr-Scientific-Working-Group-a-Behm-Bendig/e3cd5111be68b7591b9e12a21d75405aa68cccd3 (accessed on 1 December 2022).
6. Gupta, S.; Srivastava, A.K. Biochemical Targets in Filarial Worms for Selective Antifilarial Drug Design. *Acta Parasitol.* **2005**, *1*, 1–8.
7. Peixoto, C.A.; Santos, A.C.O.; Ayres, C.F.J. Molecular Evidence for Apoptosis in Microfilariae of *Wuchereria bancrofti* Induced by Diethylcarbamazine. *Parasitol. Res.* **2008**, *103*, 717–721. [CrossRef]
8. Sharma, R.; Petare, S.; Shinde, G.; Kalyan, G.; Reddy, M. Novel Drug Designing Rationale against *Brugia malayi* Microfilariae Using Herbal Extracts. *Asian Pac. J. Trop. Med.* **2010**, *3*, 846–850. [CrossRef]
9. Tzin, V.; Galili, G. The Biosynthetic Pathways for Shikimate and Aromatic Amino Acids in *Arabidopsis thaliana*. *Arab. Book* **2010**, *8*, e0132. [CrossRef]
10. Navarro-Perán, E.; Cabezas-Herrera, J.; García-Cánovas, F.; Durrant, M.C.; Thorneley, R.N.F.; Rodríguez-López, J.N. The Antifolate Activity of Tea Catechins. *Cancer Res.* **2005**, *65*, 2059–2064. [CrossRef]
11. K Sahu, N.; S Balbhadra, S.; Choudhary, J.; V Kohli, D. Exploring Pharmacological Significance of Chalcone Scaffold: A Review. *Curr. Med. Chem.* **2012**, *19*, 209–225. [CrossRef]
12. Singh, A.; Dixit, S.K.; Yadav, M.; Yadav, S.S.; Rathaur, S.; Awasthi, S.K.; Mishra, N. Antifilarial Activity of 1,3-Diarylpropen-1-One: Effect on Glutathione-S-Transferase, a Phase II Detoxification Enzyme. *Am. J. Trop. Med. Hyg.* **2009**, *80*, 764–768. [CrossRef]
13. Bahekar, S.P.; Hande, S.V.; Agrawal, N.R.; Chandak, H.S.; Bhoj, P.S.; Goswami, K.; Reddy, M.V.R. Sulfonamide Chalcones: Synthesis and in Vitro Exploration for Therapeutic Potential against *Brugia malayi*. *Eur. J. Med. Chem.* **2016**, *124*, 262–269. [CrossRef] [PubMed]
14. Sänger, I.; Lämmler, G.; Kimmig, P. Filarial Infections of Mastomys Natalensis and Their Relevance for Experimental Chemotherapy. *Acta Trop.* **1981**, *38*, 277–288.
15. Bhoj, P.S.; Rao, S.; Bahekar, S.P.; Agrawal, N.R.; Togre, N.S.; Sharma, R.; Goswami, K.; Chandak, H.S.; Patil, M.B. In Vitro Apoptotic Effect on Human Lymphatic Filarial Parasite by Piperidine Derivatives and Thymidine Reversal Study. *Parasitol. Res.* **2020**, *119*, 165–175. [CrossRef] [PubMed]
16. Hande, S.; Goswami, K.; Sharma, R.; Bhoj, P.; Jena, L.; Reddy, M.V.R. Targeting Folate Metabolism for Therapeutic Option: A Bioinformatics Approach. *Indian J. Exp. Biol.* **2015**, *53*, 762–766. [PubMed]
17. Widemann, B.C.; Balis, F.M.; Adamson, P.C. Dihydrofolate Reductase Enzyme Inhibition Assay for Plasma Methotrexate Determination Using a 96-Well Microplate Reader. *Clin. Chem.* **1999**, *45*, 223–228. [CrossRef] [PubMed]
18. Rao, U.R.; Mehta, K.; Subrahmanyam, D.; Vickery, A.C. *Brugia malayi* and *Acanthocheilonema viteae*: Antifilarial Activity of Transglutaminase Inhibitors in Vitro. *Antimicrob. Agents Chemother.* **1991**, *35*, 2219–2224. [CrossRef] [PubMed]
19. Sashidhara, K.V.; Rao, K.B.; Kushwaha, V.; Modukuri, R.K.; Verma, R.; Murthy, P.K. Synthesis and Antifilarial Activity of Chalcone–Thiazole Derivatives against a Human Lymphatic Filarial Parasite, *Brugia malayi*. *Eur. J. Med. Chem.* **2014**, *81*, 473–480. [CrossRef]
20. Forman, H.J.; Zhang, H.; Rinna, A. Glutathione: Overview of Its Protective Roles, Measurement, and Biosynthesis. *Mol. Asp. Med.* **2009**, *30*, 1–12. [CrossRef]
21. Khazir, J.; Riley, D.L.; Chashoo, G.; Mir, B.A.; Liles, D.; Islam, M.A.; Singh, S.K.; Vishwakarma, R.A.; Pilcher, L.A. Design, Synthesis and Anticancer Activity of Michael-Type Thiol Adducts of α-Santonin Analogue with Exocyclic Methylene. *Eur. J. Med. Chem.* **2015**, *101*, 769–779. [CrossRef]
22. Brogden, R.N.; Carmine, A.A.; Heel, R.C.; Speight, T.M.; Avery, G.S. Domperidone. *Drugs* **1982**, *24*, 360–400. [CrossRef]
23. Hagner, N.; Joerger, M. Cancer Chemotherapy: Targeting Folic Acid Synthesis. *Cancer Manag. Res.* **2010**, *2*, 293–301. [CrossRef] [PubMed]

24. Bennuru, S.; Meng, Z.; Ribeiro, J.M.C.; Semnani, R.T.; Ghedin, E.; Chan, K.; Lucas, D.A.; Veenstra, T.D.; Nutman, T.B. Stage-Specific Proteomic Expression Patterns of the Human Filarial Parasite *Brugia malayi* and Its Endosymbiont Wolbachia. *Proc. Natl. Acad. Sci. USA* **2011**, *108*, 9649–9654. [CrossRef] [PubMed]
25. Perez-Abraham, R.; Sanchez, K.G.; Alfonso, M.; Gubler, U.; Siekierka, J.J.; Goodey, N.M. Expression, Purification and Enzymatic Characterization of *Brugia malayi* Dihydrofolate Reductase. *Protein Expr. Purif.* **2016**, *128*, 81–85. [CrossRef] [PubMed]
26. Tobias, A.M.; Toska, D.; Lange, K.; Eck, T.; Bhat, R.; Janson, C.A.; Rotella, D.P.; Gubler, U.; Goodey, N.M. Expression, Purification, and Inhibition Profile of Dihydrofolate Reductase from the Filarial Nematode *Wuchereria bancrofti*. *PLoS ONE* **2018**, *13*, e0197173. [CrossRef] [PubMed]

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Textbooks in Colonial Times: Reviewing the Status of Historical Explorations

A. S. Hornby Educational Trust

A Research Project
Supported by the Hornby Trust, UK and
facilitated by AINET Association of English Teachers

Engagement as Research Associate

To,
Dr. Prithvirajsingh Thakur,
G. S. Science, Arts and Commerce College,
KHAMGAON (Maharashtra) 444303

Thank you for your interest in joining the project. The Project Team is delighted to engage you as a Research Associate (RA) on the project on the following terms and conditions:

Your responsibilities:

During your period of engagement, you are required to help the project team in various project related work, which includes but is not limited to the following:

1. Explore various online and offline resources to identify primary and secondary sources on the history of English textbooks from colonial India.
2. Compile lists of all such sources in prescribed formats using any software or tools identified by the Project Team.
3. Prepare brief annotations on the sources included in the lists being compiled.
4. Create suitable tags for each entry in consultation with the Project Team.
5. Help in dissemination events like seminars/ conferences/ workshops, as and when planned.
6. Help the Project Team to put together and publish an annotated bibliography on historical explorations of textbooks from colonial India.

You will follow the prevalent norms and regulations related to data and privacy protection and research ethics as effective in India during the project period.

Terms of engagement:

1. Your engagement is initially for a fixed period of six months effective from the date of your acceptance of this engagement.
2. An all-inclusive consolidated amount of Rs. 50,000 (INR Fifty Thousand only) will be paid as honorarium for the work.

3. It is expected that a minimum of 150 hours of online work will be carried out during the period of associateship.
4. Before the end of the six-month period, you are expected to compile at least 200 entries of various primary and secondary sources relevant to the project and prepare annotations on at least 100 entries out of them.

Your rights and privileges:

1. Any specific software or tools required for the work of the project will be provided by the project. However, the project cannot provide computers, laptops, storage devices, etc.
2. The Project Team will orient and train you on project-related activities and procedures and will constantly support you throughout the period.
3. You will be included as a co-author of the annotated bibliography, provided you successfully carry out your RA work.
4. You will also be acknowledged in any publications emerging out of the project.
5. A certificate of engagement as a RA will be provided on the completion of the engagement.

The engagement will automatically come to an end on the completion of six months, unless otherwise notified by the Project Team. Subject to your performance and willingness, and depending on the status of the project work, your engagement may also be extended for such period and on such terms as may be finalised with mutual consent in due course.

As an indication that you accept this engagement and are joining the project, kindly complete the attached acceptance form and send it back to helegroup.india@gmail.com at your earliest convenience.

The Project Team looks forward to working with you!

Project Team

DR. AMOL PADWAD, *Project Coordinator*
Centre for English Language Education (CELE), Ambedkar University Delhi
DR. ATANU BHATTACHARYA
Centre for English Studies, SLLCS, Central University of Gujarat
DR. KRISHNA K. DIXIT
Centre for English Language Education (CELE), Ambedkar University Delhi
DR. R. VENNELA
Department of HSS, NIT Warangal

Date: 15 May 2021 Project Coordinator

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Educational Visit – Jalna.

Date: 11/01/2023

Venue: Jalna – Kalash Crop Seeds Show.

List of participants —

SN	Name of the participant	Class/ Designation	Signature	Mobile No.
1	Bhagyashri Baliram Nimkande	B.A II	B.B.Nimkande	8767722946
2.	khushi patil	B.A II	k. patil	9545420628
3	Nikita Gopal Bhaisakale	B.A II	N.G. Bhaisakale	9096464604
4)	Megha Ganesh Bodade	B.A II	M.G.Bodade	7499217613
5)	Jyoshri khandekar	B.A III	[illegible]	7219480960
6)	Rani sirsat	B.A III	R.Sirsat	7887301190
7)	Pradnya sirsat	B.A III	P.Sirsat	8010695521
8)	Reshma surwade	B.A III	R.surwade	9511630336
9)	Sejal Dhurandhar	B.A. III	S. Dhurandhar	9689701463
10)	Madhuri ingle	B.A III	M.ingle	9209085125
11)	Arpita More	B.A III	Arpita	7499002021
12)	Anushka Santosh Mesare	B.A III	A.S.Mesare	9767932326
13)	Simran Jain	B.A. III	Jain	9172900674
14)	Shital Rajesh Pawar	B.A. II	S.R.Pawar	9359551240
15)	Poonam Gautam Khandare	B.A II	P.G.Khandare	8412007265
16)	Vaishnavi Ravindra Gokit	B.A. II	VGokit	9403939006
17)	Nandini Gajanan Deshmukh	B.A III	N.G.Deshmukh	9970552221
18)	Jaya bhojane	B.A II	J.B.Bhojane	8793620445
19)	Kirti khandegar	B.A II	KKhandegar	9767342473
20)	Manisha wankhade	B.A II	[illegible]	7798301648
21)	Arpita wankhade	B.A II	[illegible]	9356525862
22)	Pratima Patil	B.A. III	[illegible]	9284630092
23)	Kiran Motkhede	B.A. III	[illegible]	9067070917
24)	Vaishnavi Pawar	B.A III	V.M.Pawar	7249168864
25)	Aarti Tayde	B.A III	A.G.Tayde	9322555662
26)	Sakshi Bhilkar	B.A III	S.A.Bhilkar	9322399019
27)	Gayatri Pawar	B.A II	[illegible]	7666578623
28)	Sakshi mahamune	B.A III	[illegible]	8600469527
29)	Vaishnavi Chandekar	B.A III	Chandekar	8308615829
30)	Shital Joshi	B.A III	Joshi	9552388[illegible]
31	Kiran Gite	B.A III	[illegible]	7038630321
32)	Shejal Wankhede	B.A. I	S.Wankhede	9309219625
33)	Bhagyashri Gajbhare	M.com	[illegible]	7028536955
34)	Gauri Junare	B.Voc.	[illegible]	9561650573
35)	Vaishnavi Charkhe	B.Voc.	V.Charkhe	8302150531

Activity In charge
Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
Khamgaon.

Principal
Principal
G. S. Sci. Arts & Commerce
College, Khamgaon-444303.


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KALASH CROP SHOW
2023

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Webinar topic career Katta**
Organizing Department	Career Katta
Date	08.04.2023
Venue	Late. Shankarraoji Boadey Hall
Guest/ Resource Persons	Shri. Yasvan Shitole (President Maharashtra technology support center)
No of Beneficiaries	Students 200 Teachers 06 Others 03
Brief Report about event	**A Webinar organized by Career Katta on 08/04/2023 on the topic "**Advantage of Career Katta**" a details guidance provided by** Shri. Yasvant shitole (President Maharashtra technology support center) **At the outset guest welcome by principal Dr. D.S. Talwankar Chair person of program. Chif Gust shri Anup purani Secretory jalgaon shekshan mandal jalgaon jamod, The anchoring of the program conduct & Vote Of thanks Expressed by Dr. J.D. Porey** **Principal Dr. Nilesh Nimabalkar (Skk College Jalgaon Jamod, Dr. Dabare Sir , Dr. Raut Sir, Dr. V R. Gawhale, Dr. D.N. Vyas, Dr. V.S. Atwar also present to be program**

गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय, खामगांव

सूचना

दि. ५.४.२०२३

वरिष्ठ महाविद्यालयातील सर्व विद्यार्थी व विद्यार्थीनींना सूचित करण्यात येत आहे की, करीअर कट्टा मध्ये नोंदणी केलेल्या सर्व विद्यार्थी व नोंदणी करण्यास इच्छुक विद्यार्थी यांना मागदर्शन करण्याकरीता अध्यक्ष, माहिती व तंत्रज्ञान सहायता केंद्र, महाराष्ट्र राज्य तथा करीअर कट्टा संचालक, महाराष्ट्र राज्य मा. डॉ. यशवंत शितोळे शनिवार दि. ८.४.२०२३ रोजी दु. १२.०० वा. उपस्थित राहणार आहेत.

तरी करीअर कट्टा मध्ये नोंदणी केलेल्या सर्व विद्यार्थी व नोंदणी करण्यास इच्छुक विद्यार्थी यांनी शनिवार दि. ८.४.२०२३ रोजी दु. १२.०० वा. स्व. अँड शंकरराव बोबडे सभागृहामध्ये उपस्थित रहावे.

प्राचार्य

प्रत माहिती करीता

१. प्रा. डॉ. जे. डी. पोरे, समन्वयक, करीअर कट्टा
२. डॉ. बी. एस. जवजाळे, समन्वयक, करीअर कट्टा
३. डॉ. व्ही. एस. अठवार,Co-ordinater, Career Counseling & Placement Cell :
४. प्रबंधक

(1)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Counseling

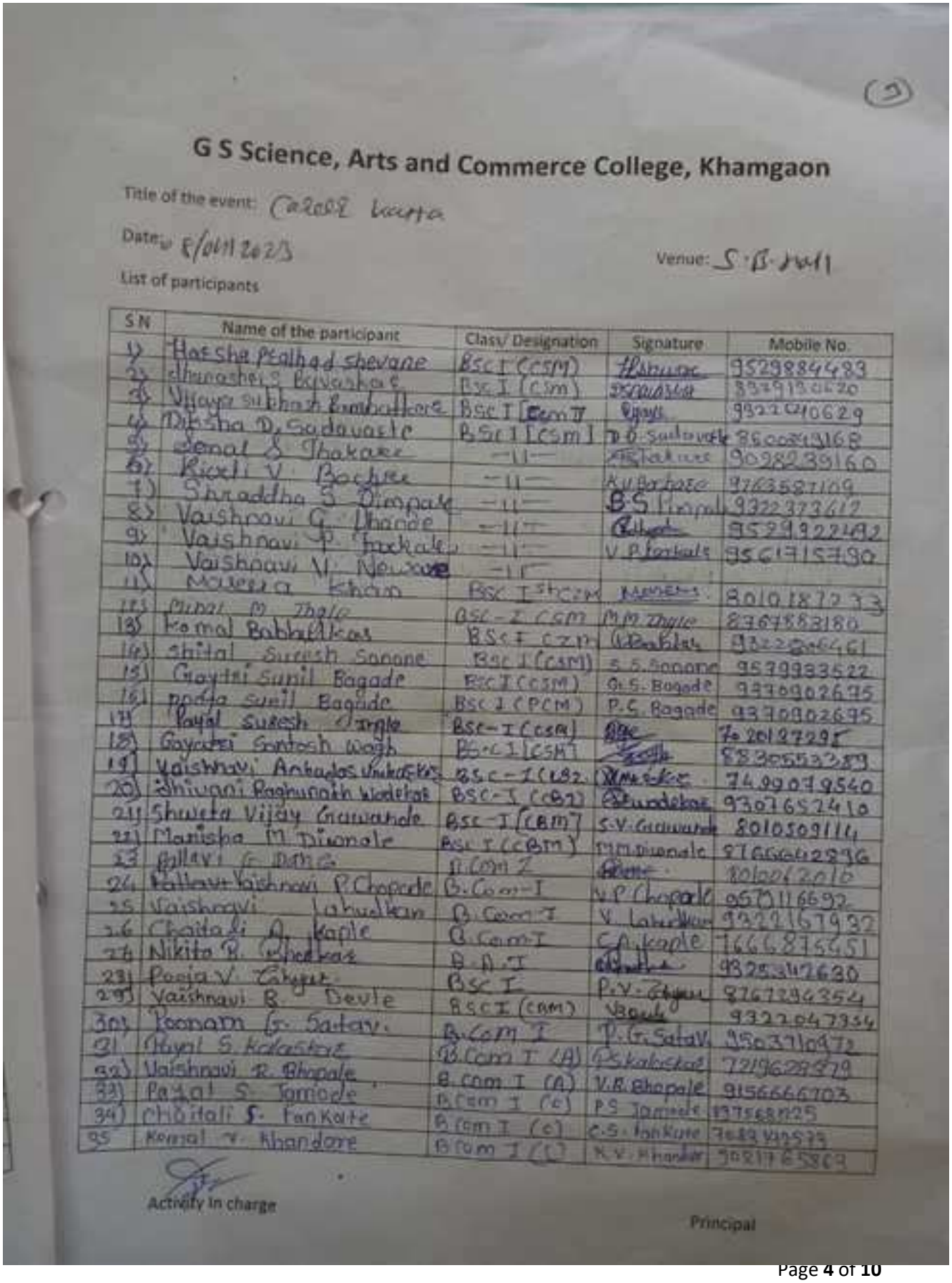
Date: 8/04/2023 Venue: S.B. Hall

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No.
1)	Harsha Prahlad shevane	BSc I (CSM)	Hshevane	9529884483
2)	Shivashri S. Rajurkar	BSc I (CSM)	SSRajurkar	8379913620
3)	Vijaya Subhash Rambhatkare	BSc I [Com]	Rambhatkare	9322010629
4)	Diksha D. Sadavarte	BSc I [CSM]	D.D. Sadavarte	8600249168
5)	Sonal S Thakare	-11-	SSThakare	9028239160
6)	Ricki V. Bachare	-11-	RVBachare	9763587109
7)	Shraddha S. Dimpare	-11-	B.S Dimpare	9322373612
8)	Vaishnavi G. Dhande	-11-	GDhande	9529922492
9)	Vaishnavi V. Pachkale	-11-	V.P.Pachkale	9561715790
10)	Vaishnavi V. Newase	-11-		
11)	Mariya Khan	BSc I [CSM]	Mariya	8010187233
12)	Mitali M. Thole	BSc-I CSM	M.M. Thole	8767883180
13)	Komal Babhulkar	BSc I CZM	KBabhulkar	9322866461
14)	Shital Suresh Sanane	BSc I (CSM)	S.S. Sanane	9579933522
15)	Gayatri Sunil Bagade	BSc I (CSM)	G.S. Bagade	9370902695
16)	Pooja Sunil Bagade	BSc I (PCM)	P.S. Bagade	9370902695
17)	Payal Suresh Ingle	BSc-I (CSM)	PSIngle	7620127295
18)	Gayatri Santosh Wagh	BSc I [CSM]	Gwagh	8830553289
19)	Vaishnavi Antaglos Khandekar	BSc-I (CBZ)	VAKhandekar	7499079540
20)	Shivani Raghunath Wadekar	BSc-I (CBZ)	SRwadekar	9307652410
21)	Shweta Vijay Gawande	BSc-I [CBM]	S.V. Gawande	8010509114
22)	Manisha M Divanale	BSc I (CBM)	MMDivanale	9766642896
23	Pallavi G. Dhole	B.Com I	PGDhole	8010012016
24	Pallavi Vaishnavi P. Chopade	B.Com-I	V.P Chopade	9673116692
25	Vaishnavi Lahudkar	B.Com I	V. Lahudkar	9322167932
26	Chaitali A. Kagle	B.Com I	CA.Kagle	7666875951
27	Nikita R. Khedkar	B.A.I	RKhedkar	9325342630
28	Pooja V. Tayade	BSc I	P.V. Tayade	8767296354
29	Vaishnavi R. Devte	BSc I (CBM)	VRDevte	9322047334
30	Poonam G. Satav.	B.Com I	P.G. Satav.	9503710972
31	Payal S. Kakastkar	B.Com I (A)	PSKakastkar	7219628979
32	Vaishnavi R. Bhopale	B.com I (A)	V.R. Bhopale	9156666703
33	Payal S. Tamode	B.Com I (C)	PS Tamode	9175688125
34	Chhaitali S. Tankate	B.Com I (C)	C.S. Tankate	7083935573
35	Komal V. Khandare	B.Com I (C)	K.V. Khandare	9021765869

Activity In charge

Principal



(3)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Counta

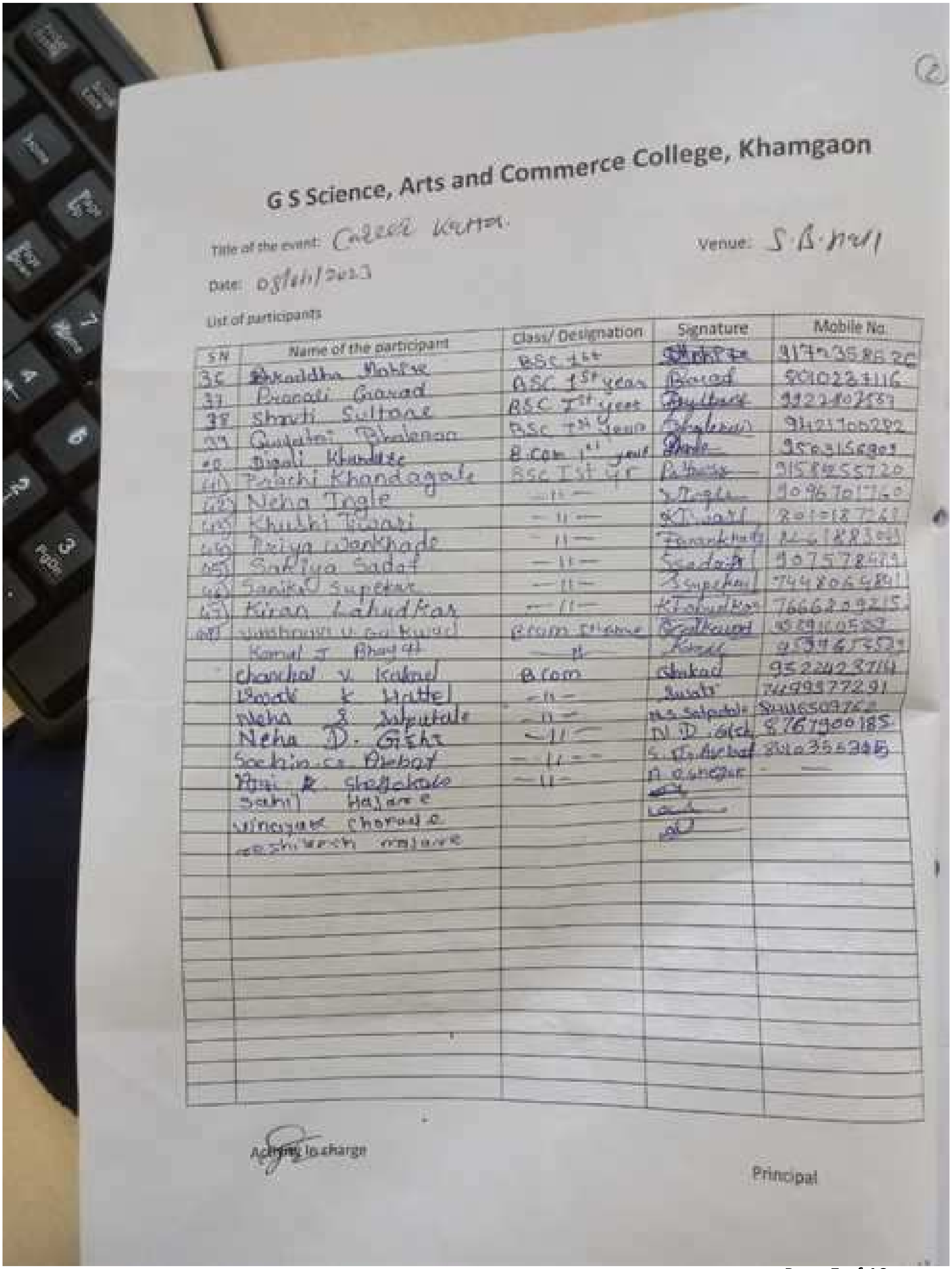
Date: 8/11/2023 Venue: S.B. Hall

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No.
1)	Harsha Prabhad Shevane	BSc I (CSM)	Hshevane	9529884483
2)	Dhanashri S Bavaskar	BSc I (CSM)	Dhanashri	8329130620
3)	Vijaya Subhash Bambatkare	BSc I [Com II	Vijaya	9322010629
4)	Diksha D. Sadavarte	BSc I [CSM]	D.D. Sadavarte	8600219168
5)	Sonal S Thakare	-11-	S.S. Thakare	9028239160
6)	Ruchi V. Bachare	-11-	R.V. Bachare	9763587109
7)	Shraddha S. Dimpare	-11-	S.S. Dimpare	9322373617
8)	Vaishnavi G. Bhande	-11-	G.Bhande	9529922192
9)	Vaishnavi P. Inamdar	-11-	V.P. Inamdar	9561715790
10)	Vaishnavi V. Nevare	-11-		
11)	Muskan Khan	BSc I [CSM]	Muskan	8010187273
12)	Pinal M. Thale	BSc-I CSM	M.M. Thale	8767883180
13)	Komal Babhulkar	BSc I CSM	K.Babhulkar	9322806461
14)	Shital Suresh Sonone	BSc I (CSM)	S.S. Sonone	9579933522
15)	Gayatri Sunil Bagade	BSc I (CSM)	G.S. Bagade	9970902695
16)	Pooja Sunil Bagade	BSc I (PCM)	P.S. Bagade	9370902695
17)	Payal Suresh Ingle	BSc-I (CSM)	Payal	7620187295
18)	Gayatri Santosh Wagh	BSc I [CSM]	Gayatri	8830553389
19)	Vaishnavi Ambadas Khedekar	BSc-I (CBZ)	Khedekar	7499079540
20)	Shivani Raghunath Wadekar	BSc-I (CBZ)	Shivani	9307652410
21)	Shweta Vijay Gawande	BSc I [CBM]	S.V. Gawande	8010509114
22)	Manisha M Pimple	BSc I (CBM)	M.M. Pimple	8766662896
23)	Pallavi G. Dange	II Com I	Pallavi	8010012016
24)	Pallavi Vaishnavi P. Chopade	B.Com-I	V.P. Chopade	9657116692
25)	Vaishnavi Lahudkar	B.Com I	V. Lahudkar	9322167932
26)	Chaitali A. Kapte	B.Com I	C.A. Kapte	7666876451
27)	Nikita R. Bhedkar	B.A. I	Nikita	9325347630
28)	Pooja V. Thakur	BSc I	P.V. Thakur	8767394354
29)	Vaishnavi B. Deule	BSc I (CBM)	Vaishnavi	9322047354
30)	Poonam G. Satav	B.Com I	P.G. Satav	9503710972
31)	Payal S. Kolastkar	B.Com I (A)	P.S. Kolastkar	7219628979
32)	Vaishnavi R. Bhopale	B.com I (A)	V.R. Bhopale	9156666703
33)	Payal S. Tamode	B.Com I (C)	P.S. Tamode	9175688025
34)	Chaitali S. Tankate	B.Com I (C)	C.S. Tankate	7588
35	Komal V. Khandare	B.Com I (C)	K.V. Khandare	7021765869

Activity In charge

Principal



(2)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Katta

Venue: S.B. Hall

Date: 08/02/2023

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No
	Shraddha Mohite	BSC 1st	[illegible]	9174358620
35	[illegible] Mohite	BSC 1st year	Gavad	9910233116
37	Pranali Gavad	BSC Ist year	[illegible]	9922807537
38	Shruti Sultane	BSC 1st year	[illegible]	9421700292
39	Gunjalini Bhalerao	B.Com 1st year	[illegible]	9503156909
40	Dipali Khandare	BSC Ist yr	[illegible]	9158255720
41	Prachi Khandagale	-"-	[illegible]	9096701760
42	Neha Ingle	-"-	N. Ingle	9096701760
43	Khushi Tiwari	-"-	K. Tiwari	[illegible]
44	Priya Wankhade	-"-	[illegible]	[illegible]
45	Sakiya Sadaf	-"-	Sadaf	907578[illegible]
46	Sanika Supekar	-"-	S. Supekar	744806[illegible]
47	Kiran Lahudkar	-"-	K. Lahudkar	7666209215
48	Vaishnavi V. Gaikwad	B.Com IInd year	Gaikwad	[illegible]
	Komal J Bhagat	-"-	Komal	[illegible]
	Chanchal V. Kalmal	B.com	[illegible]	9522493714
	Bhakti K Hattel	-"-	[illegible]	7499577291
	Neha S Salpurkale	-"-	N.S. Salpurkale	[illegible]
	Neha D. Gathe	-"-	N D Gathe	8767900185
	Sachin G. Akbar	-"-	S. G. Akbar	[illegible]
	Ravi R. Shegokar	-"-	R Shegokar	
	Sahil Hajare		[illegible]	
	Vinayak Charode		[illegible]	
	Ashish Majare		[illegible]	

Activity In-charge

Principal

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Café Katta.

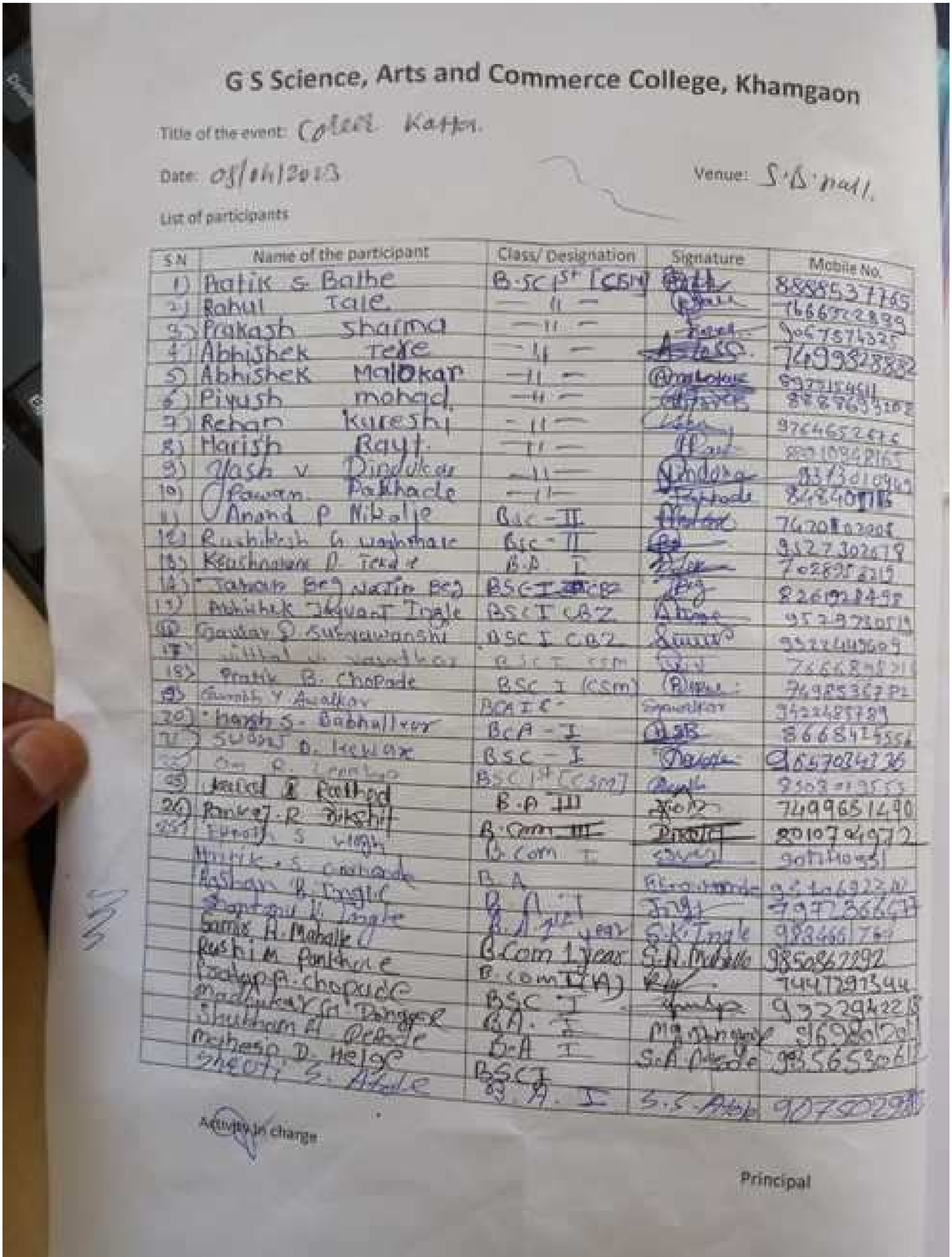
Date: 08/04/2023

Venue: S. B. Hall

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No.
1	Vaishali R Pethkar	BCA I	V R Pethkar	9766950277
2	Vaishnavi M. Rane	BCA-I		7588114403
3	Suvarna V. Shimbre	BCA I		7821093553
4	Tulsi S Patil	BCA-I		
5	Samiksha S. Kshirsagar	BSC-I	Skshirsagar	7057586962
6	Roshani G. Pawar	BSC I		9699412593
7	Dipika D. Kusumkar	B.Com		8600509936
8)	Vaishnavi G. Dandale	B.com		8080384039
9)	Gauri A Chopade	B.com I		9049665187
10)	Vishal S. Bhamare	B Com I		9209309357
11)	Gaurav B Wakode	B.com I		8605750825
12)	Pandurang P. Gondal	B.Com III		7620077715
13)	Sagar S. Kale	B.Com III		
14)	Shubham D Bhutkar	B.Com III		
15)	Gaurav S. Khode	BCA I		8956210047
16)	Shreenik O. Waskar	—11—		9721475421
17)	Om A. Nahre	—11—		9699412512
18)	Anand B. Joshi	BCA I		9850809146

Activity In charge



G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Katta.

Date: 05/04/2023 Venue: S.B. hall.

List of participants

S.N	Name of the participant	Class/ Designation	Signature	Mobile No.
1)	Pratik S. Bathe	B.Sc 1st [CSM]	[illegible]	8888537765
2)	Rahul Tale	— " —	[illegible]	7666522899
3)	Prakash Sharma	— " —	[illegible]	9067574325
4)	Abhishek Teke	— " —	[illegible]	7499328882
5)	Abhishek Malokar	— " —	[illegible]	9975154611
6)	Piyush mohod	— " —	[illegible]	8888769310
7)	Rehan kureshi	— " —	[illegible]	9764652476
8)	Harish Raut	— " —	[illegible]	8801098165
9)	Yash V. Dindokar	— " —	[illegible]	8373010949
10)	Pawan Pakhade	— " —	[illegible]	[illegible]
11)	Anand P. Nikalje	B.Sc - II	[illegible]	7620802008
12)	Rushikesh G. Waghmare	B.Sc - II	[illegible]	9527302679
13)	Krushnakant D. Tekade	B.A. I	[illegible]	7028952319
14)	Jabran Beg Nazim Beg	BSc I [illegible]	[illegible]	8260928498
15)	Abhishek Jagwant Ingle	BSc I CBZ	[illegible]	9529780519
16)	Gaurav S. Suryawanshi	BSc I CBZ	[illegible]	9322449609
17)	[illegible]	B.Sc I CSM	[illegible]	7666848511
18)	Pratik B. Chopade	BSc I (CSM)	[illegible]	7498536782
19)	Gaurav Y. Awalkar	BCA I C	[illegible]	9422485789
20)	Harsh S. Babhalkar	BCA - I	[illegible]	8668425556
21)	Sujal D. Kewar	BSc - I	[illegible]	9767024736
22)	Om P. [illegible]	BSc 1st [CSM]	[illegible]	9503019555
23)	[illegible] R. Rathod	B.A. III	[illegible]	7499651490
24)	Pankaj R. Dikshit	B.Com III	[illegible]	8010794972
25)	[illegible] S. [illegible]	B.Com I	[illegible]	9011140951
	[illegible] S. [illegible]	B.A.	[illegible]	[illegible]
	Roshan R. Ingle	B.A. 1st	[illegible]	9972366[illegible]
	Santosh K. Ingle	B.A. 1st year	S.K. Ingle	983466176[illegible]
	Samir A. Mahalle	B.Com 1 year	S.A. Mahalle	9850862292
	Rushikesh Panthare	B.Com I (A)	[illegible]	7447291344
	[illegible] A. Chopade	BSc I	[illegible]	9322942215
	Madhukar G. Dangre	B.A. I	M.G. Dangre	969801[illegible]
	Shubham A. Deode	B.A. I	S.A. Deode	98565306[illegible]
	Mahesh D. Helge	BSc I	[illegible]	[illegible]
	Shruti S. Ahale	B.A. I	S.S. Ahale	9075022[illegible]

Activity in charge

Principal

(5)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Katta

Date: 8-4-2023 Venue: S.B. Hall

List of participants

S.N	Name of the participant	Class/ Designation	Signature	Mobile No.
1)	Ayesha O Bhatarkar	B.Sc I	AoBhatarkar	9309765181
2)	Bhavna R Soni	-11-	Bsoni	8483055287
3)	Dipali S. Ashe	B.Com I	[illegible]	7620083095
4	Tejashwini D Bhajat	B.com I A	T.D.Bhajat	7020094077
5)	Gayatri S. Raut	B.com I (B)	GS Raut	7249480070
6)	Poonam V. Mundhe	-11-	PVmundhe	
7	KOMAL A HAGE	-11-	[illegible]	9322087178
8)	Mridushi M. Wawge	BCA -I	M.Mwawge	9970121529
9	manyesh s. Pirkatwar	B.Com I	[illegible]	8788019376
10	Gaurav D. Gawande	B.Com I	[illegible]	9607326194
11)	Sangam S Ingle	BCom I	[illegible]	8459412403
12)	Harish A. Ingle	B.com I	[illegible]	7709498665
13)	Sadsaifali. Mujib	B.A.I	[illegible]	2010299572
14)	Shaikhnaz K. Shamnaz	B.A III	[illegible]	9823942593
15)	Vishal G. Lal	B.A. II	[illegible]	7822814802

Activity In charge

Principal

(7)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Katta.

Date: 8/04/2023

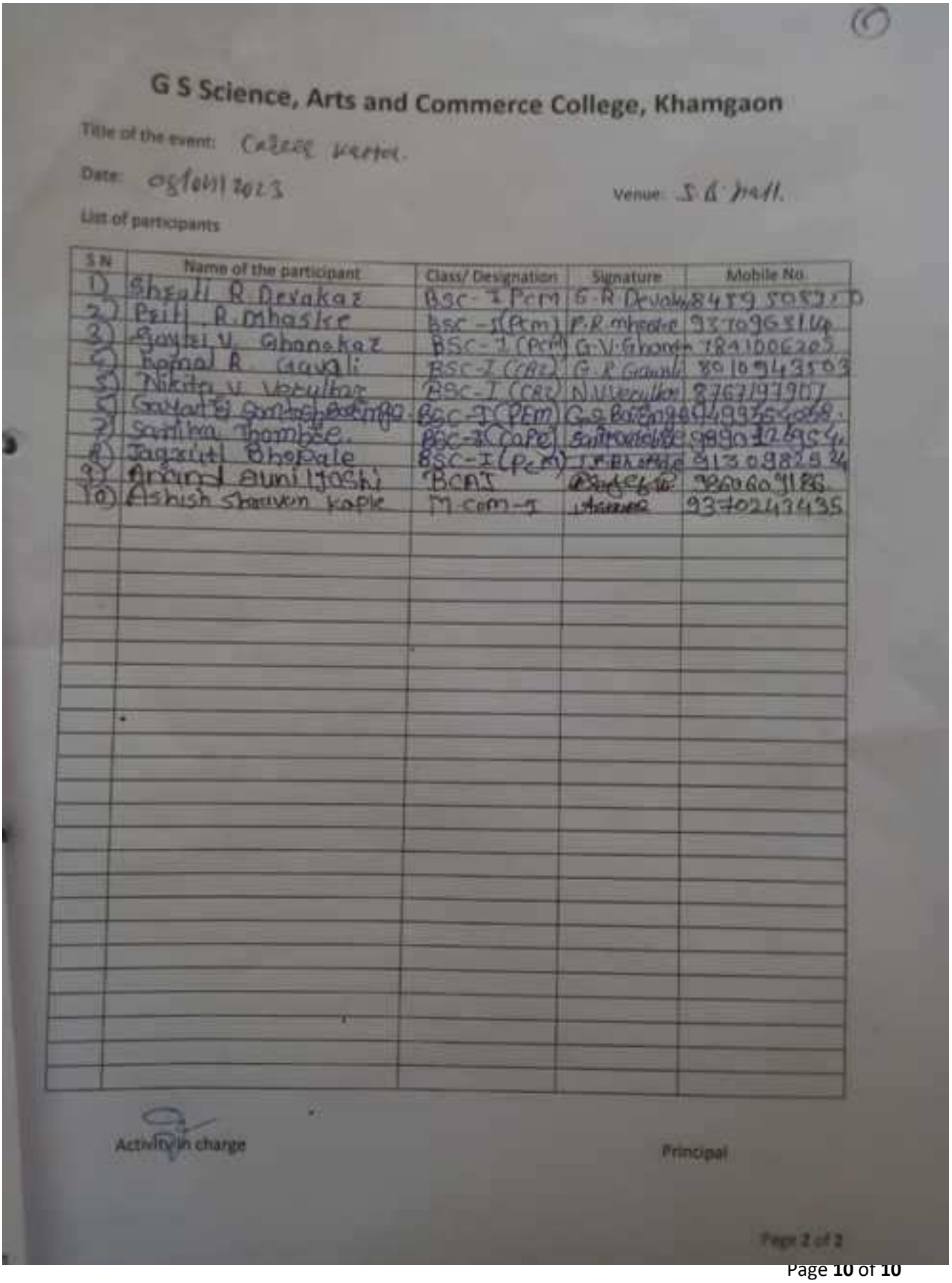
Venue: S. B. Hall

List of participants

S N	Name of the participant	Class/ Designation	Signature	Mobile No.
1	Adarsh P. Hatkar	BCA-I	[illegible]	7777816 [illegible]
	Vaibhav P. Ninkande	BCA-I	[illegible]	9529654292
	[illegible] S. Wankar	B.C.A.I	S. Wankar	99 [illegible]
	Anand S. Joshi	BCA I	[illegible]	9860609186
	[illegible] S. [illegible]	-"-	[illegible]	7756210047
	Om Vishnu Khude	B.A. I	O.V. Khude	7620575350
	Om More	B.C.A I	O. More	
	Sagar V. Gaikwad	B.com I	V. Gaikwad	9529160523
	Vishnu Ramesh Hajare	BCA I	[illegible]	9503931835
	Vijay S. Hiwale	BCA-I	[illegible]	9579074019
	Pradip N. Thakare	BCA-I	[illegible]	9579596098
	Ashish Shravan Kaple	M.com-I	[illegible]	9370243435
	Asif Shah [illegible] Shah	B.com-C-I	A.S. [illegible]	[illegible]

Activity In-charge

Principal



(6)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Career Meetal.

Date: 08/09/2023 Venue: S.A. Hall.

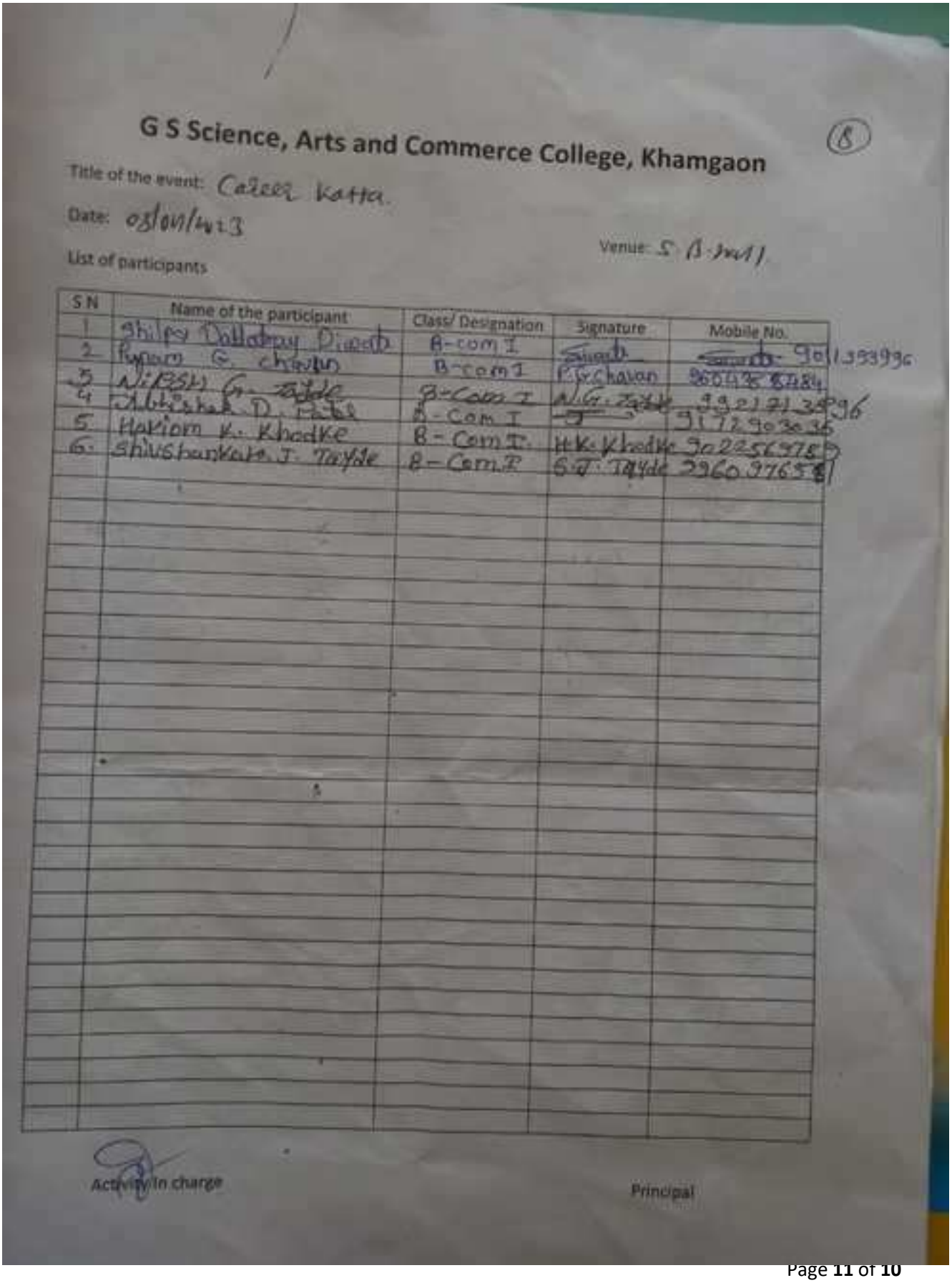
List of participants

S N	Name of the participant	Class/ Designation	Signature	Mobile No.
1)	Shruti R Devakar	BSC- I PCM	S.R.Devak	8459 5052
2)	Priti R. Bhaskar	bsc -I(Pcm)	P.R.bhaskar	9370963114
3)	Gayatri V. Ghanekar	BSC-I (PCM)	G.V.Ghanek	7841006205
4)	Komal R Gavali	BSC-I (CBZ)	G.R.Gavali	8010943503
5)	Nikita V Verulkar	BSC-I (CBZ)	N.V.Verulkar	8767197907
6)	Gayatri Santosh Bokade	BSC-I(PCM)	G.S.Bokade	9923540688
7)	Sanjivani Thombare.	BSC-I(CBZ)	Sanjivani Th	9890126954
8)	Jagruti Bhopale	BSC-I(PCM)	J.B.Bhopale	9130982934
9)	Anand Sunil Joshi	BCAI	Anand Joshi	9860609186
10)	Ashish Shamrao kapse	M.com-I	Ashish	9370243435

Activity in charge

Principal

Page 2 of 2



G S Science, Arts and Commerce College, Khamgaon

(8)

Title of the event: Career Katta.

Date: 08/01/2023

Venue: S. B. Hall

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No.
1	Shilpa Dattatray Pimpale	B-com I		9011393996
2	Pujaro G. chavan	B-com I	P.G.Chavan	9604358484
3	Nikita G. Tayde	B-Com I	N.G. Tayde	9921713996
4	Abhishek D. Patil	B-Com I		9172903036
5	Hariom K. Khadke	B-Com I.	H.K. Khadke	9022563758
6.	Shivshankar J. Tayde	B-Com I	S.J. Tayde	7960376581

Activity In charge

Principal

G S Science, Arts and Commerce College, Khamgaon

दिव्य मराठी बुलडाणा 11-04-2023

गो. से. महाविद्यालयाला यशवंत शितोळे यांची भेट

विद्यार्थ्यांना मार्गदर्शन करताना यशवंत शितोळे तर व्यासपीठावर उपस्थित मान्यवर.

प्रतिनिधी | खामगाव

गो. से. विज्ञान, कला व वाणिज्य महाविद्यालयात ८ एप्रिलला करिअर कट्टा या उपक्रमांतर्गत उच्च व तंत्र शिक्षण विभागाचे अध्यक्ष यशवंत शितोळे यांनी महाविद्यालयाला सदिच्छा भेट देऊन विद्यार्थ्यांना स्पर्धा परीक्षा तसेच उद्योगाबाबत महत्त्वपूर्ण मार्गदर्शन केले. कार्यक्रमाच्या अध्यक्षस्थानी प्राचार्य डॉ. डी. एस. तळवणकर होते. तसेच प्रमुख पाहुणे म्हणून अनुप पुराणिक, सचिव जळगाव शिक्षण मंडळ हे लाभले होते.

या वेळी विद्यार्थ्यांना संबोधित करताना यशवंत शितोळे म्हणाले, की कोणत्याही क्षेत्रात विद्यार्थ्यांना आपले करिअर बनवायचे असेल तर करिअर कट्टा कसा उपयुक्त आहे याबद्दल उदाहरणासह स्पष्ट करून मार्गदर्शन केले. याप्रसंगी उद्योजक पुराणिक यांनी विद्यार्थ्यांना यशस्वी उद्योजक बनण्याकरिता मार्गदर्शन केले. प्राचार्य डॉ. तळवणकर यांनी फक्त ३३ पैसे प्रतिदिन खर्च करून आपल्याला अमूल्य असा फायदा करिअर कट्ट्यामध्ये नोंदणी करून मिळवता येतो. त्यामुळे प्रत्येक विद्यार्थ्याने या संधीचे सोने करावे, असे आवाहन केले. विद्यार्थ्यांकरिता महाविद्यालयात करिअर कट्टा अंतर्गत वर्षभर विविध कार्यक्रम घेण्यात येत असतात तसेच बुलडाणा जिल्ह्यात सेंटर फॉर एक्सलन्स सुरू होत असलेले गो. से. महाविद्यालय हे एकमेव महाविद्यालय आहे, अशी माहिती दिली.

कार्यक्रमाचे सूत्रसंचालन करून डॉ. जयंत पोरे यांनी आभार मानले. या कार्यक्रमाला प्रा. डॉ. नीलेश निंबाळकर, प्राचार्य श्रीपाद कृष्ण कोल्हटकर महाविद्यालय, जळगाव जामोद, डॉ. डाखरे, डॉ. राऊत वाणिज्य विभाग प्रमुख, डॉ. व्ही. आर. गवळे, प्रा. डॉ. व्ही. एस. अठवार, प्रा. डॉ. डी. एन. व्यास यांच्यासह विद्यार्थी उपस्थित होते.

Dr. J. D. Porey
Activity In charge

Dr. D. S. Talwankar
Principal

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Webinar on the topic –" Guidance of MPSC/UPSC"**
Organizing Department	Career Counseling & Placement Cell
Date	24.03.2022
Venue	A.V. Theatre
Guest/ Resource Persons	Mr. Sagar Wakode (Director UNIQUE academy Pune)
No of Beneficiaries	Students 197 Teachers 04 Others 02 Non-teaching staff
Brief Report about event	A Webiner Orgonised By Career Counseling & Placement Cell on 24-03-2022 the topic –" Guidance of MPSC/UPSC " a details guidance provided by Mr. sagar wakode (Director UNIQUE academy Pune) At the outset the guest welcome by Principal Dr. P.V. Ubale chairperson of the program, The anchoring of the Program conducted by Prof. S.P. Hargunani & vote of thanks expressed by Dr. J. D. Porey. Dr. P.V Ubale. Prof. Raj Fate also present to the programme.

D

Figure 1 On the dais Mr. Sagar Wakode, Dr. P. V. Ubale, Dr. J. D. Porey & Dr. S. P. Hargunani

Figure 2: Students attendance at the programme

खामगाव फास्ट

गुरवार दि. 24 मार्च 2022

जमीन व्यवहारांची समयबद्ध कालवधीत चौकशी करुन सं

शासकीय जमीन घोटाळ्या विरोधात पारखेड वासियांचे "दे ध

खामगाव (का. प्र.) मौजे पारखेड येथील मातंग व बौद्ध बांधवांच्या भूमापिन्यांनी बेकादेशीर हडपलेल्या शासकीय जमिनी परत मिळण्याकरिता, भूखंड घोटाळ्याची सीबीआय चौकशी करण्यात यावी यासह विविध मागण्यांकरीता सामाजिक कार्यकर्ते लक्ष्मण सनान्से यांच्या नेतृत्वात गुरुवार दिनांक 24 मार्च 2020 रोजी खामगाव येथील उपविभागीय (महसूल) कार्यालयासमोर "दे धडक बे धडक " डफडे बजाव आंदोलन करण्यात आले. महसूल प्रशासनाला झोपेतून जागे करण्याकरिता करण्यात आलेल्या या आंदोलनामध्ये पारखेड येथील बौद्ध , मातंग समाज बांधव व ग्रामस्थ मोठ्या संख्येने सहभागी झाले होते.

या आंदोलन मंडपाला माजी आमदार राणा दिलीपकुमार सानंदा यांनी भेट देऊन आपला पाठींबा दिला व सविस्तर माहिती जाणून घेतली. या आंदोलनाबाबत उपविभागीय अधिकारी (महसूल) राजेंद्र जाधव व सुद्धा केली. पारखेड वासीयांची मागणी रास्त असून पारखेड येथील भूमिहिनांना देण्यात आलेल्या जमिनी बेकायदेशीरपणे खरेदी करुन त्यावर अवैधपणे मालकी हक्क प्रस्थापित केला जात आहे. असा ग्रामस्थांचा करता या सर्व प्रकरणांची समयबद्ध कालावधीत सखोल चौकशी करून , शासनाच्या जमीन वाटपाच्या मु जमिनी परत मिळण्याकरिता महसूल प्रशासनाने कारवाई करावी , अशा सूचना देखील सानंदानी महसू

गो. से. महाविद्यालयात स्पर्धा परिक्षा वेबिनार संपंन्न

खामगाव - विदर्भ शिक्षण प्रसारक मंडळ व्दारा संचालीत गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय येथे 24. मार्च रोजी Career Counselling and Placement Cell व्दारे M.P.S.C. व U.P.S.C. स्पर्धा परिक्षेसंबंधी वेबिनार आयोजीत करण्यात आला होता. सदर वेबिनारमध्ये सर्व प्रथम महाविद्यालयाचे प्रभारी प्राचार्य मा. डॉ. प्र फुल्ल उबाले यांनी महाविद्यालयातील विद्यार्थ्यांना स्पर्धेपरिक्षेमध्ये जर यश मिळवायचे असेल तर जिद्द, चिकाटी व सातत्य यांच्या विद्यार्थ्यांनी अवलंब करायला हवा. त्यांनी गोष्टीच्या माध्यमातून कसा संघर्ष करावा हे विद्यार्थ्यांना सांगितले. त्यानंतर युनिक अॅकेडमी पुणे शाखा बुलडाणा येथील प्रा. सागर वाकोडे यांनी विद्यार्थ्यांना स्पर्धेसंबंधी योग्य व सविस्तर मार्गदर्शन पॉवरपाईन्टव्दारे केले. त्यामध्ये स्पर्धा परिक्षा कोणत्या असतात, स्पर्धेसंबंधी पात्रता यांची सविस्तर माहिती दिली. कार्यक्रमाचे सुत्रसंचालन प्रा. संजय हरगुणानी यांनी केले तर आभार प्रदर्शन प्रा.डॉ. जयंत पोरे यांनी केले.

लोखंडी रॉडने मारहाण एक जखम

खामगाव - जुन्या वादावरुन वसंता समाधान गिऱ्हे (४०) पि.राजा या दुचाकी थांबवून त्यांच्या डोक्यात लोखंडी रॉडने मारहाण करुन जखमी केल्याची घटना घडली. प्रकरणी शिवाजी नगर पोलिसांनी आरोपी मंगेश ज्ञानेश्वर शहापूर यांच्या विरुद्ध कलम ३२४,५०४, ५०६ भादवीनुसये गुन्हा नोंदविला.

नाना शहाणे

खामगाव - येथील सुपरिचित इलेक्ट्रीकलचे संचालक दीनानाथ नाना शहाणे यांचे आज सकाळी वयाच्या ५७ वर्षी हृदयविकाराने झाले . त्यांची अंत्ययात्रा उद्या मार्च रोजी सकाळी ९ वाजता घर वि[illegible] लाईन मोठ्या वि[illegible] जवळून निघणार आहे . त्यांच्या पश्चात आई,३ भाऊ, परिवार आहे .त्यांच्या आत्म्या दैनिक खामगाव फास्ट परिवा

Figure: 3 Newspaper cutting of the programmew
Few(2-5) glimpses and Press note

गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय, खामगांव

सुचना

दि. १५/०३/२०२२

महाविद्यालयातील सर्व विद्यार्थ्यांना सुचित करण्यात येते की, Career Counseling & Placement Cell व्दारा M.P.S.C. व U.P.S.C स्पर्धा परिक्षेसंबंधी वेबिनार दि. २४/०३/२०२२ रोजी सकाळी १०.०० वाजता ए.व्ही.थेयटर येथे आयोजीत करण्यात आला आहे. या कार्यशाळेला Unique Academy, Pune. Branch-Buldana येथील प्रा. सागर वाकोडे प्रशिक्षक म्हणून लाभणार आहे.

तरी सर्व विद्यार्थ्यांनी उपस्थित राहावे.

प्राचार्य
Principal
G. S. Sci. Arts & Commerce College, Khamgaon - 444303

Dr. J. D. Porey
Activity In charge

Dr. D. S. Talwankar
Principal

(1)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: U.P.S.C. / M.P.S.C. Webinar

Date: 24/03/2022 Venue: A.V. Theatre

List of participants

S N	Name of the participant	Class/ Designation	Signature
1)	Bhavana Jitendrasing pati	B.Com 1 year	Bpati
2)	Mamta R. Parashar	B.Com 1st	Mamta Patil.
3)	Pooja V. Jadhav	B.Com 1st	V.Jadhav.
4)	Swapnil Vilas Ingle	B.Com 1st	Single
5)	pragati Gajanan Gikhe	B.Com 1st	Gikhe
6)	Vaishnavi S. matey	B.com 2nd	matey
7)	Gauri G. Raut	B.com 1st	Raut
8)	Dipali Gajanan Bodade	B.com 1st	Bodade
9)	Ashalata Ramdas Kolhekar	B.Com(II)	
10)	Sakshi vasanta Dhage	B.com 1st	Dhage
11)	Shrutsna Prakash Bhise	B.com II year	Bhise
12)	Mohit Ashok Wholenkar	B.com II year	M.A. Wholenkar
13)	Sneha vivek muthe	B.com I	Muthe
14)	Nikita Ambadas Mahte	B.Com I	Mahte
15)	Utkarsha Umesh Belokar	B.com 1year	Belokar
16)	Ankita Shankar Patil	B.Com 1st	Patil
17)	Vaishnavi Gajanan Dhage	B.Com 1st	Dhage
18)	Shejal N. Dahibhat	B.com I	S.N. Dahibhat
19)	Ashal Sanjay Jaiswal	B.com 2nd	Jaiswal
20)	Komal Sanjay Jayad	B.Com 1st	Jayad
21)	Jagruti Ganesh Shegokar	B.Com I	Shegokar
22)	Sakeha malge	B.Com I	Malge
23)	Ashwini Samadhan Satpute	B.Com II	Satpute
24)	Akshara Vaman Hiwarkar	B.Com II	Hiwarkar
25)	Priti Maroti Raut	B.Com II	Raut
26)	Vishakha Mohan Hiwale	B.com III	Hiwale
27)	Hamsika Sanjay Thorat	B.Com II	H.S. Thorat
28)	Rohini Laxman Bobade	B.com II	R.L. Bobade.
29)	Neha Samadhan Rath	B.Com II	
30)	Sakshi Bhaskarrao Shirke	B.Com II	Shirke
31	Arpita S. Balapure	B.Com II	Balapure
32	Sakshi Arun kalpande	B.Com I	Kalpande
33	Rajshree Ashok Tonare	B.Com (I)	
34	Kajal Hedau	B.Com (II)	K. Hedau

Activity In charge

Principal

Page 2 of 2

(7)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: U.P.S.C & M.P.S.C Webinar

Date: 24/03/22 Venue: A.V. Theatre

List of participants

S.N	Name of the participant	Class/ Designation	Signature
1	Vitthal R. Bichare	B.com I 'C'	Bichare
2	Ruchikesh G. kawle	B.com I 'C'	Kawle
3	Ankit V. Munthe	B.com I 'C'	Munthe
4	Dipak A. Gushin	B.com I 'C'	Gushin
5	Jalhan R. Bhangdiya	B.Com I 'C'	Jalhan
6	Shankgustan R. Thion	B.Com I C	Thion
7	Mahesh S. Bhagat	B.Com I	
8	Vaibhav G. Lal	B Com III C	
9	Ganesh J. Gore	B. Com II C	G. J. Gore
10	Rushikesh N. Hingne	B. Com III C	
11	Abhijeet G. Chopade	B. Com III C	
12	Sachin D. Wayfal	B. Com III C	S. D. Wayfal
13	Akash W. Dhote	B. Com III	
14	Atul S. Kothwal	B. Com II (C)	Kothwal
15	Gaurav S. Ame	B. Com I (C)	
16	Sanjay B. Bansi	B. Com I (C)	
17	Sachin R. Sasane	B. Com 1st (B)	S. R. Sasane
18	Dipak R. Kolaskar	B. Com 1st (B)	
19	Dnyaneshwar S. Patne	B. Com 1st (C)	
20	Gajanan B. Bhambere	B. Com III (C)	
21	Anil Sunil chopade	B. Com II (A)	Chopade
22	Rutik R. Wachar	B COM I (D)	
23	Akash A. Dambhe	B.Com I (D)	Dambhe
24	~~Parivar~~		
25	Nikhil P. Lahudkar	B.com II (B)	Lahudkar
26	Sahil S. Jadhav	B. COM-II (A)	Jadhav
27	Harish S. Ithey	B.COM-II (A)	Ithey
28	Kartik P. Zade	B.Com II (A)	Zade
29	Suresh Mankar	B.(Com)-II A)	S.N. Mankar
30	Snehal P. Tayde	BCA I	
31	Suvarna E Bhagat	BCA - I	
32	Renuka G. Khiddekar	BCA - I	
33	Vaishali Ramesh More	B.com III	V. R. More
34	Kavita Kaila S Halkar	B Com III	K. K Halkar

Activity In charge

Principal

Page 2 of 2

(7)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: U.P.S.C & M.P.S.C. webinar

Date: 24/03/2022 Venue: A.V. Theatre

List of participants

S N	Name of the participant	Class/ Designation	Signature
1)	Sunil B. Khandage	M.Com I	Khandage
2)	[illegible]	[illegible]	[illegible]
3)	Pavan S. Bhagesar	B.Com II	[illegible]
4)	Abhijeet Sureshrao Nanhare	B.Com II	Nanhare
5)	Om R. Ghogale	B.Com II (A)	O.Ghogale
6)	Abhijeet P. [illegible]	B.Com I (A)	[illegible]
7)	Vishal A. Deshmukh	B.Com II (C)	[illegible]
8)	Sumedh M. Tiwale	B.Com I (A)	[illegible]
9)	Shivcharan Mundaleay	B.Com II (B)	[illegible]
10)	Shyam P. Tungode	B.Com II (C)	[illegible]
11)	Vishal D. Jaiswal	B.Com II (C)	[illegible]
12)	Ashish T. Pankule	B.Com II (C)	[illegible]
13)	[illegible] S. [illegible]	B.Com II (A)	[illegible]
14)	Pankaj R. Dhokshi	B.Com II (B)	[illegible]
15)	Avinash G. Dandale	B.Com II (B)	[illegible]
16)	Shubhadeep [illegible]	B.Com II (B)	[illegible]
17)	Saurabh P. Navlakhe	B.Com II B	[illegible]
18)	Ganesh P. Wankhade	B.Com II (B)	[illegible]
19)	Rohan S. Deshmukh		
20)	Pranav S. Chandangole	B.Com I B	[illegible]
21)	Bunty A. Rakhonde		[illegible]
22)	Vishal S. Gaipade		[illegible]
23)	Supriya P. Mansai		[illegible]
24)	Nandkumar P. Chandak		
25)	Abhijeet A. Chavhan	B.Com I (B)	[illegible]
26)	Umesh S. Gave	B.Com II (A)	[illegible]
27)	Avinash P. Bachale	B.Com II (A)	[illegible]
28)	Ajay K. Mujare	B.Com II (B)	[illegible]
29)	Shubham D. Umale	B.Com II (D)	[illegible]
30)	Vaishnavi Zate	B.Com II (A)	[illegible]
31)	Ganesh S. Atole	B.Com II (B)	[illegible]
32)	Vishal S. Dange	B.Com III (B)	[illegible]
33)	Shivam A. Mankhade	B.Com II (B)	[illegible]
34)	Jaydip H. Mote		
35)	Harshal K. Sarthak	M.Com-I Sem	[illegible]

Activity In charge

Principal

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(1)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: U.P.S.C. & M.P.S.C. Webinar

Date: 24/03/2022 Venue: A.V. Theatre

List of participants

S N	Name of the participant	Class/ Designation	Signature
1.	Riya P. Agrawal	B.Sc-CIM-Iy	Agrawal
2.	Sneha S. Ugale	BSC I - CSM	Sneha
3.	Divya K. Sadawarte	B.Com - II	
4)	Neha S. Tayade	B.com II	Tayade
5)	Minal G. Kanjuldkar	B. com II	Kanjuldkar
6)	Pragati S. Bhise	B. Com I	P.S. Bhise
7)	Chaitanya B. Baghe	B. com I	Baghe
8)	Neha V. zate	B. com I	N.V.zate
9)	Neha Mohan Gadge	B.com I	Gadge
10)	Sunita Radheshyam Fuse	B. Com I	S.R.fuse
11)	Aparana Bhagwat zate	B. com I	Mate
12)	Sakshi Dayaram Sapkal	B. Com. I (B)	Sapkal
13)	Gayatri Vishwomber Patale	B.Com I (A)	G.V. Patale
14)	Nikita Shivkishan Bhagwat	B.com II(A)	N.S. Bhagwat
15)	Snehal Avinash Parashkar	B.Com II Year	Parashkar
16)	Divya Gajanan Mirge	B.com II Year	D.G. Mirge
17)	Vaishnavi Sanjay Umbarkar	B. Com I	Umbarkar
18)	Renuka Purushottam Rathore	B.com II	Rathore
19)	Pranjal Vishnu Ghayal	B.Com II	Ghayal
20)	Vaishnavi Hissal	B.Com II	Vithissal
21)	Jagruti Ganesh Shelokar	B Com I	Shelokar
22)	Sneha Arun Mahajan	B. Com I	Mahajan
23)	Shruti Tawalkar	B. com I	Tawalkar
24)	Chanchal R. Rikkabi	B. com I (B)	Rikkabi
25)	Pooja S. Wakode	B. Com I (B)	Wakode
26	Vaishali K. Chavan	B. com I (A)	Vaishali K. Chavan
27)	Pallavi S. Tiwari	B.Com II (A)	Tiwari
28)	Dnyaneshwari D. Akhat	B. Com II (A)	Dnyaneshwari Akhat
29	Kajal B. Ingle	B. com I A	K.B. Ingle
30)	Ketki M. Gabhai	B. com 1 A	K. M. G
31)	Maya B. Ingle	B. com 1 A	M. B. Ingle
32)	Shraddha P. Mirge	B.com 1st year	S. P. Mirge
33)	Kiran Santosh Sonulkar	B.com - II	Sonulkar
34)	Vaishnavi Suresh Rahate	B.com II	Rahate
35)	Ashwini Govinda Akart	B.com II	Akart

Activity In charge

Principal

(2)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: U.P.S.C. & M.P.S.C. webinar

Date: 24/03/2022 Venue: A.V. Theatre

List of participants

S N	Name of the participant	Class/ Designation	Signature
1	Anushka. V. Gonle	B.com IV D	
2	Sanyukta. S. Bhople	B.com IV D	S.S. Bhople
3)	Pratiksha G. Ghosad	B.com IV D	Ghosad.
4)	Vaishnavi R. Adhao	B.com IV D	
5)	Disha G Kankimad	B.com I A	D.G.Kankimad
6)	Mina G. Jadhav	B.com I A	M.G.Jadhav
7)	Yogita Jagannatha Patale	B.com I A	Y. J. Patale
8)	Vaishnavi Gajana Mahale	B.com I B	V. G. Mahale
9)	Sonal prabhakar Mahale	B.com I B	S.P. Mahale
10)	Divya Vilas Vasamkar	B.com I B	D. V. Vasamkar
11.	Mohika Gajanan Bichare	B.com III A	Mbichare.
12.	Shital Suresh Bichare.	B.com III A	Sbichare.
13)	Pooja Hazibhau Mirge	B.com I (A)	P.H. Mirge
14)	Vaishnavi Gajanan Deshmukh	B.com I (A)	Vdeshmukh
15)	Radha Narayan Ambhore	B.com I (A)	Rambhore
16)	Disha Arun gonge	B.com I (A)	Agonge
17)	Jagruti Ganesh Shelokar	B.com I	Jshelokar
18)	Kajal Shriram Bhuyar	B.com II (A)	KBhuyar
19)	Aakanksha S. Rathod	B.Com II (D)	ASRathod
20)	Punam Pralhad Hissal	B.com I (D)	PP Hissal
21)	Anuradha Anil Chhangani	B.com I (A)	
22)	Bhakti mahendra Tiwari	B.com I (B)	Btiwari
23)	Nivita Ravindra Asole	B.com I (B)	Nasole
24)	Vaishnavi shankar Mirge	B.com II (A)	Vmirge
25)	Punam Santosh Mirge	B.com II (B)	PSmirge
26)	Renuka Babanrao Kshirsagar	B.com III (C)	R.Bkshirsagar
27)	Dhanashri Shivaji Thakare	B.com III (C)	D.S. Thakare
28)	Pooja . D. Shirsath	B.com II 'B'	P.D.S.
29)	Shraddha D. Ranane	BCA-I	Dranane
30)	Nikita P. Asawar	BCA-I	
31)	Janvi B. Khandare	BCA I	Bkhandare
32)	Shreya V. Baskar	BCA I	
33)	Pooja S. Jongbakare	B.com II	Psjongbakare

Activity In charge

Principal

Page 2 of 2

(6)

G S Science, Arts and Commerce College, Khamgaon

Title of the event: V.P.S.C.S M.P.S.C. Webinar

Date: 24/05/2022

Venue: A.V. Theatre

List of participants

S N	Name of the participant	Class/ Designation	Signature
1)	Nobinay P. Chavan	B.com 3rd (A)	[illegible]
2)	Suresh S. Deshmukh	B.com 1st	S.S. Deshmukh
3)	Swapnil E. Ghote	1st B.com	Swapnil E. Ghote
4)	Rushikesh S. Raut	1st B.A. (A)	R.S. Raut
5)	Dipak Rajesh Chokte	1st B.A. (B)	[illegible]
6)	Vinayak Rameshwar Bochare	B.A. I	[illegible]
7)	Vitthal Baburao Kuyate	B.com (A)	V.B. Kuyate
8)	Ganesh Shankar Zod	B.com (A)	[illegible]
9)	Nikhil Santosh Pathal	B.A. III Year	[illegible]
10)	Pavan Dinesh Dhore	B.A. III Year	[illegible]
11)	Sandip Ambhore	B.com III	[illegible]
12)	Ashish Omprakash Tayade	B.com I	[illegible]
13)	Rushikesh D. [illegible]	[illegible] I	[illegible]
14)	Aman Vijay Gaysol	B.A. II	[illegible]
15	Ayush Gautam Samrade	B.A. II	[illegible]
16	Akshay Vijay Wankhede	B.Sc III	[illegible]
17	Rohan M. Chambhare	B.com II (A)	[illegible]
18)	Buddharakshit P. Wankhade	B.C.A.	B. Wankhede
19)	Shivang G. Kute	B.C.A.	[illegible]
20	Bhagyashri B. Nimkarde	B.A. I	B.B. Nimkarde
21	Shrutti S. Khandare	B.A. I	S.S. Khandare
22	Shital R. Pawar	B.A. I	S.R. Pawar
23	Vaishnavi S. Rothe	M.com I	[illegible]
24	Tejas S. Dabhbhat	B.Sc II	[illegible]
25	Abhishek R. Saukhekar	B.Sc II	[illegible]
26	Deepak G. Dabke	B.Sc III	D.G. Dabke
27	Omkar S. Tadekar	B.A. III	[illegible]
28)	Sakshi D. Tayade	B.Sc I	Stayade
29)	Dhanashree C. Tomar	B.Sc I	D.Tomar

Activity In charge

Principal

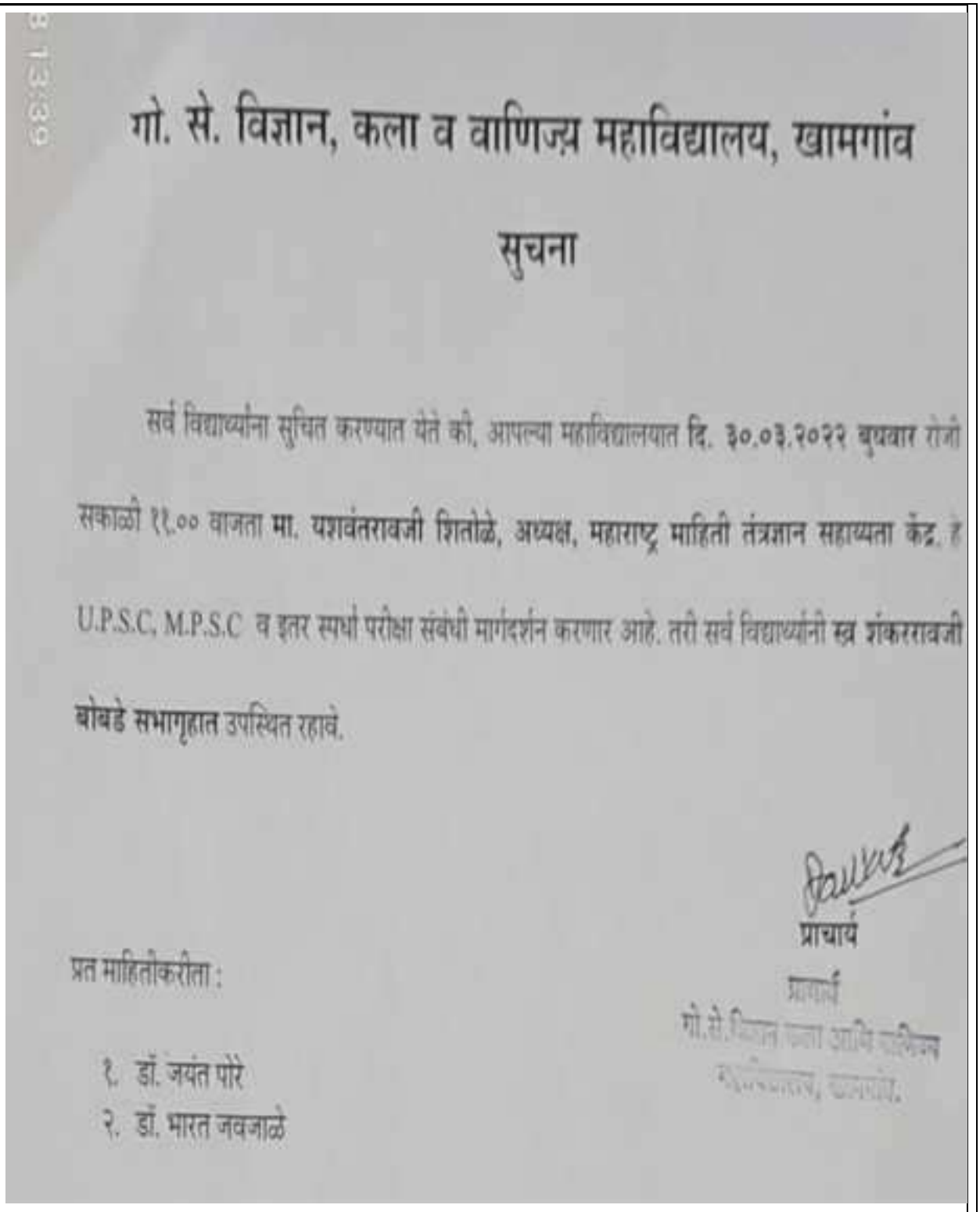
Page 2 of 2

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Webinar on the topic –" Guidance of MPSC/UPSC"**
Organizing Department	Career Katta
Date	30.03.2022
Venue	S.B.Hall
Guest/ Resource Persons	Mr. Mr. Yashwantji Shitole (President, Maharashtra Technology Support Centre)
No of Beneficiaries	Students 95 Teachers 09 Others 02 Non-teaching staff
Brief Report about event	A Webiner Orgonised By Career Katta on 30-03-2022 the topic –" Guidance of MPSC/UPSC " a details guidance provided by Mr. Yashwantji Shitole ((President, Maharashtra Technology Support Centre)At the outset the guest welcome by Officiating Principal Dr. P.V. Ubale chairperson of the program, The anchoring of the Program conducted by Prof Dr. Rohini Dharamkar Madam & Dr. D.T, Adhau & vote of thanks expressed by Dr. J. D. Porey. Dr. P.V Ubale. Prof. Dr. R.R. Gawhale, Dr. Akotkar, Dr. K. S. Gulhane, Prof. Jayash Tated & Taluka Co-ordinator Dr. Bharat Jawjale also present to the programme.

Figure 1 On the dais Mr. Yashwant Shitole, Dr. P. V. Ubale, Dr. J. D. Porey.

Figure 2: Students attendance at the programme



गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय, खामगांव

सुचना

सर्व विद्यार्थ्यांना सुचित करण्यात येते की, आपल्या महाविद्यालयात दि. ३०.०३.२०२२ बुधवार रोजी सकाळी ११.०० वाजता **मा. यशवंतरावजी शितोळे, अध्यक्ष, महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र.** हे U.P.S.C, M.P.S.C व इतर स्पर्धा परीक्षा संबंधी मार्गदर्शन करणार आहे. तरी सर्व विद्यार्थ्यांनी **स्व शंकररावजी बोबडे सभागृहात** उपस्थित रहावे.

प्राचार्य

प्रत माहितीकरीता :

१. डॉ. जयंत पोरे
२. डॉ. भारत जवजाळे

figure: 3 Notice of the programme for students.

सकाळ

स्पर्धा परीक्षेमध्ये समर्पण हे यशाचे गमक

यशवंत चितोळे : स्पर्धा परीक्षेसंबंधी वेबिनार संपन्न

खामगाव : मार्गदर्शन करताना यशवंत चितोळे.

सकाळ वृत्तसेवा

खामगाव,ता.१ : विदर्भ शिक्षण प्रसारक मंडळाव्दारा संचालित गो.से.विज्ञान, कला व वाणिज्य महाविद्यालय, खामगाव येथे (ता.३०) करिअर कट्टा व्दारे एमपीएससी व युपीएससी व इतर स्पर्धा परीक्षेसंबंधी वेबीनार आयोजित करण्यात आले होते.

सदर वेबीनारला व्यासपीठावर प्रभारी प्राचार्य डॉ. प्रफुल्ल उमाळे, यशवंत चितोडे, उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य आणि महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र व गो. से. महाविद्यालय करिअर कट्टाचे समन्वयक डॉ.जयंत पोरे हे उपस्थित होते.

सदर वेबीनारमध्ये सर्वप्रथम उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य आणि महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्राचे अध्यक्ष यशवंत चितोडे यांनी विद्यार्थ्यांना स्पर्धा परीक्षा तसेच करिअर कट्टा संबंधी विस्तृत माहिती दिली. तदनंतर वेबीनारचे अध्यक्ष महाविद्यालयाचे प्रभारी प्राचार्य डॉ. प्रफुल्ल उमाळे यांनी विद्यार्थ्यांना मार्गदर्शन करतांना जगातील प्रत्येक मनुष्य आपल्या आयुष्यात काहीतरी किंवा इतर मिळविण्यात आस बाळगतो. आयुष्यात यशस्वी होणे आणि त्याची कल्पना करणे हे एक वर वर जरी सोपे असले तरी प्रत्यक्षात यश मिळविण्यात खुप आव्हाण असते असे म्हटले. सदर वेबीनारला प्रा. डॉ.आर.आर.गव्हाले सर, प्रा. डॉ.आकोटकर सर, प्रा.डॉ.गुल्हाने, डॉ.धामकार मॅडम, प्रा. जयेश तातेड खामगाव ता. समन्वयक प्रा.डॉ.भात जवजाळे उपस्थित होते. कार्यक्रमाचे सुत्र संचालन प्रा. डॉ. रोहिणी धामकार व प्रा.डॉ. देवनंदन अढाव यांनी केले. तसेच सदर वेबीनारचे सिंयोजन प्रा. डॉ. जयंत पोरे व प्रा.डॉ.भात जवजाळे यांनी केले. अशी माहिती प्रा.डॉ.मो. रागीब देशमुख यांनी प्रसिध्दी पत्रकाद्वारे दिली आहे.

Akola, Buldhana-Today
02/04/2022 Page No. 4

Figure: 3 Newspaper cutting of the programme
Few(2-5) glimpses and Press note

Dr. J. D. Porey
Activity In charge

Dr. D. S. Talwankar
Principal

G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C & U.P.S.C. व इतर स्पर्धा परिक्षा चे मार्गदर्शन

Date: 30.03.2022

Venue: S.B. Hall. G.S. College, Khamgaon

List of participants

S.N	Name of the participant	Class/ Designation	Signature
1)	Naina Sanjay Hade	BSc-I (CBZ)	Hade
2)	Kalyani Jagdish rao Pokhrkar	BSc-I (CBZ)	K.J.Pokhrkar
3)	Disha Balwant Shille	BSc-I (CBM)	Disha
4)	Nisha Vishnu Kale	BSc-I (CBZ)	N.Kale
5)	Gayatri Shivshankar Sabibhat	B.Sc-I (CBZ)	G.Sabibhat
6)	Rutuja Bhaskar Raundale	B.Sc-I (CBZ)	R.B.Raundale
7)	Arpita Shrikrushna Pawar	B.Sc-I (CBZ)	A.S. Pawar
8)	Divya Ramdas Hage	B.Sc-I (CBZ)	D.R. Hage
9)	Sanjana Sudhir Bhole	B.Sc-I (CBZ)	S.S. Bhole
10)	Neha Arun Ghodade	BSc II (CBZ)	N.Ghodade
11)	Shifa Riyazoddin Deshmukh	BSc III (CBZ)	[illegible]
12)	Komal Vishnu Gaikwad	BSc-I (CBZ)	[illegible]
13)	Sakshi Suresh Dethe	BSc-I (CBZ)	S.Dethe
14)	Riya Pankaj Agrawal	BSc-I (CBM)	[illegible]
15)	Shraddha Vijay Khamankar	BSc-I (CBM)	[illegible]
16)	Neha Govinda Ladhe	BSc-I (CBM)	G.Ladhe
17)	Kalyani Suresh Tayade	BSc-I (CBM)	K.S. Tayade
18)	Rajashri Santosh Wakode	BSc-I (CBZ)	[illegible]
19)	Sakshi Dnyaneshwar Tayade	BSc-I (CBZ)	S.Tayade
20)	Bhagyashree C. Tomar	BSc-I (CBZ)	B.Tomar
21)	Shubhangi Shrikrushna Borkar	BSc-I (CBZ)	S.Borkar
22)	Dipali Haridas Mangle	BSc-I (CBZ)	D.Mangle
23	Ankita Vishnu Gaikar	BSc-I (CBZ)	A.Gaikar
24	Pallavi Purushottam Kale	BSc-I (CBZ)	P.Kale
25	Ashwini Gajanan Dhoke	BSc-I (CBZ)	Ashwini
26	Vaishnavi Sampat Ambhore	BSc II (CBZ)	V.Ambhore
27)	Anisha Shankar Rathore	Bcom II	[illegible]
28)	Shital Rameshwar Ambhore	BSc-II (CBZ)	[illegible]
29)	Kiran Kishor Bundele	M.A-I (Eng)	K.K.Bundele
30)	Yugini Samadhan Kandelkar	B.com II	[illegible]
31)	Krishna Gajanan Kurhe	B.com II	[illegible]
32)	Vaishnavi Manohar Ghule	B.com II	[illegible]
33)	Gauri Balkrushna Bhore	BSc I	G.B. Bhore
34)	Sneha Sanjay Ugale	BSc-I (CSM)	S.Ugale
35)	Vaishnavi Mahadev Ghanpade	BSc-I (CBZ)	V.M. Ghanpade

Activity In charge

Principal

Principal
G. S. Sci. Arts & Commerce College, Khamgaon - 444303

Page 2 of 2

G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C. व U.P.S.C. व इतर स्पर्धा परिक्षा के मार्गदर्शन

Date: 30-3-2022

Venue: S.B. Hall G.S. College, Khamgaon

List of participants

S.N.	Name of the participant	Class/ Designation	Signature
1.	Harish S. Ingy	B.COM 2nd Y	[illegible]
2.	Sahil S. Jadhav	B.COM 2nd Y	[illegible]
3.	Sandip B. Ambhore	B.com III	[illegible]
4	Akshay S. Bhakar	BA II	[illegible]
5	Ankit S. Mundhe	B.Com I	[illegible]
6	Vitthal R. Bichare	B.com I	GRBichare
7	Mahesh S. Gawande	B.Com-I (A)	[illegible]
8	Rutik R. Avawchar	B.Com-I (B)	R.Avawchar
9	Ankush V. Bawale	B.Voc-II	A.Bawale
10	Abhishek A. Kankale	B.Voc-II	[illegible]
11	Harshad R. Pandhare	B.Voc II	[illegible]
12	Tushar R. Gawande	BSC II	T.R. Gawande
13	Aashutosh S. Giri		
14)	Gaurav U. Ambhore	BCA II	G. U. Ambhore
15)	Yogesh G. Nimse	BCA II	[illegible]
16)	Rushikesh Suresh Sohane	BCA I	[illegible]
17	Aniket D. Raut	BSC III	A.D. Raut
18	Abhang G. Gomase	Bsc 3rd	A.G. Gomase
19	Rahul P. Saiswal	Bsc 3rd	R.P. Saiswal
20	Saurabh R. Manmode	Bsc 3rd	S. Manmode
21	Chetan S. Bodhe	B.com II	[illegible]
22	Shubham T. Bochare	B.com II	[illegible]
	Rushikesh R. Dawange	B.com III	[illegible]
23	Anand S. Khandare	B.com II	[illegible]
24	Abhishek Kailas Deshmukh	B.Voc III	[illegible]
25	Dnyaneshwar N. Wahadkar	B.com III	D.N. Wahadkar
27	Rushikesh Gajanan Wankhade	B.A. II	[illegible]
	Pavan Dinesh Dhore	BA III Year	[illegible]
25	Sandeep Gopal Shegokar	MSC-II Year	[illegible]
26)	Dipak Rajesh Chapde	B.A. I Year	[illegible]
27)	Harihar Vishnu Burade	B.A. I	H.V.Burade
28)	Nikita Shivshankar Bhagat	B.com II	N.S. Bhagat
29)	Bhagyashri R. Bhalerao	B.com II	Bhalerao
30)	Pooja Shrinath	B.com II	[illegible]
30)	Mukta Suresh Bhagat	B.com II	[illegible]

Activity in charge
30-3-2022

Principal
Principal
G. S. Sci. Arts & Commerce
College, Khamgaon - 444303

Page 2 of 2

G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C & U.P.S.C व इतर स्पर्धा परीक्षा से मार्गदर्शन.

Date: 30.03.2022 Venue: S.B. Hall, G.S. College Khamgaon.

List of participants

S N	Name of the participant	Class/ Designation	Signature
1	Harish K. Sapkhire	M.Com II Sem	
2	Sonal M. Ghanekar	B.Com II year D	S.M. Ghanekar
3	Nilesh S. Dandale	B.Com II (D)	
4	Rushikesh G. Tupalekar	BSc - I (CSM)	
5	Mrunal P. Bambatkar	BSC - I (PCM)	
6	Sweta S. Bombat Patil	BSC I CPCM	
7	Umesh K. Nanwatkar	BA - I	U.K. Nanwatkar
8	Sneha G. Nimkardc	BSC I (PCM	S. G. Nimkardc
9	Rishvini S. Gatpute	B.Com II	
10	Nehal S. Tayde	B.com II D	
11	Minal G. Langdetaker	B.com II B	
12	Aakanksha S. Rathod	B.Com II 'D'	
13	Neha R. Tayde	B.com II 'B'	
14	Nilamrata G. Gawashe	B.Com II B	
15	Gauri G. Moorkhond	B.com II B	G.G. Moorkhond
16	Yogita G. Gawhale	B.Com II A	
17	Gayatri S. Bhople	B.com II D	G.S. Bhople
18	Aarti Anil Khadcan	B.COM II	Khadcan
19	Jayashri P. Ingle	BSC III	

Activity In charge

Principal
G. S. Sci. Arts & Commerce College, Khamgaon-444 303

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	Breast Feeding Awareness Program
Organizing Department	Home economics
Date	20.08.2022
Venue	Sati Fail Angnwadi no..75 /76
Guest/ Resource Persons	DR. Dnyaneshwari Padtod
No of Beneficiaries	Students___35_____ Teachers_02_____ Others____03_,31__
Brief Report about event	Department of Home Economics G.S.Sciences,Arts &Commerce College Khamgaon organized Breast feeding Awareness program 2022-23 during 20 Augest2022.Occasion for Breastfeeding week .Organized a workshop on the importance and awareness of breastfeeding for the woman of satifail Anganwadi no. 75/76 on the occasion of breastfeeding week by Home Economics Dept. and N.S.S.Was done . The workshop was chaired by Dr.P.V.Ubale vice principal of the college delivered the speech on mothers milk is important for the health of the baby and through this kind of workshop , it will help to remove the misunderstanding of the mother. Unable expressed The main guid of the workshop Dr. Dnyaneshwari Padtod guided the women in depth on the subject and removed the misconceptions in their minds with a demonstration that mothers should breastfeed properly. On this occasion N.S.S. Assistant program officer prof.Shigane was present . For the success of the workshop Anganwadi Head Mrs.Nisha Mahamune ,Vandana Amle ,N.S.S. Program officer Dr. H.A.Bhosale .The workshop it self was organized by Prof.Dr. Neeta Boche Head of the Dept.of Home Economics and N.S.S.women program officer. The workshop conducated by ku. Sakshi mahamune and vote of the thanks was given by ku. Simran Jain . vaishanvi Golait, Anushka Mesre, Shruti Khandare, Megha Bodade ,students of the dept.of Home economics and n.s.s. volunteers worked hard for the success of the workshop.

Activati Incharge

Principal

लोकमत

स्तनपान सप्ताहानिमित्त कार्यशाळा

लोकमत न्यूज नेटवर्क

खामगाव : गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय, खामगाव येथील गृहअर्थशास्त्र विभाग आणि राष्ट्रीय सेवा योजनेच्या संयुक्त विद्यमाने स्तनपान सप्ताहानिमित्त सतीफैल अंगणवाडी क्रमांक ७५/७६ येथील महिलांसाठी स्तनपानाचे महत्त्व आणि जागरूकता या विषयावर कार्यशाळा पार पडली. कार्यशाळेचे अध्यक्ष महाविद्यालयाचे उपप्राचार्य डॉ. प्रफुल उबाळे होते.

कार्यशाळेत डॉ. ज्ञानेश्वरी पातोंड यांनी महिलांना सखोल मार्गदर्शन केले. यावेळी राष्ट्रीय सेवा योजनेचे सहकार्यक्रमाधिकारी प्रा. सचिन शिंगणे उपस्थित होते. कार्यशाळा यशस्वी करण्यासाठी अंगणवाडी प्रमुख निशा महामुने, वंदना आमले, राष्ट्रीय सेवा योजना कार्यक्रम अधिकारी प्रा. डॉ. हनुमंत भोसले यांनी सहकार्य केले. कार्यशाळेचे आयोजन गृहअर्थशास्त्र विभाग प्रमुख तथा राष्ट्रीय सेवा योजना महिला कार्यक्रम अधिकारी प्रा. डॉ. नीता बोचे यांनी केले.

संचालन साक्षी महामुने यांनी केले, तर आभार सिमरन जैन हिने मानले. यशस्वितेसाठी वैष्णवी गोलाईत, अनुष्का मेसरे, श्रुती खंडारे, मेघा बोदडे, शीतल पवार, पूजा दाते, प्रियंका बोदडे, शिवानी बोंबटकार, गृहअर्थशास्त्र विभागातील विद्यार्थिनी, स्वयंसेविकांनी प्रयत्न केले.

Hello Khamgaon
Page No. 2 Aug 24, 2022
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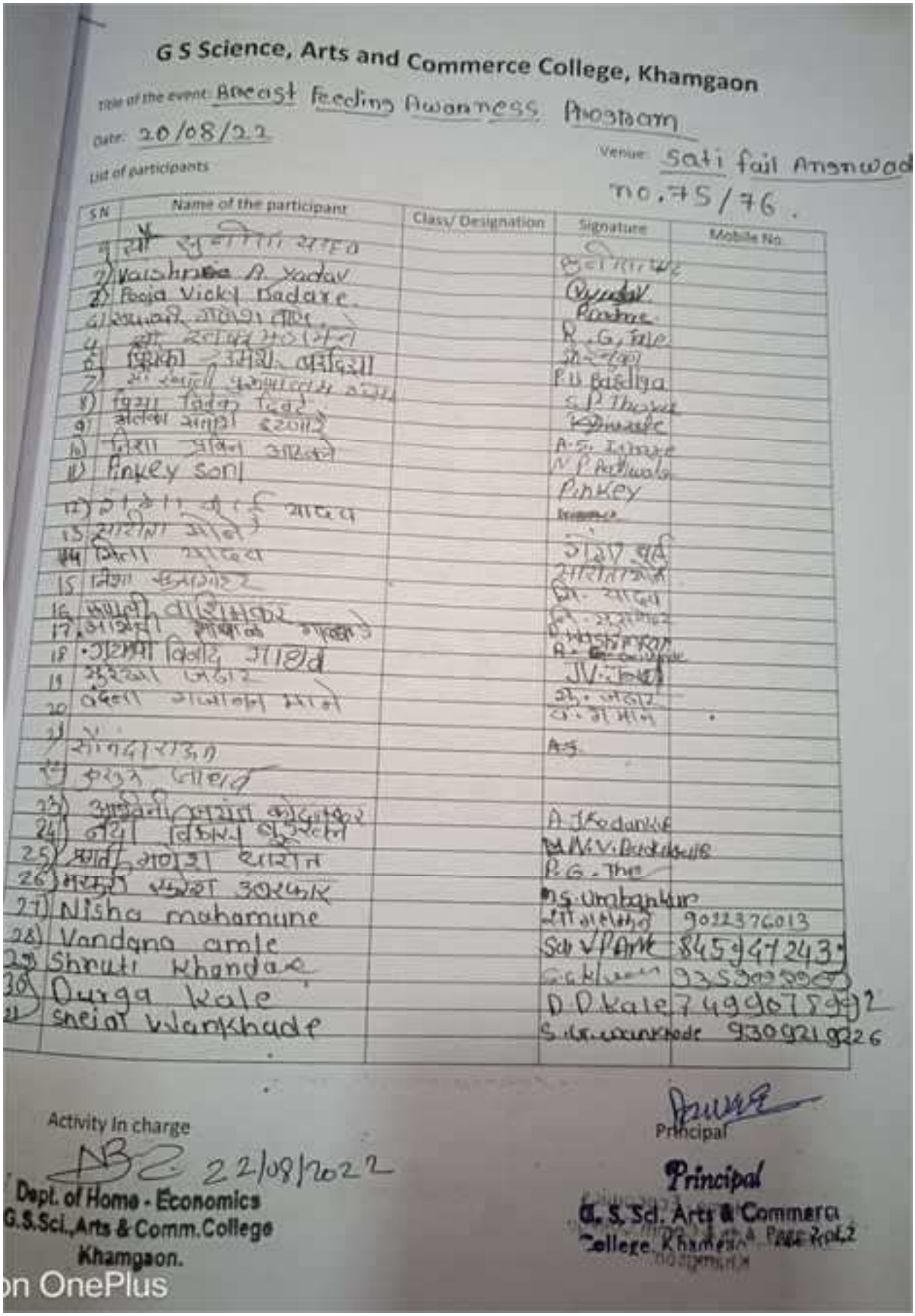


G S Science, Arts and Commerce College, Khamgaon

Title of the event: Breast Feeding Awareness Programm

Date: 20/08/22

Venue: Sati fail Anganwadi No. 75/76.

List of participants

SN	Name of the participant	Class/ Designation	Signature	Mobile No
1	[illegible]			
2	Vaishnavi A. Yadav			
3	Pooja Vicky Badare		Pooja V. Badare	
4	[illegible]		R. G. Tale	
5	[illegible]		P.U. Baldiya	
6	[illegible]		S.P. Thakre	
7	[illegible]		A.S. Ingale	
8	[illegible]		N.P. Padwale	
9	[illegible]		Pinkey	
10	[illegible]			
11	[illegible]			
12	[illegible]			
13	[illegible]			
14	[illegible]			
15	[illegible]			
16	[illegible]			
17	[illegible]			
18	[illegible]			
19	[illegible]			
20	[illegible]			
21	[illegible]		A.S.	
22	[illegible]			
23	[illegible]		A.J. Kadam	
24	[illegible]		M.V. Deshmukh	
25	[illegible]		P.G. Thakre	
26	[illegible]		M.S. Umbarkar	
27	Nisha mahamune		[illegible]	9022376013
28	Vandana amle		Sd/ [illegible]	8459747243
29	Shruti Khandare		[illegible]	9325[illegible]
30	Durga Kale		D.D. Kale	7499078[illegible]2
31	Sneha Wankhade		S. Wankhade	9309219226

Activity In charge

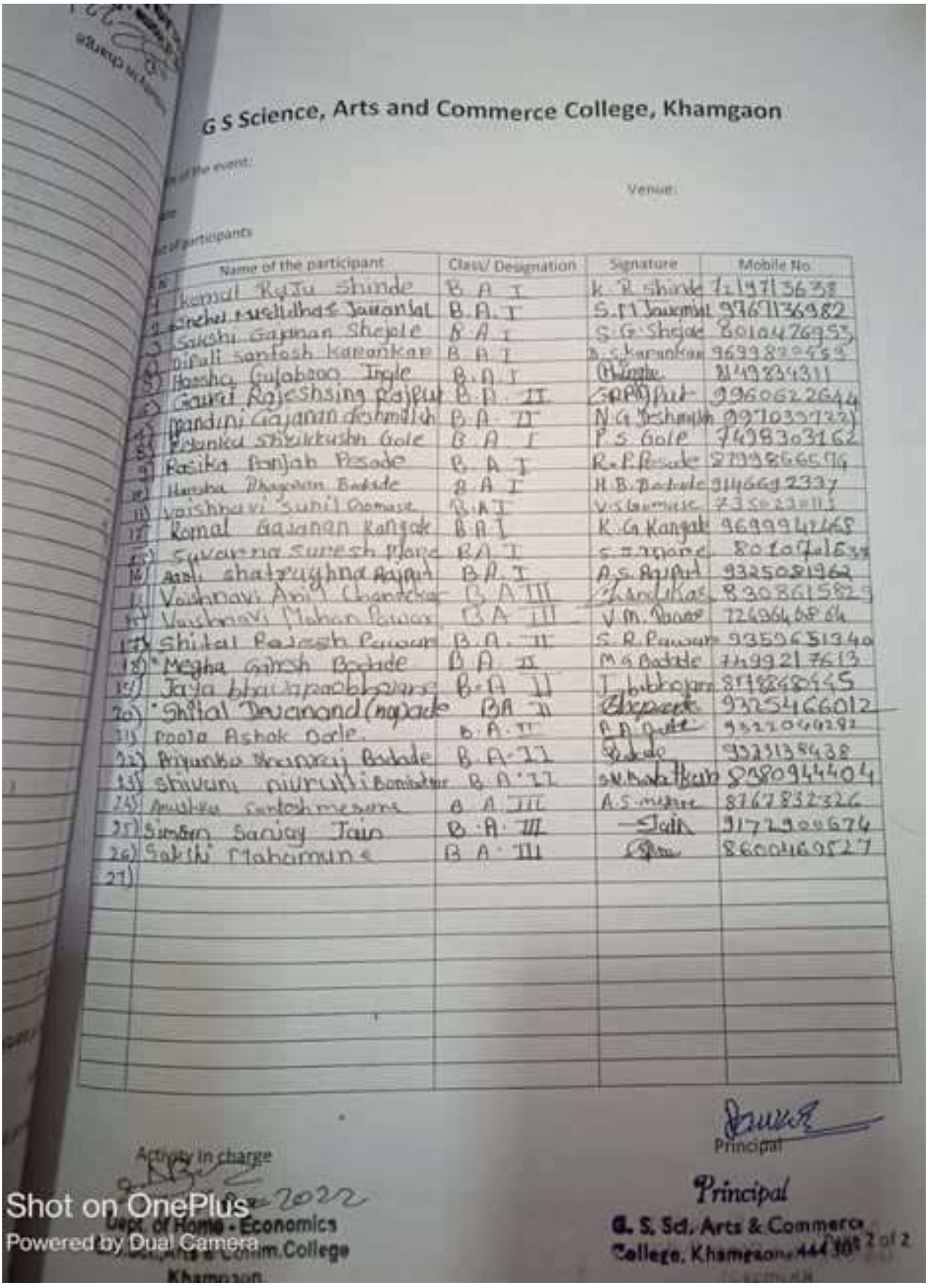
22/08/2022

Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
Khamgaon.

Principal

Principal
G. S. Sci. Arts & Commerce
College, Khamgaon

Page 2 of 2



G S Science, Arts and Commerce College, Khamgaon

Name of the event:

Venue:

No. of participants

Sr. No.	Name of the participant	Class/ Designation	Signature	Mobile No.
1	Komal Raju Shinde	B. A. I	K. R. Shinde	7219713638
2	Sanchal Sudhidhar Jawanjal	B. A. I	S. S. Jawanjal	9767136982
3	Sakshi Gajanan Shejole	B. A. I	S. G. Shejole	8010476953
4	Pinali Santosh Karoankar	B. A. I	S. S. Karoankar	9699829659
5	Harsha Gulabrao Ingle	B. A. I	(illegible)	8149834311
6	Gauri Rajeshsing Rajput	B. A. II	S. R. Rajput	9960622644
7	Nandini Gajanan deshmukh	B. A. II	N. G. Deshmukh	9970339732
8	Prtanka Shrikrushn Gole	B. A. I	P. S. Gole	7498303162
9	Rasika Ranjan Pesode	B. A. I	R. P. Pesode	9709866596
10	Harsha Bhagwan Bokade	B. A. I	H. B. Bokade	9146692337
11	Vaishnavi Sunil Gomase	B. A. I	V. S. Gomase	7350223113
12	Komal Gajanan Kangale	B. A. I	K. G. Kangale	9699942465
13	Suvarna Suresh Mane	B. A. I	S. S. Mane	8010776638
14	Km. Shatrughna Rajput	B. A. I	A. S. Rajput	9325081962
15	Vaishnavi Anil Chavhan	B. A. III	Vaishnavi	8308615825
16	Vaishnavi Mohan Pawar	B. A. III	V. M. Pawar	7269646864
17	Shital Rajesh Pawar	B. A. II	S. R. Pawar	9359651340
18	Megha Girish Bokade	B. A. II	M. G. Bokade	7499217613
19	Jaya Bhaupachbhaise	B. A. II	J. Bhaupachbhaise	8788480445
20	Shital Devanand Ingale	BA II	Shital	9325466012
21	Pooja Ashok Dole	B. A. II	A. D. Dole	9322066292
22	Priyanka Pandurang Bobade	B. A. II	Bobade	9325135438
23	Shivani Murlidhar Bankar	B. A. II	M. Bankar	8380944404
24	Anushka Santosh Meshram	B. A. III	A. S. Meshram	8767832326
25	Simran Sanjay Jain	B. A. III	Jain	9172900674
26	Sakshi Mahamune	B. A. III	Sakshi	8600469527
27				

Activity In charge

Dept. of Home - Economics

Principal

Principal
G. S. Sci. Arts & Commerce College, Khamgaon


स्तनपान सप्ताह निमित्त कार्यशाळा
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Khamgaon, Maharashtra, India
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Lat 20.713811°
Long 76.560636°
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Google


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G S Science, Arts and Commerce College, Khamgaon

<table>
<tr><td>Title of the Activity</td><td>Sports Activities</td></tr>
<tr><td>Organizing Department</td><td>Student Development Committee.</td></tr>
<tr><td>Date</td><td>18/09/2021</td></tr>
<tr><td>Venue</td><td>Badminton Hall and Cricket Ground, G S College, Khamgaon</td></tr>
<tr><td>Guest/ Resource Persons</td><td>Dr. S S Bobdey, President, V S P Mandal, Khamgaon</td></tr>
<tr><td>Committee</td><td>Dr. S. T. Warade
Dr. H. A. Bhosale
Prof. Anurag K Bobdey
Prof. Jayesh Tated</td></tr>
<tr><td>No of Beneficiaries/ Participants</td><td>Students :- 50
Teachers :- 30
Non-Teaching :- 22</td></tr>
<tr><td>Brief Report about event</td><td>This activity was organized as a part of Late S B Bobdey Memorial Week celebration during 18th to 24th September, 2021. Dr. D. S. Talwankar was the chairperson of this activities and Dr. S. S. Bobdey was the chief guest and inaugurator of these activities. The details of participation and winner of the activities are given below:
<table>
<tr><td>Activity</td><td>No. of Participants</td><td>Winner</td><td>Runner</td></tr>
<tr><td>Chess</td><td>Male-16

Female-4</td><td>Hrushikesh Mehetre

Jayashri Gadhe</td><td>Sandesh Rathod

Apeksha Chopde</td></tr>
<tr><td>Chess Staff</td><td>13</td><td>Dr. M. O. Wankhade</td><td>Dr. P P Thakur</td></tr>
<tr><td>Badminton</td><td>Male-19
Female-11
Staff-17</td><td>Pavan Wanare
Jayashri Gadhe
Anurag Bobdey
Dr. Nita B Boche</td><td>Atharva Rahane
Shravani Kulkarni
Dr. D T Adhao</td></tr>
<tr><td>Cricket</td><td>Staff-24
Man of the Match</td><td>P S Bodkhe’s Team
G M Surwade</td><td>S.V.Jadhao’s Team</td></tr>
</table>
</td></tr>
</table>

G S Science, Arts and Commerce College, Khamgaon

Inauguration of Sport Day 2021.

Students Matches during Sport Day- Late Bhausaheb Bobdey Memorial Week 2021

G S Science, Arts and Commerce College, Khamgaon

Dr. Prashant Bobdey, Secreatary VSP Mandal Participating Chess Competition.

Badminton Matches (Staff)

G S Science, Arts and Commerce College, Khamgaon

Chess Matches (Students)

Group Photo of Cricket teams (Staff) with Dr. S. S. Bobdey (President VSP Mandal)

G S Science, Arts and Commerce College, Khamgaon

Dr. P. N. Bobdey (Secretary VSP Mandal) & Dr. D. S. Talwankar Principal

Date: 18/09/2021 **Venue: Indoor Hall**

List of participants (Staff Members)

Sr. No.	Name of the Staff Member	Mobile No.	Designation	Select Sports
1	Dr. Hanumant Ankushrao Bhosale	9420760918	Teaching	Badminton
2	Prithvirajsingh Thakur	9881721193	Teaching	Chess
3	Deepak Nagrik	9970837347	Teaching	Chess
4	P E Ajmire	9890467024	Teaching	Badminton
5	Sanjay Prakashchand Hargunani	9421882676	Teaching	Badminton, Chess
6	Gajanan Murlidhar Surwade	9011528244	Non-Teaching	Chess
7	Ravindra Mahadeo Chavan	9096310588	Teaching	Badminton
8	Ravindra Mahadeo Chavan	9096310588	Teaching	Chess
9	S D Wagh	9049658012	Teaching	Badminton, Chess
10	Sunil Sharadchandra Muley	9420562001	Teaching	Chess
11	Dr.Neeta Bhanudas Boche	9960760320	Teaching	Badminton
12	Sanjay Gopalrao Gulbhele	9421467594	Non-Teaching	Chess
13	Dr. Mahesh Shankar Gaikwad	9370312270	Teaching	Badminton
14	Dr Keshao Suryabhansa Gulhane	9423853549	Teaching	Badminton
15	Dr. M. O. Wankhade	9420338358	Teaching	Badminton, Chess
16	Prashant N. Solanke	9421473027	Non-Teaching	Badminton
17	Sandip madhukar shinde	8805675535	Teaching	Chess
18	Devendra N Vyas	7588041801	Teaching	Badminton, TT, Chess
19	Mr.Sachin Madan Shingne	9422139644	Teaching	Badminton, Chess
20	Dr Ashok Vishnu Padghan	9421473565	Teaching	Chess
21	Dr.Deonanda T Adhau	9404869268	Teaching	Badminton, TT, Chess
22	Dr.R.R. Gawhale	9422547722	Teaching	Badminton
23	Sanjay Tukaram Warade	9422184530	Teaching	Table Tennis
24	Dr G.B.Kale	9422885181	Teaching	Badminton
25	Prakash S Bodkhe	9422183017	Teaching	Badminton, TT, Chess
26	Arvind A Tayade	9823577006	Teaching	Badminton
27	Dr. V. R. Gawhale	9421467953	Teaching	Badminton, Chess
28	Vidhyadhar S Athawar	9422884584	Teaching	Badminton, TT, Chess
29	Prashant Bobdey	9404039999	Non-Teaching	Chess

G S Science, Arts and Commerce College, Khamgaon

List of participants (Students)

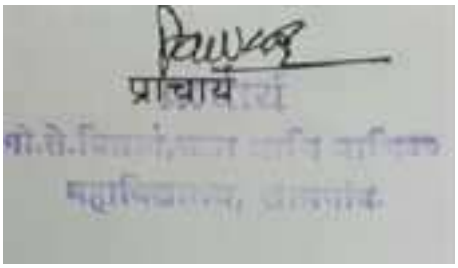
Sr. No.	Enter Your Name	Mobile Number	Class	Gender	Select Sports
1	Vipul Rajeshwar Lawand	7507246562	M.A. 1st Eco	Male	Chess
2	Shrikant Devendra Ingle	9975726024	B.com part 3	Male	Badminton
3	Sagar Kalyankar	9096437532	B. COM 1st	Male	Chess
4	Shubham Haribhau Mirge	9767631491	B.com 2d	Male	Badminton
5	Jyotsna Prakash Bhide	7741930174	B com 1 year	Female	Badminton
6	Ankit Ramesh Dhule	7776812219	B com III	Male	Chess
7	Sachin Bharat Kiratkude	9604127759	B.com 1year	Male	Badminton
8	Tejas Satish Kulkarni	7875900168	BCA 2 YEAR	Male	Badminton
9	Vijay Eknath Kambale	9130388258	B A III	Male	Badminton
10	Rita Ramesh Wankhede	7499229185	B sc 1 year	Female	Badminton
11	Rita Ramesh Wankhade	7499229185	BSc 1 year	Female	Badminton
12	Umesh Sheshrao Gore	8767175225	Bcom 1st	Male	Chess
13	Sachin Anil Surwade	7666403489	B.A 2nd	Male	Chess
14	Yashika Pradeep Rathi	8830024270	11th	Female	Chess
15	Apeksha Ashok Chopade	9834965503	B.sc 1 year	Female	Chess
16	Adesh Gajanan Daunge	7499069194	B.sc 2 ..sem4	Male	Badminton
17	Datta Govinda Mhasaye	9022658465	Bsc Cape	Male	Badminton
18	Vaibhav Sanjay Chavan	9307186942	B.sc 2nd	Male	Chess
19	Prashant Shatrughna Ingle	7757806424	B.com 2	Male	Badminton
20	Pavan Wanare	9356811484	11 th	Male	Badminton
21	ANUJA Deshmukh	7620899841	MA 1 ECO	Female	Badminton
22	ANUJA Deshmukh	7620899841	MA 1 ECO	Female	Badminton
23	Datta Govinda Mhasaye	9022658465	BSC Cape	Male	Badminton
24	Apeksha Ashok Chopade	9834965503	B.sc 1year	Female	Badminton
25	Manisha Hansaram Gavale	9130316651	M. A	Female	Badminton
26	Jayesh Deepak Peshwani	7721919450	M.com part 2	Male	Chess
27	Abhishek Krishna Narde	7058998904	Bsc csm	Male	Badminton
28	Dhananjay Sanjay Khandare	7498778523	12th	Male	Chess
29	Dhananjay Sanjay Khandare	7498778523	12th	Male	Chess
30	Mahesh Satyavijay Mhasagar	9420244272	B. A. 3rd	Male	Chess
31	Ankit Ramesh Dhule	7776812219	B.com III	Male	Chess
32	Asha Shivnarayan Gupta	8446167008	M.A. part-2	Female	Chess
33	Pooja Sahebrov Jamave	8080739932	3rd year	Female	Chess

G S Science, Arts and Commerce College, Khamgaon

34	Atharv Shivaji Rahane	8669062293	11th science	Male	Badminton Chess
35	Amol Rambhau Solanke	7758932892	B.com v	Male	Badminton
36	Abhi Ghatte	9834404037	BCA 2 nd	Male	Badminton
37	Shravani Sudhir Kulkarni	9322592016	Bsc I year	Female	Badminton
38	Gaurav Santosh Munjal	8010212778	B. A. 3rd year	Male	Chess
39	Kiran Gite	7038630321	1st year	Female	Badminton
40	Jayashri Gajanan Gadhe	8788930050	Bsc-1	Female	Badminton
41	Hrushikesh Ashokrao Mehtre	9511885791	B.Sc 1st year	Male	Chess
42	Sohel Jalam Pale	8208646010	B.A 2	Male	Badminton
43	Ayush	9764290568	12th	Male	Badminton
44	Vivek Yogesh Kharche	7387273373	12 science	Male	Badminton Chess
45	Pratik Bahal	9834473125	12th	Male	Badminton
46	Jayashri Gajanan Gadhe	8788930050	Bsc-1(CSM)	Female	Badminton
47	Sunny Mahesh Bhosale	7261995354	12th	Male	Chess
48	Sunny Mahesh Bhosale	7261995354	12th	Male	Badminton
49	Sandesh Rathod	8767936250	BSC 1	Male	Chess

Dr. Sanjay Warade

Activity In charge



G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Certificate course of IoT**
Organizing Department	Computer Science and Application
Date	17th July 2021 to 10th August 2021
Venue	Online
Guest/ Resource Persons	In collaboration with Microspectra Software Technologies Ltd
No of Beneficiaries	Students_____ Teachers_____ Others_____
Brief Report about event	About this course:- Internet of Things or IoT in short, is the idea of making devices and objects smarter by linking them to the internet. With IoT, you could for example have a fridge notify you when there's no milk. IoT has promising applications for smart homes, wearable devices, smart cities, connected cars and more. This course introduces you to the amazing world of IoT and its fascinating applications. Using a Raspberry Pi computer and other sensors, you will develop an electronic device that streams data over the internet. Apart from gaining practical skills on the Internet of Things, by doing this project you will learn about the Raspberry Pi development platform which is popular among people who love innovative projects. Course Outcomes □ Learn the basics of Internet of Things and its applications □ Build your computer using Raspberry Pi platform □ Work with different sensors □ Setup IoT connectivity using a remote desktop □ Understand Raspbian OS, Python programming, SMTP and API □ Develop and test an IoT weather monitoring station

G S Science, Arts and Commerce College, Khamgaon

Few(2-5) glimpses and Press note
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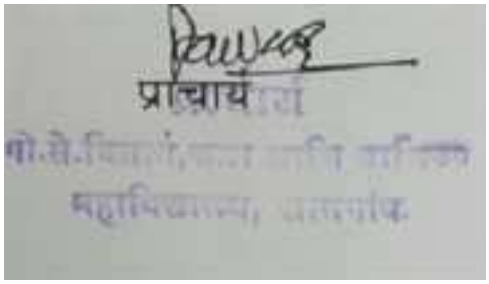
Double click on photo and change its height to 3.5cm

Add appropriate caption which include name of the resource person, topic, etc.

Few(2-5) glimpses and Press note
Paste photo here (**GPS MAP STAMP** app may be used for geotagged photos)
Double click on photo and change its height to 3.5cm

Add appropriate caption which include name of the resource person, topic, etc.

Activity In charge



G S Science, Arts and Commerce College, Khamgaon

Title of the event: Certificate course of IoT

Date: 17th July, 2021 Venue: Online

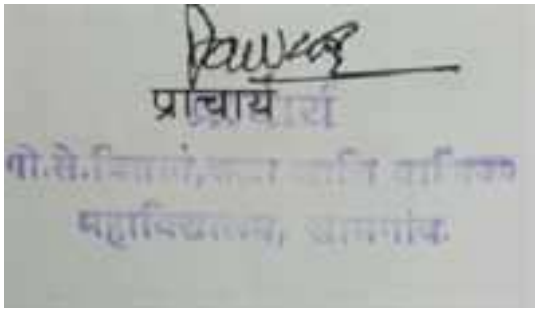
List of participants

S N	Name of the participant	Class/ Designation	Signature
1	Chavan Mrunal Arun	B.Sc.-I CSM	
2	Ingle Shivani Ganesh	B.Sc.-I CSM	
3	Jadhao Nisha Narendra	B.Sc.-I CSM	
4	Jadhao Sakshi Santosh	B.Sc.-I CSM	
5	Kalne Neha Nivrutti	B.Sc.-I CSM	
6	Kalne Nikita Nivrutti	B.Sc.-I CSM	
7	Kolte Pradyumna Sanjay	B.Sc.-I CSM	
8	Marke Kshitija Rameshwar	B.Sc.-I CSM	
9	Nare Ajay Shrikrushna	B.Sc.-I CSM	
10	Patil Pratiksha Prakash	B.Sc.-I CSM	
11	Patil Tushar Samadhan	B.Sc.-I CSM	
12	Patole Vaishnavi Rajendra	B.Sc.-I CSM	
13	Pawar Damini Govindrao	B.Sc.-I CSM	
14	Tirukh Raksha Pramod	B.Sc.-I CSM	
15	Wankhade Rita Ramesh	B.Sc.-I CSM	
16	Daberao Jyoti Gokulsing	B.Sc.-I CSM	
17	Kawle Prasad Sunil	B.Sc.-I CSM	
18	Najardhane Pooja Ramesh	B.Sc.-I CSM	
19	Wani Tashu Bhushan	B.Sc.-I CSM	
20	Rakhonde Sandesh Santosh	B.Sc.-III CSM	
21	Thakare Revati Krushnarao	B.Sc.-III CSM	
22	Tikar Vaishnavi Sanjay	B.Sc.-III CSM	
23	Adhav Shubham Gajanan	BCA - I	
24	Ghorade Gaurav Santosh	BCA - I	
25	Ksodiya Lokesh Ghanshyam	BCA - I	
26	Kharche Aniket Prabhakar	BCA - I	
27	Kharche Suraj Yadav	BCA - I	
28	Mirge Dnyaneshwar Anant	BCA - I	
29	Rajurkar Gaurav Mohan	BCA - I	
30	Rautraye Ganesh Sarangdhar	BCA - I	
31	Sakshi Rajendra Jumble	BCA - I	
32	Sutone Rushikesh Suraj	BCA - I	
33	Thakare Vaibhav Gajanan	BCA - I	
34	Thosar Akash Kailas	BCA - I	
35	Adhao Govinda Sunil	BCA - I	
36	Ambhore Gaurav Gajanan	BCA - I	
37	Azeem Khan Naeemullah Khan	BCA - I	
38	Belokar Ganesh Murlidhar	BCA - I	

G S Science, Arts and Commerce College, Khamgaon

39	Dhandar Abhishek Vijay	BCA - I	
40	Ghodke Shubham Ramdas	BCA - I	
41	Ghope Shubhangi Gopal	BCA - I	
42	Ghorade Mayur Sanjay	BCA - I	
43	Hiwale Vaishnavi Satish	BCA - I	
44	Jumade Prashant Kailas	BCA - I	
45	Likhar Aishwarya Gajanan	BCA - I	
46	Nimse Yogesh Ganesh	BCA - I	
47	Parskar Abhishek Supda	BCA - I	
48	Shaikh Akram Shaikh Aleem	BCA - I	
49	Suralkar Namrata Ganesh	BCA - I	
50	Thakur Ranjeetsingh Vijaysingh	BCA - I	

Activity In charge

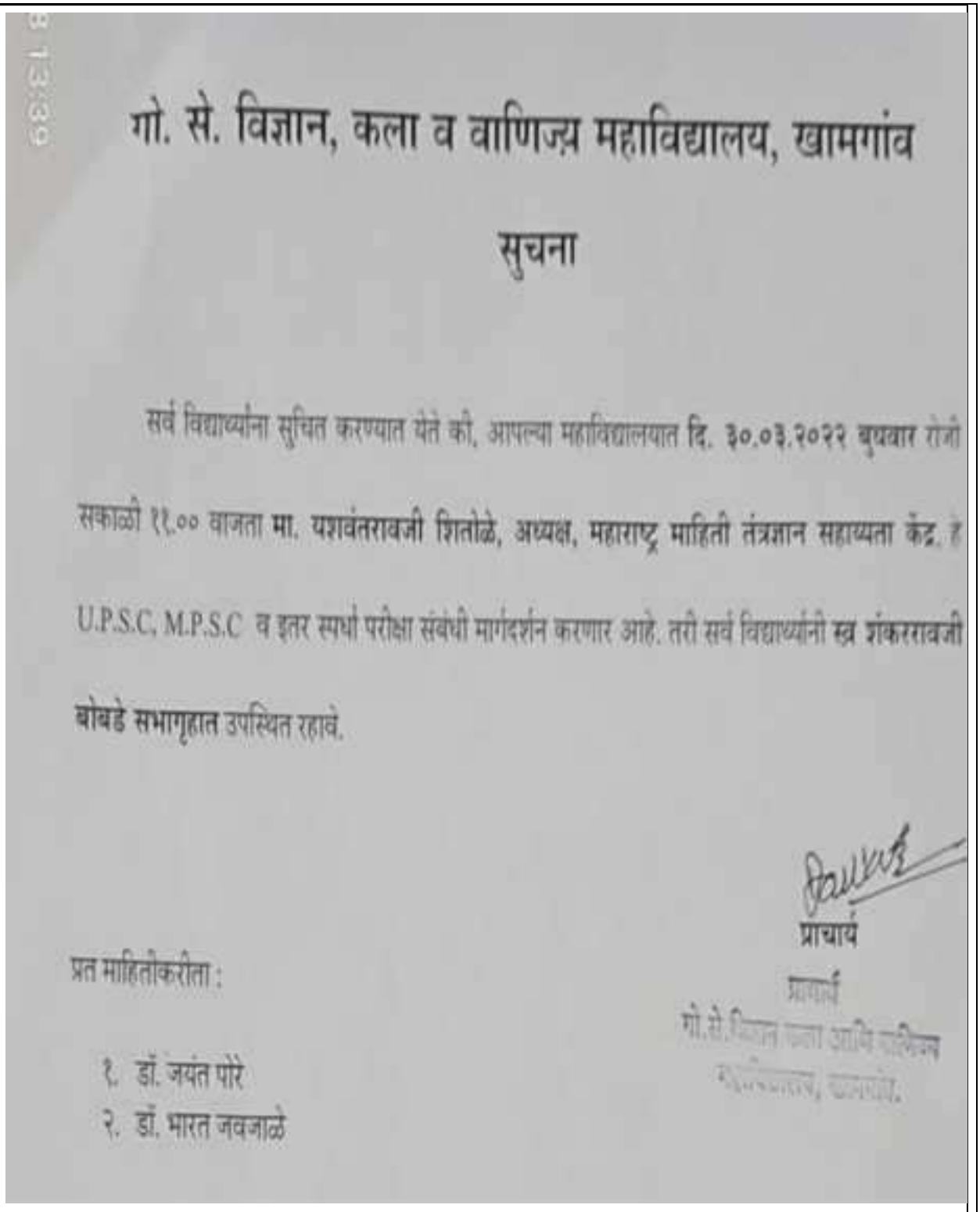


G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Webinar on the topic –" Guidance of MPSC/UPSC"**
Organizing Department	Career Katta
Date	30.03.2022
Venue	S.B.Hall
Guest/ Resource Persons	Mr. Mr. Yashwantji Shitole (President, Maharashtra Technology Support Centre)
No of Beneficiaries	Students 95 Teachers 09 Others 02 Non-teaching staff
Brief Report about event	A Webiner Orgonised By Career Katta on 30-03-2022 the topic –" Guidance of MPSC/UPSC " a details guidance provided by Mr. Yashwantji Shitole ((President, Maharashtra Technology Support Centre)At the outset the guest welcome by Officiating Principal Dr. P.V. Ubale chairperson of the program, The anchoring of the Program conducted by Prof Dr. Rohini Dharamkar Madam & Dr. D.T, Adhau & vote of thanks expressed by Dr. J. D. Porey. Dr. P.V Ubale. Prof. Dr. R.R. Gawhale, Dr. Akotkar, Dr. K. S. Gulhane, Prof. Jayash Tated & Taluka Co-ordinator Dr. Bharat Jawjale also present to the programme.

Figure 1 On the dais Mr. Yashwant Shitole, Dr. P. V. Ubale, Dr. J. D. Porey.

Figure 2: Students attendance at the programme



गो. से. विज्ञान, कला व वाणिज्य महाविद्यालय, खामगांव

सुचना

सर्व विद्यार्थ्यांना सुचित करण्यात येते की, आपल्या महाविद्यालयात दि. ३०.०३.२०२२ बुधवार रोजी सकाळी ११.०० वाजता **मा. यशवंतरावजी शितोळे, अध्यक्ष, महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र.** हे U.P.S.C, M.P.S.C व इतर स्पर्धा परीक्षा संबंधी मार्गदर्शन करणार आहे. तरी सर्व विद्यार्थ्यांनी **स्व शंकररावजी बोबडे सभागृहात** उपस्थित रहावे.

प्राचार्य

प्रत माहितीकरीता :

१. डॉ. जयंत पोरे
२. डॉ. भारत जवजाळे

figure: 3 Notice of the programme for students.

सकाळ

स्पर्धा परीक्षेमध्ये समर्पण हे यशाचे गमक

यशवंत चितोळे : स्पर्धा परीक्षेसंबंधी वेबिनार संपन्न

खामगाव : मार्गदर्शन करताना यशवंत चितोळे.

सकाळ वृत्तसेवा

खामगाव,ता.१ : विदर्भ शिक्षण प्रसारक मंडळाव्दारा संचालित गो.से.विज्ञान, कला व वाणिज्य महाविद्यालय, खामगाव येथे (ता.३०) करिअर कट्टा व्दारे एमपीएससी व युपीएससी व इतर स्पर्धा परीक्षेसंबंधी वेबीनार आयोजित करण्यात आले होते.

सदर वेबीनारला व्यासपीठावर प्रभारी प्राचार्य डॉ. प्रफुल्ल उमाळे, यशवंत चितोडे, उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य आणि महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्र व गो. से. महाविद्यालय करिअर कट्टाचे समन्वयक डॉ.जयंत पोरे हे उपस्थित होते.

सदर वेबीनारमध्ये सर्वप्रथम उच्च व तंत्रशिक्षण विभाग, महाराष्ट्र राज्य आणि महाराष्ट्र माहिती तंत्रज्ञान सहाय्यता केंद्राचे अध्यक्ष यशवंत चितोडे यांनी विद्यार्थ्यांना स्पर्धा परीक्षा तसेच करिअर कट्टा संबंधी विस्तृत माहिती दिली. तदनंतर वेबीनारचे अध्यक्ष महाविद्यालयाचे प्रभारी प्राचार्य डॉ. प्रफुल्ल उमाळे यांनी विद्यार्थ्यांना मार्गदर्शन करतांना जगातील प्रत्येक मनुष्य आपल्या आयुष्यात काहीतरी किंवा इतर मिळविण्यात आस बाळगतो. आयुष्यात यशस्वी होणे आणि त्याची कल्पना करणे हे एक वर वर जरी सोपे असले तरी प्रत्यक्षात यश मिळविण्यात खुप आव्हाण असते असे म्हटले. सदर वेबीनारला प्रा. डॉ.आर.आर.गव्हाले सर, प्रा. डॉ.आकोटकर सर, प्रा.डॉ.गुल्हाने, डॉ.धामकार मॅडम, प्रा. जयेश तातेड खामगाव ता. समन्वयक प्रा.डॉ.भात जवजाळे उपस्थित होते. कार्यक्रमाचे सुत्र संचालन प्रा. डॉ. रोहिणी धामकार व प्रा.डॉ. देवनंदन अढाव यांनी केले. तसेच सदर वेबीनारचे सिंयोजन प्रा. डॉ. जयंत पोरे व प्रा.डॉ.भात जवजाळे यांनी केले. अशी माहिती प्रा.डॉ.मो. रागीब देशमुख यांनी प्रसिध्दी पत्रकाद्वारे दिली आहे.

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Figure: 3 Newspaper cutting of the programme
Few(2-5) glimpses and Press note

Dr. J. D. Porey
Activity In charge

Dr. D. S. Talwankar
Principal

G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C & U.P.S.C. व इतर स्पर्धा परिक्षा चे मार्गदर्शन

Date: 30.03.2022

Venue: S.B.Hall G.S College, Khamgaon

List of participants

S.N	Name of the participant	Class/ Designation	Signature
1)	Naina Sanjay Hade	BSc-I (CBZ)	Hade
2)	Kalyani Jagdish rao Pachpor	BSc-I (CBZ)	K.Pachpor
3)	Disha Balwant Bhile	BSc-I (CBM)	Disha
4)	Nisha Vishnu Kale	BSc-I (CBZ)	NKale
5)	Gayatri Shivshankar Sahibhat	B.Sc-I (CBZ)	G.Sahibhat
6)	Rutuja Bhaskar Raundale	B.Sc I (CBZ)	R.B.Raundale
7)	Arpita Shrikrushna Pawar	B.Sc I (CBZ)	A.S Pawar
8)	Divya Ramdas Hage	B.Sc I (CBZ)	D.R Hage
9)	Sanjana Sudhir Bhole	B.Sc-I (CBZ)	S.S. Bhole
10)	Neha Arun Ghodande	BSc II (CBZ)	Nghodande
11)	Shifa Riyazoddin Deshmukh	BSc III (CBZ)	[illegible]
12)	Komal Vishnu Gaikwad	BSc I (CBZ)	Gaikwad
13)	Sakshi Suresh Dethe	BSc I (CBZ)	Dethe
14)	Riya Paraj Agrawal	BSc I (CBM)	[illegible]
15)	Shraddha Vijay Hamane	BSc I (CBM)	[illegible]
16)	Neha Govinda Ladhe	BSc I (CBM)	G.Ladhe
17)	Kalyani Dinesh Tayade	BSc I (CBM)	K.S Tayade
18)	Rajashri Santosh Walokar	BSc I (CBZ)	[illegible]
19)	Sakshi Dnyaneshwar Tayade	BSc I (CBZ)	Tayade
20)	Bhagshree C Tomar	BSc I (CBZ)	Btomar
21)	Shubhagi Shrikrushna Borle	BSc I (CBZ)	Sborle
22)	Dipali Haridas Mangle	BSc I (CBZ)	Dmangle
23	Ankita Vishnu Gaikar	BSc I (CBZ)	Agaikar
24	Pallavi Purushottam Kale	BSc I (CBZ)	Pkale
25	Ashwini Gajanan Dhoke	BSc I (CBZ)	Ashwini
26	Vaishnavi Sampat Ambhore	BSc II (CBZ)	Vambhore
27)	Anisha Shankar Ambhore	Bcom II	[illegible]
28)	Shital Rameshwar Ambhore	BSc II (CBZ)	[illegible]
29)	Kiran Kishor Bundele	M.A-I (Eng)	K.K.Bundele
30)	Yogini Samadhan Kandelkar	B.com II	[illegible]
31)	Krishna Gajanan Kuthe	B.com II	[illegible]
32)	Vaishnavi Manohar Ghule	B com II	[illegible]
33)	Gauri Balkrushna Bhore	BSc I	G.B. Bhore
34)	Sneha Sanjay Ugale	BSc I (CSM)	Sugale
35)	Vaishnavi Mahadev Ghanpade	BSc I (CBZ)	V.M. Ghanpade

Activity In charge

Principal

Principal
G. S. Sci. Arts & Commerce College, Khamgaon - 444303

Page 2 of 2

G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C. & U.P.S.C. व इतर स्पर्धा परीक्षा के मार्गदर्शन

Date: 30-3-2022

Venue: S.B. Hall, GS College, Khamgaon

List of participants

S.N.	Name of the participant	Class/ Designation	Signature
1.	Harish S. Ihay	B.COM 2nd Y	[illegible]
2.	Sahil S. Jadhav	B.COM 2nd Y	[illegible]
3.	Sandip B. Ambhore	B.Com III	[illegible]
4	Akshay S. Bhakar	BA II	[illegible]
5	Ankit S. Mundhe	B.Com I	[illegible]
6	Vitthal R. Bichare	B.Com I	G.R.Bichare
7	Mahesh S. Gawande	B.Com I (A)	[illegible]
8	Rutik R. Awachar	B.Com I (A)	R.Awachar
9	Ankush V. Borale	B.Voc II	A.Borale
10	Abhishek A. Kankale	B.Voc II	[illegible]
11	Harshad R. Bendre	B.Voc II	[illegible]
12	Tushar P. Gawande	BSC II	T.P. Gawande
13	Aashutosh S. Gid		
14	Gaurav V. Ambhore	BCA II	G. V. Ambhore
15	Yogesh G. Nimse	BCA II	[illegible]
16	Rushikesh Suresh Sethar	BCA II	[illegible]
17	Aniket D. Raut	BSC III	A D Raut
18	Abhang G. Gamare	Bsc 2nd	A.G.Gamare
19	Rahul A. Jaiswal	Bsc 2nd	R.A. Jaiswal
20	Saurabh R. Manmode	Bsc 3rd	S. Manmode
21	Chetan S. Bodhe	B.com III	[illegible]
22	Shubham J. Bochare	B.com II	[illegible]
	Rushikesh R. Sawange	B.com III	[illegible]
23	Anand S. Khandare	B.com II	[illegible]
24	Abhishek Kailash Deshmukh	B.Voc III	[illegible]
25	Dnyaneshwar N. Wahadhar	B.com III	D.N. Wahadhar
27	Rushikesh Gajanan Wadhwe	B.A. I	[illegible]
	Pavan Dinesh Dhore	B.A. III Year	[illegible]
25	Sandeep Gopal Shegokar	MSC-II Year	[illegible]
26	Dipak Rajesh Chafle	B.A. I Year	[illegible]
27	Harihar Vishnu Bunde	B.A. I	H.V.Bunde
28	Nikita Shivsharan Bhagat	B.com II	N.S. Bhagat
29	Bhagyashri R. Bharambe	B.com II	Bharambe
30	Pooja Shrinath	B.com II	[illegible]
30	Ankita Suresh Bhagat	B.com II	[illegible]

Activity in charge
30-3-2022

Principal
Principal
G. S. Sci. Arts & Commerce College, Khamgaon - 444303

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G S Science, Arts and Commerce College, Khamgaon

Title of the event: M.P.S.C & U.P.S.C व इतर स्पर्धा परीक्षा से मार्गदर्शन.

Date: 30.03.2022 Venue: S.B. Hall, G.S. College Khamgaon.

List of participants

S N	Name of the participant	Class/ Designation	Signature
1	Harish K. Sapkhire	M.Com II Sem	
2	Sonal M. Ghanekar	B.Com II year D	S.M. Ghanekar
3	Nilesh S. Dandale	B.Com II (D)	
4	Rushikesh G. Tupalekar	BSc - I (CSM)	
5	Mrunal P. Bambatkar	BSC - I (PCM)	
6	Sweta S. Bombat Patil	BSC I CPCM	
7	Umesh K. Nanwatkar	BA - I	U.K. Nanwatkar
8	Sneha G. Nimkardc	BSC I (PCM	S. G. Nimkardc
9	Rishvini S. Gatpute	B.Com II	
10	Nehal S. Tayde	B.com II D	
11	Minal G. Langdetaker	B.com II B	
12	Aakanksha S. Rathod	B.Com II 'D'	
13	Neha R. Tayde	B.com II 'B'	
14	Nilamrata G. Gawashe	B.Com II B	
15	Gauri G. Moorkhond	B.com II B	G.G. Moorkhond
16	Yogita G. Gawhale	B.Com II A	
17	Gayatri S. Bhople	B.com II D	G.S. Bhople
18	Aarti Anil Khadcan	B.COM II	Khadcan
19	Jayashri P. Ingle	BSC III	

Activity In charge

Principal
G. S. Sci. Arts & Commerce College, Khamgaon-444 303

G.S. Science, Arts and Commerce College, Khamgaon

Department of Chemistry

Name of the event :-	**NET/SET Guidance session on competitive examinations in Chemical Science**
Conducted by:-	Department of Chemistry, G.S Science, Arts and Commerce College, Khamgaon and Internal Quality Assurance Cell and Department of Chemistry of Pillai HOC College of Arts, Science and Commerce Rasayani .
Date:-	March 4, 2022
Venue/ Online Platform:-	Online : Zoom
Activity Falls under Criterion/Criteria:-	Criteria III
Convenor:-	Dr. Rohini Dharamkar and Dr. Vishakha Telgote
Co-Convenor: - (if any)	
Number of participants benefitted:-	Students :____96 Teachers : _____04 Others:____
Report:-	**Report on NET/SET Guidance session on competitive examinations in Chemical Science.** Department of Chemistry, G.S Science, Arts and Commerce College, Khamgaon in collaboration with Department of Chemistry of Pillai HOC College of Arts, Science College,on Friday , March 4, 2022.The session was started with welcome speech given by Ms. Krunali Patil , TYBSc student. Dr. Nanabhau Karanjule sir , Asst. Professor, Department of Chemistry, K.J. Somaiya college of Science was resource person of the day.

	Various competitive exams are conducted in chemical Sciences such as IIT JAM, UGC NET, SET etc, UGC Net is regarded as one of the toughest exams. To fare well in UGC NET, SET or any other competitive exams long time strategy is needed. Each aspirant must balance the time and give importance to both papers (Paper I and Paper II) Dr. Karanjule sir explained paper pattern along with marks distribution for exams. What topics to be focused more is explained during session. Along with NET, SET, JAM preparation exams like entrance examinations for BARC, DRDO were also discussed. The session was ended by vote of thanks proposed by Dr. Rohini Dharamkar, department of chemisty, G S College, Khamgaon.
Photos:-	


Dr.Nanabhau Karanjule's screen

Dharambar

Activity In Charge

Dr. R.R. Dharambar

Head of Department

Principal

Principal
G.S. Sci., Arts & Commerce
College, Khamgaon-444303

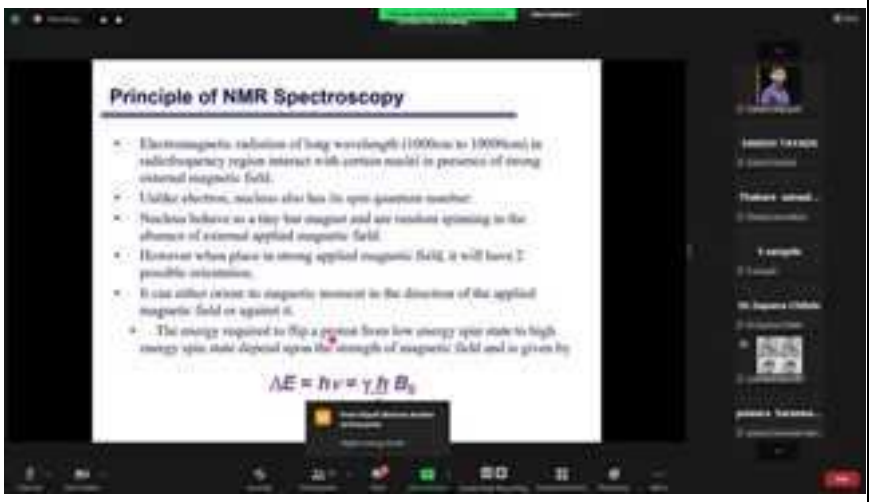
G.S. Science, Arts and Commerce College, Khamgaon

Department of Chemistry

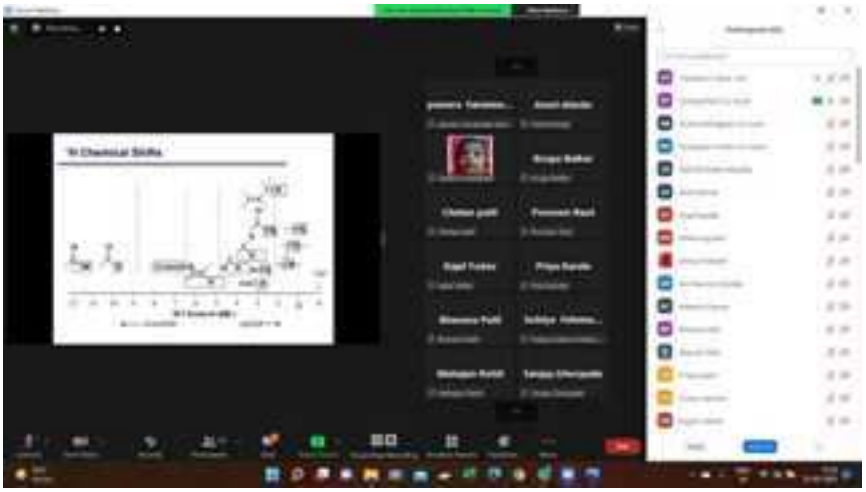
Title of the Acitvity:-	**A Guidance Session on "Applications of Spectroscopic Techniques in Industry"**
Conducted by:-	Department of Chemistry, G.S Science, Arts and Commerce College, Khamgaon and Internal Quality Assurance Cell and Department of Chemistry of Pillai HOC College of Arts, Science and Commerce Rasayani .
Date:-	March 12, 2022
Venue/ Online Platform:-	Zoom meet
Activity Falls under Criterion/Criteria:-	Criterion III
Convenor:-	Dr. Sapana Mukund Chilate
Co-Convenor: -	Dr. Vishakha Telgote, Dr. Rohini R. Dharamkar

Number of participants benefitted:-	**Students : _____85 Teachers : _____04 Others : _____**
Brief Report about event:-	Department of Chemistry, G.S.Science, Artsand Commerce College, Khamgaon Dist Buldana in association with Internal Quality Assurance Cell and Department of Chemistry ,Mahatma Education Society'sPillai HOC College of Arts, Science and Commerce, Rasayani **Report on A Guidance Session on "Applications of Spectroscopic Techniques in Industry"** For students on **March 12, 2022**, from 3.00 pm-4.00 pm through Zoom platform. The event started with Dr.Sapana Chilate, welcoming the resource person of the day, **Dr.Sharad Duche.** He led the session by explaining scientific development in the field of Spectroscopy , analytical approach, experimental approach, and descriptive approach and applications of different Spectroscopic Techniques in Industry. He elaborated on instruments used for various research activities. A total of **89** participants attended this event. The event ended with a vote of thanks by Dr. Rohini Dharamkar and positive feedback from the participants.
Photos:-	


Mahatma Education Society's
Pillai HOC College of Arts, Science and Commerce, Rasayani
(Accredited by NAAC)
(ISO 9001: 2015 Certified)
Internal Quality Assurance Cell and Department of Chemistry
of
Pillai HOC College of Arts, Science and Commerce, Rasayani
in collaboration with
S.P.D.M. Arts, S.R.B. and S.H.D. Commerce and S.M.A. Science College, Shirpur;
Vidarbha Shikshan Prasarak Mandal's G.S Science, Arts and Commerce College, Khamgaon and
Rajmanya Sirajuddin Patel Arts, Commerce and Science College
organize
A Guidance Session on
Applications of Spectroscopic Techniques in Industry
Resource Person:
Dr. Sharad Dache,
Head, Analytical R&D
Hemmant Corporation
Day and Date: Saturday, March 12, 2022
Time: 3.00 pm - 4.00 pm, Platform: Zoom


Principle of NMR Spectroscopy
Electromagnetic radiation of long wavelength (1000cm to 1000Mcm) in radiofrequency region interact with certain nuclei in presence of strong external magnetic field.
Unlike electron, nucleus also has its spin quantum number.
Nucleus behaves as a tiny bar magnet and are random spinning in the absence of external applied magnetic field.
However when place in strong applied magnetic field, it will have 2 possible orientation.
It can either orient in magnetic moment in the direction of the applied magnetic field or against it.
The energy required to flip a proton from low energy spin state to high energy spin state depend upon the strength of magnetic field and is given by
$\Delta E = h\nu = \gamma \hbar B_0$


NMR Applications
NMR
Agriculture and Food Industry
Drug Discovery

	
Winners(if any):-	NA

Activity In Charge
Dr. R.R. Dharambar

Head of Department

Principal
Principal
G.S. Sci., Arts & Commerce
College, Khamgaon-444303

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	Guest lecture -Topic -Breastfeeding foundation of life
Organizing Department	Home economics in collaboration shri Shivaji college ,Akot--Dept.-Home economics
Date	1 August 2021
Venue	Online{Google meet}
Guest/ Resource Persons	Dr.Shilpa Bhuashan Patil --B.A.M.S.CGO.--Tiwasa , Dist-Amravati
No of Beneficiaries	Students___64_____ Teachers____05_____ Others__-_____
Brief Report about event	Breast feeding week 2021-22 Department of Home economics ,G.S.Sciences,Arts &Commerce College in collaboration with Department of Home economics , Shri Shivaji College ,Akot ,Dist-Akola Organized an onile guest lecture program 2021-22 on the occasion for world Breast feeding week during 1 August 2021. The guest speaker Dr.Shilpa B. Patil -B.A.M.S.CGO. Tiwsa Dist-Amravati .delivered speech on" Breast feeding foundation of life "on this occasion about 64 students and 05 Teachers attented the program. The program was guided by principal Dr. D.S.Talwankar sir ,The program conducted by Prof.Dr.Swati Vaidhy (HOD.-Dept.of HEC,Shri Shivaji college akot)Prof. Dr.Neeta Boche expressed the vote of Thanks .Prof.Dr.Bhati, Prof.Dr.Lahole took special efforts for the success of the program. The event was attended by the college students.

Few(2-5) glimpses and Press note Paste photo here (**MAP GPS STAMP** app may be used for geotagged photos) Double click on photo and change its height to 3.5cm
Add appropriate caption which include name of the resource person, topic, etc.
Few(2-5) glimpses and Press note Paste photo here (**GPS MAP STAMP** app may be used for geotagged photos) Double click on photo and change its height to 3.5cm
Add appropriate caption which include name of the resource person, topic, etc.

Activity In charge
Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
Khamgaon.

Principal
Principal
G. S. Sci. Arts & Commerce
College, Khamgaon - 444 303

G S Science, Arts and Commerce College, Khamgaon

Title of the Activity	**Poster Competition**
Organizing Department	Home economics in collaboration shri Shivaji college ,Akot--Dept.-Home economics
Date	13 May 2022
Venue	Online(Google Form)
Guest/Examiner Persons	Dr. Nilima Mahore (Dept. of Home Economics, Yuvashkati College Amravati) Dr. Prachi Bhamburkar (Dept. of Home Economics, V.D. College Amravati)
No of Beneficiaries	Students___48_____ Teachers____02_____ Others__02_____
Brief Report about event	Department of Home economics ,G.S.Sciences,Arts &Commerce College in collaboration with Department of Home economics , Shri Shivaji College ,Akot ,Dist-Akola Organized an online poster competition on 13 May 2022.on the topic" Food and Nutrition " in this competition about 48 students.The program conducted by Prof.Dr.Swati Vaidhy (HOD.-Dept.of HEC,Shri Shivaji college akot) Prof. Dr.Neeta Boche .In this competition Ku. Nandini Deshmukh got 2nd prize and Ku Kiran Morkhade got consolidated prize.

Few(2-5) glimpses and Press note
Paste photo here (**MAP GPS STAMP** app may be used for geotagged photos)
Double click on photo and change its height to 3.5cm

Add appropriate caption which include name of the resource person, topic, etc.

Few(2-5) glimpses and Press note
Paste photo here (**GPS MAP STAMP** app may be used for geotagged photos)
Double click on photo and change its height to 3.5cm

Add appropriate caption which include name of the resource person, topic, etc.

Activity In charge

Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
Khamgaon.

Principal

Principal
G. S. Sci. Arts & Commerce
College, Khamgaon - 444 303

G S Science, Arts and Commerce College, Khamgaon

Title of the event: Poster Competition

Date: 13/05/2022

Venue: Online (Google Form)

List of participants 48

S N	Name of the participant	Class/ Designation	Signature
	Ku. Shivani bombatkar		
	Ku. Mukta Rele SSCAkot		
	Ku. Radhika Pimpale		
	Ku. Gayatri Tade		
	Ku. Aarti Shendokar		
	Ku. Nikita Korde		
	Ku. Sharda Borapi		
	Ku Neha Diware		
	Ku . Nikita Nathe		
	Ku.Pooja Date		
	Ku.Divya Pande		
	Ku Manisha Kate		
	Ku. Bhairavi Rele		
	Ku . Sakshi Mahamune		
	Ku.Arpita More		
	Ku.Simran Jain		
	Ku.Kiran Gite		
	Ku.Anushka Mesare		
	Ku Geeta Majre		
	Kiran Morkhade		
	Ku.Prerña Patil		
	Ku.Aarti Tayde		
	Ku.Vaishanvi Pawar		
	Ku.Shital Joshi		
	Ku.Sejal Dhurandar		
	Ku.Nikita Farpat		

Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
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	Ku. Pradhnya Sirsat		
	Ku. Rani Sirsat		
	Ku.Jaya Sirsat		
	Ku. Jayashri Khanderaw		
	Ku.Vaishnavi Chandekar		
	Ku.Reshma Surwade		
	Ku.Yogita Aswar		
	Ku Vaishnavi Golait		
	Ku Priyal Gaygol		
	Ku.Arya Moharil		
	Ku.Pooja Bhange		
	Ku.Manisha Wankhade		
	Ku. Vishakha Kale		
	Ku.Rutuja Bhople		
	Ku.Shrafdha Hiware		
	Ku.Sakshi Gawande		
	Ku. Priti Choukhande		
	Ku. Srushti Kakad		
	Ku. Monika Nagre		
	Ku. Tejaswini Dhande		
	Ku. Nandini Deshmukh		
	Ku Trupti Dhande		

Activity In charge

Dept. of Home - Economics
G.S.Sci.,Arts & Comm.College
Khamgaon.

Principal

Principal
G. S. Sci. Arts & Commerce
College, Khamgaon - 444 303