



**KISHINCHAND CHELLARAM COLLEGE CHURCHGATE, MUMBAI
400020**

DBT STAR SCHEME

REPORT OF COMPLETED ACTIVITIES

Period: April 2020 – March 2021

File No. BT/HRD/11/039/2019

Department of Physics

Department of Mathematics

Department of Computer Science & Information Technology

Department of Biotechnology

**Proforma for submission of progress reports for Annual Review of
Colleges supported under Star College Scheme**

(Kindly note that the annual report from Point 6 to 10, should not be more than 5 A4 size sheets, with font size 12pt and line spacing 1.5)

1. Name of the College: **Kishinchand Chellaram College**
2. Name of Coordinator: **Dr. Shalini R. Sinha**
Designation: Vice-Principal & Co-ordinator
Department of Computer Science, K.C. College
Address: 124, Vidyasagar Principal K.M Kundnani Chowk,
Dinshaw Wachha Road, Churchgate, Mumbai- 400 020.
Phone no's: 9869431342
College: 022-66981000
3. Assessment duration: **01/04/2020 to 31/03/2021** Duration in years: **01 year**
4. Details of Departments Supported

SR No.	Name of Department	Courses (B.Sc./M.Sc./PG Diploma, certificate etc.) offered	Regular Faculty members	
			With Ph.D.	Without Ph.D.
			Total = 17	
1.	Physics	B.Sc.	02	03
2.	Mathematics	B.Sc. - (up to S.Y B.Sc.)	01	02
3.	Computer Science	B.Sc. (CS), M.Sc. (CS)	-	04
	Information Technology	B.Sc. (IT), M.Sc. (IT)	01	04

5. **Number & Date of Advisory committee meeting: (Local Advisory Committee)**
 - Meeting Date: 5th September, 2020, Dept. of Physics – Advisor – Prof. G.P Kothiyal
 - **Physics, Mathematics, Computer Science & Information Technology**
Meeting Date: 23rd December 2020
Advisors:
 - Dept. of Physics - **Prof. G.P. Kothiyal**
 - Dept. of Mathematics - **Dr. Sivaji Ganesh Sista**
 - Dept. of Computer Science and Information Technology - **Mr. Shreekant Shiralkar**
6. **Qualitative improvements due to DBT support. Please highlight 5 salient points (within 500 words).**

(You may enumerate 5 minor projects where students were involved and their impact or similar activities and their outcome; this is for representative purpose and coordinator may include details as per his own choice; kindly refrain from providing philosophical data Avoid any introduction. All the justifications must be very crisp like any aspect non-existent pre-STAR Scheme and you achieved after the grant).

Department of Physics

- **Interdisciplinary Invited Lecture - “Insights into Binomial, Poisson & Gaussian Distribution”** by Mr. R. J Pawar, Former HOD, Department of Statistics, K.C. College for Physics & Statistics students.
- **Interdisciplinary Master Lecture - “Advanced Materials Technology”** by Dr. Debdatta Ratna, Head, Directorate Polymer Science and Technology, NMRL, DRDO for Physics and Chemistry students.
- **Extension Activity - “Healing through Hardship-the Corona Experience”** by Dr Aman Bhonsle, Relationship Counselor and Physiotherapist for Teachers of Departments under Star Status and Star Scheme of KC College and Degree College students.
- **Intercollegiate & Interdisciplinary Faculty Development Program Webinar - “Development of Skills in Students-A Teacher’s Role”** by **Dr. G.P. Kothiyal**, Former Head, Advanced Glass and Ceramics Division, BARC & Professor of Physics, Homi Bhabha National Institute & Currently Chairman, MRSI, Mumbai Chapter.
- **Intercollegiate workshop for Support Staff of Physics Laboratories** in colleges: **“Printed Circuit Board - Design Techniques”** by **Mr. Maheshwar Falake**, Assistant Professor, Department of Physics, SIES College.

Projects Under Star DBT Scheme			
Start Date: February 2020 End Date: March 2021			
Sr. No.	Name of the Students	Title of the project	Name of Guiding Teacher
1.	Ms. Krishna Bulchandani Mr. Abbas Dalvi	Optical characterization of KDP, ADP doped with L-Arginine (Amino Acid) NLO crystals	Dr. Jyotsna Pandey

Department of Mathematics

- Due to grants from DBT, the department of Mathematics got the opportunity to celebrate the World Environmental Day by, **organizing National Webinar** on “Mathematical Models of Tipping Points in Ecosystem” by **Dr. Vishwesh Guttal**, Associate Professor, and Centre for Ecological Sciences, IISc, Bengaluru, **jointly with Environment Committee, of KC College**. More than 91 students and researchers from all over India attended this Webinar.
- Because of the grants received from DBT, the department of Mathematics could host 12 days camp G3 of **Online Foundation Course in Mathematics organized by MTTs Trust**, simultaneously in six camps all over India, with a goal to enhance the problem-solving ability of students doing bachelor’s degree in Mathematics. Over 93 S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana attended the Camp. Apart from these 93 selected students, more than 700 students attended live streaming on YouTube every day.
- Under the aegis of DBT Star the department of Mathematics organized Workshop for IIT-JAM and because of online platform could extend the reach to more than 270 under graduate students from various colleges in Mumbai, Thane district (rural area) on 8th and 9th February 2021.
- The grant has also enabled the Department to organize various online sessions of Sage Math, Python, MS Excel and also some more seminars, workshops including an Interdisciplinary talk on “Applications of Mathematics and Statistics to Understand Species Distribution” by **Dr. Amiya Bhowmick**, Assistant Professor, Department of Mathematics, Institute of Chemical Technology, Mumbai, which was attended by over 100 students of various Institutes in India.
- The grant enabled all the four departments of DBT star scheme to generate an online Resource-Activity handbook “Learning Tips for Success @ School”. 100 hard copies of the same have been sent to the two schools in the remote villages in Sindhudurg district of Maharashtra.

Research Projects Under Star DBT Scheme (F.Y B.Sc.) (02)			
Mathematics			
Sr. No.	Name of the Students	Title of the project	Name of Guiding Teacher
1.	Ms Nishna Paria Ms. Siddhi Daphale Mr. Anush Shaikh	Vedic Mathematics: Literature Review: *(completed and submitted)	Mrs Gollakota Usha VVH
2.	Mr. Imran Ansari	Differential Equation and applications (on-going)	

Department of Computer Science & Information Technology

- The undergraduate students of our college learnt a number of new technologies and the departments were able to interface with industry partners due to the facilities extended under Star DBT.
- Curriculum enhancement through introduction of new practical made them understand theoretical concepts. Exposure to experimental-design and execution of projects enabled UG students to take-up small in-house projects. This helped them gain an insight into research methodology.
- The funds provided by DBT has given the students of our college an opportunity to get training from various institutes and industries such as Pi Techniques, Curaksha Gianda Trading Solutions, LLP., Kaizen Future Tech Ltd., Research and Solution Architect, InfiCorridor Solution Pvt. Ltd, Mumbai.
- The star college scheme has enabled the students to develop new and novel Apps which can be very beneficial to society like Cryptocurrency, Health and Safety App, Cross platform app, Recommendation System, Game Development, Speech Emotion Recognition System, Secure cloud storage, Sentiment Analysis of Twitter Data, First Order Motion Model for Image Animation and the patenting process for these Apps is being explored.
- The grant has made it possible to organize Virtual field visit on Blockchain Technology by Blocklogy Edutech Pvt. Ltd to widen the scope of learning and evoke an interest in exploring the practical aspects of knowledge gained in the classroom.

Projects Under Star DBT Scheme T.Y B.Sc. CS (16)			
Sr. No.	Name of the Students	Title of the Project	Name of Guiding Teacher
1.	Mr. Aniket Chaudhary	Cryptocurrency App -System allows user to View Real time Open, High, Low, Close price in Graph of Ani coin. It provides day to day active trading where trading can be done every seconds. User can see their trading wallet, Running profit and loss and marginal limit value.	Mrs. Shalini Maheshgauri
2.	Ms. Rishika Agrawal	Group Expenses App – Expensezz Expensezz Application is an android application where user creates an account for managing its budget and expenses. User is able to see and analyze their budget and expenses through graph charts.	Mrs. Shalini Maheshgauri
3.	Mr. Ajay Mandani	OTT Video Streaming Website- VidKnight is a website that provides service for users to create their own OTT Platform on the website. User can easily upload Tv-shows/ Movies, buy subscription of a channel and start watching the content of that channel	Mrs. Shalini Maheshgauri
4.	Mr. Ajay Mandani	Travel Story I-iphone App - Travxt is an iOS app that provides service for users to	Mrs. Shalini Maheshgauri

		create their personal travel group. User can easily upload Images/Video on the app. It allows to add an announcement which is like a broadcast message to all the users in that group.	
5.	Mr. Yogesh Surve	Desktop Voice Assistant - the Virtual Desktop Voice Assistant is a type of automation-based program. User has to give the voice command related to the task as input parameter, program then converts the voice into speech. For example: if user tells open notepad, then the program will open notepad and speak "Opening Notepad" or "Notepad open successfully" as output.	Mrs. Shalini Maheshgauri
6.	Mr. Ali Jivani	DRS Review System in Cricket - Decision Review System which is a technology-based system to assist the umpires on the ground with their robust decision-making capacity.	Ms. Geeta N. Brijwani
7.	Mr. Avishkar Jaiswal	Blog and Chat Application- (blog.cillyfox.com) - A blogging site for content creators. A user can put their thoughts in front of blogs readers and give the in opinion on every concept. A Web Application for every user where they can have privacy to talk and have a conversation with encryption.	Ms. Geeta N. Brijwani
8.	Mr. Avishkar Jaiswal	Issue Forum - Portal for IT Companies Developers and Project Managers to keep a track of the on-going projects and bugs which can be solved by a higher expertise. A Developer assign an issue regarding the project on the portal and can get some expert advice.	Ms. Geeta N. Brijwani
9.	Ms. Saachi Sharma	SARS Health and Safety App - It keeps track of all the transactions happening in a company dealing with the sales of medical equipment.	Mrs. Beenarani S. Karutharan
10.	Ms. Shabniz Panjwani	Personal Secretary - It keeps a record of the different events scheduled for the day and updates the user accordingly. It also keeps a track of the expenses and income of the user.	Mrs. Beenarani S. Karutharan
11.	Ms. Urvi Dedhia	Event Planner Website - The Event Planner Web application provides the user the freedom to explore services like venues, caterers, decorators, photographers by themselves.	Mr. Maunash A. Jani
12.	Mr. Punit Ghag	CyberTrail, PulseRift - It is a game with various utilities which gives good playing experience to the players.	Mrs. Beenarani S. Karutharan
13.	Mr. Saurabh Singh	Traffic Sign Recognition/Classification - Predicts the category of the traffic sign image using CNN (Convolutional Neural Network) model for the Image Classification purpose.	Mr. Naveen Pahuja
14.	Ms. Priya Chaurasiya	Bloggng Website – This website allows users to express their thoughts, leadership and expertise on a topic.	Mr. Vishaldeep Jain
15.	Mr. Om Tawde	Movie Recommendation System - The	Mr. Vishaldeep Jain

		basic idea behind this system is that movies that are more popular and critically acclaimed will have a higher probability of being liked by the average audience. Second is content-based filtering, where we try to profile the users, interests using information collected, and recommend items based on that profile.	
16.	Mr. Akash Ramola	Two player Chess Game – This app allows two players to play chess game on the same device supported on Windows and Android devices, with simple and easy to use interface without having ads present in it.	Ms. Kirti Bhatt

Skill Enhancement Projects		
S.Y B.Sc. CS (18) (Python Web Based App/Windows.NET/Android App/IOT based)		
Name of Guiding Teacher: Ms. Geeta N. Brijwani		
Sr. No.	Name of the Students	Title of the Project
1.	Mr. Kartik Mishra Mr. Sourab Dolui Ms. Nishika Sharma Ms. Lakshmi Nadar	IOT Based Home Automation - The IoT based home automation consist of several smart devices for different applications of lighting, security, home entertainment etc. All these devices are integrated over a common network established by gateway and connected in a mesh network.
2.	Mr. Rohan Suram Mr. Shivam Mishra Mr. Rishabh Jain Mr. Monish Jeswani	Twitter Clone App - A simple Twitter Clone application created to mimic the basic design and functionality of the official Twitter app.
3.	Mr. Sachin Gope Mr. Brijesh Mehta Mr. Niteesh Panchal Mr. Mihir Lohar	Hospital Management Website - A hospital management system (HMS) is a computer or web-based system that facilitates managing the functioning of the hospital or any medical set up.
4.	Ms. Munisha Singhrane Ms. Mallika Bulchandani Ms. Payal Khandelwal	Student Information Management System - It is a software solution designed to help schools track and manage all their student data – everything from grades, attendance, behavioral information and more.
5.	Mr. Karan Surana Ms. Saloni Jain	Drone Programming & Path Finding Visualizer - Programming a drone for finding its path throughout the adjusted track and to visualize its path on its own and efficiently.
6.	Mr. Husain Shopurwala Mr. Himanshu Mangalore Mr. Shivam Gautam Mr. Nirbindu Bor	Online Electronic shopping Website – This website facilitates customers to search and buy electronic accessories online. The website also keeps a record of all customers and their order details.
7.	Mr. Akshay Nair Ms. Vrushali Kalantre Ms. Raksha Khandge Mr. Shivam Patel	Emergency Blood Services App - The citizens can request various blood components through the mobile app. The users can also track the status of their request from within the app. Further, the app provides facilities to search for blood stock and camps at various blood banks as well.
8.	Ms. Jill Patel Ms. Anjali Salvi Ms. Aamna Mirza	College Admission Management System - An admission management system deploys a single database which can be used by any number of departments and any number of users at once. All the data that is stored can be accessed by another department via secure role-based logins.
9.	Ms. Roshini Gupta Mr. Kartik Sharma Ms. Riddhi Gupta	Restaurant Management App – It is a system which is a collective term for software that helps streamline food business operations. Namely, restaurants, bars, bakeries, cafes, cloud (dark, virtual, ghost)

		kitchens, food trucks or delivery businesses.
10.	Mr. Sameer Dewani Mr. Prabhat Singh Mr. Yogesh Rawte Ms. Jagruti Chaudhari	Courier Delivery Management System - A courier management system, or CMS, is a business software that simplifies courier management and routing. A CMS streamlines all of the following tasks: Planning and optimizing delivery routes. Courier tracking and scheduling.
11.	Mr. Rohit Ghosh Mr. Jagdish Prajapati Ms. Grishma Mody Ms. Janvi Mehta	Ice-cream Parlor App - The POS app for your ice cream shop. Manage your entire ice creamery from your phone. Turn long lines into cash, manage flavor batches, and generate sales reports, track staff performance and more.
12.	Mr. Yash Tare Mr. Umangkumar Patel Mr. Rahul Pongde Mr. Smeet Mestry	Weather Web App - The weather app provides atmospheric pressure, weather conditions, visibility distance, relative humidity, precipitation in different unites, dew point, wind speed and direction, in addition to ten days in future and hourly weather forecast.
13.	Mr. Paras Dalvi Mr. Raj Shinde Mr. Sukhdev mali Mr. Jainam Barot	Apple I-store products App – An app which facilitates online transactions of purchasing Apple I-phones and services through means of the transfer of information and funds over the Internet.
14.	Mr. Sohil Tadvi Mr. Pradeep Gupta Mr. Krishna Dora Mr. Sohail Shaikh	Web-Based Online Library System - An online library system for managing library items. It is an advanced library management software in which all data is managed digitally such as books, magazines, users. Online facility helps in smooth functioning of library functions. Users can check the availability of a particular book online.
15.	Mr. Owais Sayyed Mr. Adarsh Pandey Mr. Ankit Mahala Mr. Arth Jain	Railway ticket booking system - The railway reservation system facilitates the passengers to enquire about the trains available on the basis of source and destination, booking and cancellation of tickets, enquire about the status of the booked ticket, etc.
16.	Ms. Renuka Raghuvveeran Ms. Sneha Mogaveera Ms. Meghna Gowda Mr. Vikas Yadav	LibriSpeech Project - The LibriSpeech corpus is derived from audiobooks that are part of the LibriVox project, and contains 1000 hours of speech sampled at 16 kHz. The corpus freely available for download, along with separately prepared language-model training data and pre-built language models.
17.	Ms. Harshika Santoshi Ms. Deeksha Mishra Ms. Nidhi Jain	Online Exam based Job Portal - The task for “Employment PORTAL BASED ON ONLINE EXAM” is about the advancement of a web application that composes an exam in on the web. This web Application gives the office to lead online examination around the world.
18.	Mr. Rishab Munot Mr. Cletus Dsouz	JavaScript Quiz Project - Coding your own JavaScript quiz is also a fantastic learning exercise. It teaches you how to deal with events, manipulate the DOM, handle user input, give feedback to the user and keep track of their score (for example, using client-side storage).

Project Reports Under Star DBT Scheme F.Y B.Sc. CS (12)		
Name of Guiding Teacher: Mrs. Shalini Maheshgauri		
Sr. No.	Name of the Students	Title of the Project
1.	Mr. Anand Adke Mr. Aryan Agarwal Mr. Siraj Ahmed Mr. Bilal Ali Mr. Imaad Ansari	Green Buildings: The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. In doing so, the three dimensions of sustainability, i.e., planet, people and profit across the entire supply chain need to be considered.
2.	Mr. Mohammed Mohtashim Mr. Hanif Barbhuiya Mr. Arun Binhani Mr. Ritesh Ojha	Renewable Resources: Renewable energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished. It can be used from power production and thermal comfort in buildings to industry and transport.

	Ms. Sagun Chatla	
3.	Ms. Disha Chaturvedi Mr. Kritik Chauhan Ms. Prachi Chavan Mr. Aryan Chile Ms. Krasia Noronha	E-waste Management companies: E-wastes are electronic materials or electrical products like computers, lights, and many more. This item can be recycled. This is called e-waste management. There are companies and NGOs that uses authorized e-cycler to safely dispose e-waste.
4.	Ms. Renona Dsouza Mr. Sagar Dwivedi Mr. Gholap Vaibhav Mr. Dipan Jain Ms. Krishi Jain	Emerging Green Technologies: Green technology is eco-friendly which is developed and used in such a way so that it doesn't disturb our environment and conserves natural resources.
5.	Ms. Nidhi Jain Mr. Akash Jaiswar Mr. Subrat Jena Mr. Labhesh Joshi Mr. Saurabh Kanade	Context Awareness: Context awareness is the ability of a system or system component to gather information about its environment at any given time and adapt behaviours accordingly. Contextual or context-aware computing uses software and hardware to automatically collect and analyse data to guide responses.
6.	Ms. Shilpita Katta Mr. Padeep Kewat Ms. Sabahat Khan Mr. Saurav Kumar Mr. Yash Mahadik	Green Products: Green products are usually identified by having two basic goals – reducing waste and maximizing resource efficiency. They are manufactured using toxic-free ingredients and environmentally-friendly procedures and are certified by recognized organizations like Energy star, Forest Stewardship Council, etc.
7.	Ms. Masrita Mangalarapu Ms. Simran Nair Mr. Moinuddin Mansoori Ms. Afza Mukaddam Ms. Firdaus Mulla	Recycling/Refurbishing of E-waste: Recycling electronic waste to produce refurbished products for reusing them in daily life such as Consumers in love with technology won't notice any difference in quality when they buy a new electronic product manufactured using refurbished e-waste. Three R's of E-Waste: Refurbish, Redesign, and Repurpose.
8.	Mr. Rehan Mulla Mr. Nithin Narayanankutty Mr. Kanak Navalkar Mr. Tanmay Nikam Mr. Om Panchal	Energy and water conservation: Water conservation measures have varying levels of energy savings. All water conservation measures reduce the volume of water pumped (from groundwater or surface water sources), treated, and distributed to customers, saving energy at each of those steps.
9.	Mr. Patel Pranav Mr. Abhishek Pathak Mr. Anish Patil Mr. Aryan Penikal Ms. Shruti Potdar	Disposal of E-Waste in India: E-waste recycling is a source of income for many people in India, it also poses numerous health and environmental risks. E-waste recyclers use processes such as open incineration and acid-leaching. This situation could be improved by creating awareness and improving the infrastructure of recycling units along with the prevalent policies.
10.	Ms. Lohitya Samala Ms. Vanshika Sathyan Ms. Asfiya Sayed Mr. Dhruv Shah Ms. Mallika Sharma	Cloud Computing: It is the on-demand availability of computer system resources, especially data storage (cloud storage) and computing power, without direct active management by the user. The term is generally used to describe data centers available to many users over the Internet.
11.	Ms. Suryanarayan Singh Mr. Devashish Subba Ms. Supriya Thakur Mr. Puneet Tulsiani Mr. Mdkaif Siddique	Virtualization: In computing, virtualization or virtualisation (sometimes abbreviated v12n, a numeronym) is the act of creating a virtual (rather than actual) version of something, including virtual computer hardware platforms, storage devices, and computer network resources.
12.	Mr. Mihir Rathod Ms. Nikita Singh Mr. Shaf Farooqui Mr. Mahendrasingh Rajpurohit Ms. Shrija Chaurasia	Digital data storage devices: It is a computer data storage technology that is based upon the Digital Audio Tape (DAT) format. DDS is primarily intended for use as off-line storage, especially for generating backup copies of working data.

Projects Under Star DBT Scheme T. Y B.Sc. (IT) (08)			
Sr. No.	Name of the Students	Title of the Project	Name of Guiding Teacher
1.	Ms. Shaikh Madeeha Ms. Rifath Zahraa	Sentiment Analysis of Twitter Data- To extract the sentiment from a famous micro blogging service, Twitter, where users post their opinions for everything.	Ms. Pragati Thawani
2.	Mr. Manan Kataria Mr. Batliwala Sadiq	Digital College Offices - A distinctive digital infrastructure to connect students with each other, with staff, with research and with the outside world to support networked, research-based, and interdisciplinary education.	Ms. Pragati Thawani
3.	Ms. Sameera momin Mr. Soham Salunke	Speech emotion recognition - To improve man-machine interface. It can also be used to monitor the psycho physiological state of a person in lie detectors Of each emotion specific SVM.	Ms. Pragati Thawani Ms. Nashrah Gowllkar
4.	Mr. Vinod Yadav Mr. Prashant Rajak	Stock management System learning strategies- To track and control the company's supply so that you can optimize your inventory and manage them without spending extra time and money.	Ms. Pragati Thawani Ms. Sandhya Bhavsar
5.	Mr. Mateen Shaikh	Secure cloud storage - To have a secure cloud storage system that enables a user to check the integrity of the outsourced data is expected to be Correct(If the cloud indeed stores the whole outsourced data, the cloud can always prove to the user that the data remains intact)	Ms. Pragati Thawani
6.	Mr. Sudhesh Rajak Mr. Aakash Nigam	Smart Agriculture System- The goal of smart agriculture research is to ground a decision-making support system for farm management. By providing them with the benefits of technological advancements, to reduce the heavy workload of the farm workers, hence improving their quality of life.	Ms. Pragati Thawani Ms. Neha Patel
7.	Mr. Nabeel Khan Mr. Ali Khatri	Social commerce website- To achieve customer engagement through social channels and to provide industry insights and research data that a customer needs to know before opting into the brand.	Ms. Pragati Thawani Ms. Neha Patel
8.	Ms. Pratishta Gupta Ms. Gauri Guglani	First Order Motion Model for Image Animation- Consists of generating a video sequence so that an object in a source image is animated according to the motion of a driving video.	Ms. Pragati Thawani Ms. Nashrah Gowllkar

Skill Enhancement Projects Under Star DBT Scheme S. Y B.Sc. (IT) (20)			
Sr. No.	Name of the Students	Title of the Project	Name of Guiding Teacher
1.	Mr. Vishal Potham, Mr. Shivram Sahu Mr. Ankit Kalauni Mr. Aditya Khandelwal	Covid Vaccine Distribution- Website for registration of user for vaccination to avoid chaos and systematic allotment for vaccination drive.	Dr. Rakhi Gupta
2.	Mr. Ashish Choubey Mr. Dhiraj Singh Mr. Aman Rawal Mr. Himanshu Singh	Quiz and Exam Management System- It provides a common platform to connect student and teacher online. The registered teacher can create Quiz and student can give the quiz and can assess itself.	Dr. Rakhi Gupta

3.	Mr. Omkar Gupta Mr. Pravin Kumar Mr. Taher Motiwala Mr. Sekendar Shaik	The RFID Attendance system - Which marks the attendance into the database when the RFID tag is scanned in with the RFID Reader and attendance can be seen by Admin, Faculty, and Student by login into the Attendance System Website	Dr. Rakhi Gupta
4.	Mr. Navin Seema Mr. Aniket Shigvan Ms. Nidhi Singh Mr. Rohit Pembarthi Mr. Nayan Jain	E-MANDI - An online food ordering system that allows restaurant businesses to accept and manage orders placed over the internet.	Dr. Rakhi Gupta
5.	Mr. Hiten Dusseja Mr. Jinay Gada Ms. Reha Shah Ms. Neha Yadav	Blogging Website to enable students to connect to Jobs - It is platform where a one or group of writers share their view on an individual subject. This project mainly contains blogs related to jobs and working life of youth.	Dr. Rakhi Gupta
6.	Ms. Arfin Sayyed Ms. Maziya Shaikh, Ms. Tasneem Goawala Mr. Gaurang Sarvaiya	Online Movie Ticket Booking Website - A website for a cinema hall where any user of internet can access it. User is required to login to the system and needs a credit card for booking the tickets.	Dr. Rakhi Gupta
7.	Mr. Aliasgar Umatia	Hotel management system - Maintaining details of customers, rooms, employees.	Dr. Rakhi Gupta
8.	Mr. Swapnil Adsul Mr. Abhishek Tiwari Mr. Utkarsh Shukla Ms. Nidhi Singh	Fashion E-commerce website - Fashion e-commerce involves buying and selling fashion-related items online.	Dr. Rakhi Gupta
9.	Mr. Ankesh Kumar Mr. Vaibhav Tiwari	Electricity billing system based on Java - The project mainly focuses on the calculation of electricity units consumed by consumers and makes bills.	Dr. Rakhi Gupta
10.	Mr. Dinesh Choudhary Mr. Aakash Dixit, Mr. Kaustubh Ghawale Mr. Partho Ghosh	Web series, movie prediction - To develop a system based upon data mining techniques that may help in predicting the success of a movie in advance thereby reducing certain level of uncertainty.	Dr. Rakhi Gupta
11.	Mr. Zahoor Mr. Uzair Mr. Saud Wavekar Mr. Bhalchandra Devale	AI based Attendance System - Software store the face that are detected and Mark Attendance. Share the student attendance to parent. Generate defaulter list.	Dr. Rakhi Gupta
12.	Mr. Chirag Bolakani Ms. Shweta Suman	Precision Agriculture Using Normalized Difference Vegetation Index -A vegetation index is a single number that quantifies vegetation biomass and/or plant vigor for each pixel in a remote sensing image. The Normalized Difference Vegetation Index is used in identifying the quality of the crops.	Dr. Rakhi Gupta Ms. Pragati Thawani
13.	Ms. Ketaki Bane Mr. Aayush Jain Ms. Shreya Jain Mr. Karan Shah	Online Voting System - is an online voting technique & is a portal that being developed for use by everyone with a simple and self-explanatory Graphical User Interface.	Dr. Rakhi Gupta Ms. Pragati Thawani
14.	Mr. Karan Dhakan, Mr. Bhargav Kevdia Mr. Shivanshu Agarwal	Shopping List - It allows a shopper to point and click on an item so that it can take place a virtual cart or a later checkout which makes it easier for the shoppers to shop online.	Dr. Rakhi Gupta Ms. Pragati Thawani

15.	Mr. Arsh Ansari Mr. Jay Makwana Mr. Gaurang Sarvaiya Mr. Anurag Pandey	Banking System - This website has all kinds of day-to-day bank transactions and other activities like cash deposit, cash withdraw, loan, bank balance, edit password.	Dr. Rakhi Gupta Ms. Pragati Thawani
16.	Mr. Deep Marathe Ms. Pooja Pardeshi Mr. Shiv Shah	Supply chain management - It is management of the flow of goods and services and includes all processes that transform raw materials into final products. It represents an effort by suppliers to develop and implement supply chains that are as efficient and economical as possible.	Dr. Rakhi Gupta Ms. Pragati Thawani
17.	Ms. Deepa Ahuja Ms. Barkha Golani Ms. Karina Makhija Ms. Namrata Poptani	Customized closet - is an online shopping website in which people can buy variety of clothes.	Dr. Rakhi Gupta Ms. Pragati Thawani
18.	Mr. Chirag Bolakani Mr. Pravin Kumar Ms. Shweta Suman	Blood Bank Management System - To help others, can be used effectively for getting the details of blood donors having the same blood group and within the same city.	Dr. Rakhi Gupta Ms. Pragati Thawani
19.	Mr. Dipesh Chandiramani	Courier Management System - A business software that simplifies courier planning, scheduling, tracking, and optimizing delivery routes.	Dr. Rakhi Gupta Ms. Pragati Thawani
20.	Ms. Asma Parkar Ms. Prachi Sakpal	Simple MCQ test using java - It is used to conduct online examination. There are 4 subjects, and each contain 10 questions. It will perform correction of the examination and display the result immediately after the exam.	Dr. Rakhi Gupta Ms. Pragati Thawani

Projects Under Star DBT Scheme F. Y B.Sc. (IT) (10)		
Name of Guiding Teacher: Dr. Rakhi Gupta		
Sr. No.	Name of the Students	Title of the Project
1.	Mr. Manan Jain	Solar mud pot cooler - It will make a cooler using a water storage mud pot. A solar panel will be attached to the top and will be charged. This will be connected to a rechargeable battery and a fan. The fan will face the mouth of the pot so the air will go inside the pot.
2.	Ms. Shreya Chaudhari	Smart Home - Creating a smart home using solar energy instead of electricity to save nonrenewable resources.
3.	Mr. Mohammed Owais Sayed	Heated Clothing - Clothing that will keep warm and be powered with a renewable source of energy. Heated Clothing that can be powered by, but not limited to, renewable sources of energy.
4.	Mr. Jay Nishar	Laptop Vacuum Cooler -It's a Vacuum Cooler for laptop made from some basic materials with Less energy consumption. Faster cooling than Air Conditioner, Cooling helps in less damage to hardware materials, User friendly.
5.	Ms. Surabhi Maydeo	Recycling of IT Waste in colleges - create awareness among students about recycling of e-waste to reduce the adverse impact on environment and health due to improper disposal of e-waste.
6.	Ms. Harshita Chatlani	Quadcopter - It is made of bio-degradable, and easily available material. This project has innumerable uses in different fields like Consumer care, medical operations, Agricultural use, Natural Disasters rescue etc.

7.	Mr. Pulkit Nehra	Construction of portable hand fan in addition to torch light- This can save energy in place of using artificial lighting, which represents a major component of energy consumption in buildings.
8.	Mr. Hrishikesh Koli	Wooden Guitar Picks (Plectrums)- Plectrums or picks are tools which are used to play notes on a stringed instrument, typically made out of acetal, celluloid, or nylon the manufacturing process uses plastic injection molding which involves rapidly heating and rapidly cooling the material, during the process toxic fumes or particles are released.
9.	Mr. Satish Surshetty	Room Heater- To promote electric efficiency as it using bulbs which consume very less energy as compared to traditional heaters and it is recyclable and reusable as cardboard box, motor from toys and bulbs which are not in use can be used.
10.	Mr. Khozema Kheriwala	Smart Projector- It is used for Entertainment purpose and for Presentations. It is eco-friendly since it does not use bulbs. It is made from Shoebox and magnifying glass is used.

7. Any Novel aspect introduced or planning to introduce during the Scheme duration.

Department of Physics

- A well rounded and well-informed personality is key to success in today's world. With the aim of making this aspect part and parcel of the growth of a student we conducted the following extension activity under the Scheme: An Extension Activity – “Know Your Rights” by Advocate Nausheen Yousuf, Lawyer, Majlis Legal Centre & Ms Flavia Agnes, Co-Founder, Majlis for students of Arts, Commerce and Science. We plan to increase the number of such activities in the upcoming year.
- Planning Projects undertaken as part of the Scheme will have the following features: Topics as interdisciplinary extension of the regular curriculum will be increased. Topics given to the students of T.Y B.Sc. must kindle interest in research. To appoint external guides for students' projects.
- Conceiving a popular lecture series with the aim of popularizing the Sciences.
- Generating following Resource Materials:
 - a) Instruction Manuals for laboratory experiments.
 - b) Project reports will be designed with the purpose of providing them as additional study material.

Department of Mathematics

- The department came out with the first issue of the newsletter Ganitam N. More (2019-20), for which all the articles are written by the alumni of the Department of Mathematics.
- Though at present there is no T.Y B.Sc. Mathematics in the College, yet the department took the initiative of organizing training workshops for IIT JAM for the benefit of the students of various other Colleges in and around Mumbai.
- Every year the Foundation course in Mathematics is organized by the MTTTS Trust for the benefit of the under graduate students all over India including the students in the remote villages in India. Due to Star DBT funds the department could be a part of this very Noble activity and helped fund one of the six Camps.
- The Department of Mathematics is planning online /offline sessions on various topics of Mathematics for school children of Municipal schools or for economically backward children.

Department of Computer Science & Information Technology

- DBT Star Scheme support helped in inviting professional organizations like VINAYAVISH, SI technologies to conduct hands-on webinars on '2 Day PHP Mini Project Workshop', Building a Simple Multi-Platform WebApp for CS and IT students of S.Y and T.Y.
- Both departments organized Webinars conducted by notable Alumni of the departments, called Alumni Lecture Series as well as an All-India level Faculty Development 6 Days Webinar.
- Collaboration with civil authorities/non-governmental organizations to create programs which would specifically help in creating awareness sensitization on health and sanitation issues.
- Identification and segregation of apps/projects for which patents can be filed.
- Also, departments are planning to organize programmes on E-resources and use ICT tools in Research and Online content creation for students and teachers.
- Organizing Online training session on Computer and Mobile Technology for Non-teaching staff to enhance their skills.

8. Lessons learnt / difficulties faced/suggestions if any, in implementation of the programme and utilization of DBT grant. (Max 3 points within 300 words).

- Due to the pandemic and the lockdown, it was imperative that teachers be trained in conducting online examination hence DBT Star Scheme funds helped in training teaching and non-teaching staff in Basic and Advanced Excel Applications.
- As there is no provision for separate fund allocation for instrument AMCs, there is a need for a separate technical or support staff for the maintenance of the instruments and for other STAR related documentation/clerical work.
- Both the Departments of Information Technology and Computer Science were combined together as one department leading to a shortage of funds in reaching out to more beneficiaries. Either extra funds need to be granted or both the departments need to be considered as separate entities.
- DBT Star Scheme Funds have helped in creating a number of novel and innovative projects/ideas. The next step now would be to explore opportunities to patent them under IPR.
- Although the extension activities conducted under this Scheme were outside the purview of science subjects they are conducive to a student's personality development and proved to be very interesting and useful.
- The payment procedures especially for purchasing relevant software should be simplified and in keeping with the current digital modes of transaction.
- A part of the funds may be demarcated for the Support staff who are an integral part of any activity conducted under the Scheme.

9. Key performance indicators

Sr. No.	Indicator	Pre-support (2019-20)	During /After Support (2020-21)	Remarks														
1	No. of students admitted	Total =								Total =								
		M=				F=				M=				F=				
		S C	S T	O B C	G	SC	ST	O B C	G	S C	S T	O B C	G	SC	ST	O B C	G	
	No. of students admitted	A-I								A-I								
2	No. of students passing out (%) Students Admitted/passing out (pass %)	A-I								A-I								
3	Drop-out rates	Physics – Nil Mathematics – Nil CS & IT- Nil								Physics – Nil Mathematics – Nil CS & IT- Nil								
4	No. of students opting for MSc	CS- 22 IT – 08								Physics-03 CS - 11 IT – 05								
5	Average marks	Physics – 60% Mathematics – 65% CS- 71% IT- 75%								Physics – 80% Mathematics – 73% CS- 90% IT - 90%								
6	No. of hands-on Experiments (Virtual) (2020-21) experiments being conducted	Physics – 01 Mathematics – 04 CS & IT – 11								Physics – 03 Mathematics – 1 CS & IT – 12								
7	No. of new experiments introduced	Physics – 05 Mathematics – 03 CS & IT- 91								Physics – 06 Mathematics – 15 CS & IT- 104								
8	Publications (Scopus indexed) /patents, if any.	Physics – Nil Mathematics – Nil CS & IT -Nil								Physics – Nil Mathematics – Nil CS & IT -Nil								
9	Training received by faculty	Physics – 05 Mathematics – 09 CS & IT – 15								Physics –02 Mathematics – 08 CS & IT - 16								
10	Exhibitions/seminars/ training courses conducted	Physics – 04 Mathematics - 13 CS & IT – 09								Physics – 08 Mathematics - 07 CS & IT – 09 + 01(IV) + 10 (Alumni Lecture Series) = 10 Total=20								
11	Books/journals subscribed from grants	Physics – 36 Mathematics – 42 CS & IT – 60								Physics – Nil Mathematics – 13 CS & IT – 70								
12	Outreach activities (Popular lectures)	Physics – 01 Mathematics – 02 CS & IT – 01								Physics – 01 Mathematics – 01 CS & IT - 03								
13	Colleges mentored to apply for DBT Star College grants	NA								NA								
14	Invited lectures	Physics – 01 Mathematics – 03 CS & IT - 06								Physics – 03 Mathematics –16 CS & IT - 10								

Proofs (S. No. 6-14 not more than 5 pages, 1.5 line spacing 11 times roman font size) to be provided duly attested by Principal and Coordinator.

Department of Physics

Hands-on Training (03) (Virtual)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Use of TINA software	Mrs. Anita Ravi HOD, Associate Professor Dr. Shaila Wagle Associate Professor K.C College	03.02.2021	T.Y.B.Sc (20)
2.	Use of Virtual Practical Platform for experiments in Physics	Mr. S.S.Singh Associate Professor Dr Jyotsna Pandey Assistant Professor Mr. Tahir Rajgoli Assistant Professor K.C College	09.02.2021	FY/SY/TY B.Sc. (94)
3.	Use of 8085 Microprocessor Simulator.	Dr. Shaila Wagle Associate Professor K.C College	24.02.2021	T.Y.B.Sc (20)

New Practical (04): (Virtual) - T.Y B.Sc.

Class and No. of Beneficiaries: T.Y B.Sc. (20)	
Sr. No.	List of Practical/Demonstrations
1.	Determination of 'g' using Kater's pendulum in different environments such as other planets and on the Moon.
2.	L/C by Maxwell's Bridge (Different values of L)
3.	Determination of h/e by photocell. (Different light sources were used)
4.	Thermistor characteristics (different thermistors are used)

New Practical (02): (Virtual) - S.Y B.Sc.

Class and No. of Beneficiaries: S.Y B.Sc. (31)	
Sr. No.	List of Practical/Demonstrations
1.	Determination of Refractive Index of different liquid (Acetone, Kerosene) by using different types of light source (Sodium Source, He, Ne)
2.	Young's Modulus by bending (different materials e.g., Wood, Aluminum, Copper, Steel)

Training Received by Faculty (02) (Virtual)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Faculty Development Program - "Development of Skills in Students-A Teacher's Role" (Intercollegiate, Interdisciplinary)	Dr.G.P.Kothiyal , Former Head, Advanced Glass and Ceramics Division, BARC Professor of Physics, Homi Bhabha National Institute, and Currently Chairman, MRSI, Mumbai Chapter	26.12.2020	Mrs Anita Ravi Dr. Jyotsna Pandey and Mr. Tahir Rajgoli
2.	Webinar- "Mathematical Models of Tipping Points in Ecosystem" (Interdepartmental)	Dr Vishwesh Guttal , Associate Professor, Centre for Ecological Sciences, IISc Bengaluru	05.06.2020	Dr. Jyotsna Pandey

Extension Activity (04) (Virtual)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Summer school module "Corporate Etiquette"	Ms Manisha Mishra Image Consultant	10.04. 2020 & 11.04.2020	S.Y.B. Sc/S.Y.B. A/ S.Y.B. Com (86)
2.	Summer school module "Advanced Communication Skills"	Martin Ebnazer , Assistant Professor, Ruparel College Mumbai	13.04.2020	S.Y.B. Sc/S.Y.B. A/ S.Y.B. Com (86)
3.	Webinar on "Healing through Hardship- the Corona Experience" (Interdepartmental)	Dr. Aman Bhonsle Relationship Counselor & Psychotherapist & Nidhi Borana Counselor, KC College	13.07.2020	Teachers of Departments under Star Status and Star Scheme of KC College and Degree College students of all faculties- 400
4.	Two Day Workshop on "Know your Rights" Conducted by Department of Physics under DBT STAR College Scheme in collaboration with Star Status (Chemistry & Statistics department) & Gender Issue Cell, KC College, Majlis and US Consulate.	Advocate Nausheen Yousuf, Lawyer, Majlis Legal Centre & Ms Flavia Agnes, Co-Founder Majlis	18.01.2021 & 19.01.2021	Students of Arts, Commerce and Science (180)

Interdisciplinary Activity (03) (Virtual)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Webinar - “Insights into Binomial, Poisson and Gaussian Distribution”	Mr. R J Pawar, Associate Professor (retd) & Former HOD, Department of Statistics, KC College	05.01.2021	FY/SY/TY B.Sc. students of Physics, Mathematics & Statistics (100)
2.	Master Lecture - “Advanced Materials Technology”	Dr Debdatta Ratna, Head, Directorate, Polymer Science and Technology, NMRL, DRDO	06.02.2021	S.Y. /T.Y. B. Sc. (Physics & Chemistry students) (40)
3.	Webinar - “Path from AI to Deep Learning” (interdepartmental)	Dr Pooja Raundale Professor and Head, MCA Department, Sardar Patel Institute of Technology, Mumbai	03.03.2021	FY/SY/TY B.Sc. students of Information Technology and Physics (100)

Intercollegiate Support Staff Activity (01) (In-Person)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	No of Beneficiaries
1.	Hands-on Workshop - “Printed Circuit Board – Design Technique”	Mr. Maheshwar Falake, Assistant Professor, Department of Physics, SIES College, Mumbai	25.03.2021	10 Support staff of KC College and 01 from Siddharth College, Mumbai

Outreach Activity (01)

- A common Outreach activity was conducted by all Departments of the College under the DBT Star College Scheme. Resource material was prepared in form of a booklet on different concepts of Basic physics. 100 copies of the same were distributed among the following schools:
 - i. Waradkar High school, Taluka Malwan, Dist. Sindhudurg
 - ii. B.T. Chouhan Maharashtra Secondary school, Taluka Malwan, Dist. Sindhudurg, at and Post Karul Gavthanwadi, Taluka Vaibhavwadi, Dist. Sindhudurg

Department of Mathematics

Hands-on Training (Virtual Training (01))

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Workshop on "Sage Math"	Dr. Ajit Kumar, Associate Professor and Head, Department of Mathematics, ICT, Mumbai	05.09.2020 to 07.09.2020	S.Y. B.Sc. (35)

New Practicals (08): Virtual - F.Y B.Sc.

Class and No. of Beneficiaries: F.Y B.Sc. (Mathematics) 65	
Sr. No.	List of New(virtual) Practicals with hands-on on Mobile/PC And submission on Google classroom
1.	Vector Algebra using Sage-Math (Extra Practical)
2.	Algebra of Matrices using Sage Math (Extra Practical)
3.	Curve sketching using Sage Math (New Practical)
4.	Divisibility using Sage Math (New Practical)
5.	Limits of functions of one variable using Sage Math (New Practical)
6.	Limit of a sequence of real numbers using Sage Math (New Practical)
7.	Stirling numbers of second kind using Sage Math (New Practical)
8.	Bisection method using Python (New Practical)

New Practicals (05): Virtual - S.Y B.Sc.

Class and No. of Beneficiaries: S.Y.B.Sc. (Mathematics) (42)	
Sr. No.	List of New(virtual) Practicals with hands-on on Mobile/PC And submission on Google classroom
1.	Sketching graph of R-to-R functions using Sage Math (Extra Practical)
2.	Verification of Mean Value Theorem using Sage Math (Practical Extension)
3.	Vector Algebra using Sage-Math (Practical Extension)
4.	Algebra of Matrices using Sage Math (Practical Extension)
5.	Curve sketching using Sage Math (Practical Extension)

New Practicals (02): Virtual -F.Y.B.Com.

Class and No. of Beneficiaries: F.Y.B.Com. (100)	
Sr. No.	List of New virtual Practical Demonstrations with hands-on on mobile/PC
1.	Demonstration of Time value of money using MS EXCEL
2.	Demonstration of EMI calculation using MS EXCEL

Training Received by Faculty (08)

Sr. No.	Name of the Activity	Resource Person	Date (DD/MM/YY)	Faculty
1.	3 Days National Level FDP on Online College Management and Online Content Creation Tools	Mr. Hitesh Motwani, Director, North Storm Academy	30.04.2020 to 02.05.2020	Mrs. Mrunal Hardikar
2.	Online Teaching and E-Content Development	Mr. Karan Shah, Founder and CEO IIDE	16.05.2020 to 17.05.2020	Mrs. Mrunal Hardikar
3.	Managing online Classes and Co-Creating MOOCS: 2.0	Teaching Learning Centre, Ramanujan College, University of Delhi	18.05.2020 to 03.06.2020	Mrs. Mrunal Hardikar
4.	Two-day workshop on “Basic and Advanced Excel Training”	Mr. Kaushal Shah Senior Manager, Reliance Ltd.	26.05.2020 & 27.05. 2020	G Usha Dr. Pankit Gandhi
5.	National Webinar: Covid 19- Challenges in Mathematical Modelling	Dr. Malay Banergee, Professor, Department of Mathematics and Statistics, IIT, Kanpur	08.06.2020	Mrs. Mrunal Hardikar
6.	Use of Moodle in teaching, learning and evaluation	Mr. Mandar Bhanushe, Assistant Professor, IDOL, University of Mumbai	09.06.2020 to 10.06.2020	Mrs. G Usha Mrs. Mrunal Hardikar
7.	RUSA Sponsored National Webinar on “Continued Fractions: Providing Best Rational Approximations since Antiquity”	Dr. Shripad Garge, Assistant Professor, Department of Mathematics, IIT Bombay	24.06.2020	Mrs. Mrunal Hardikar
8.	One day Faculty development Programme, “Development of Skills in Students – A Teacher’s Role” organised by the Physics Department, K. C. College	Dr. G. P. Kothiyal, Former, Head Glass and Ceramic Division, BARC Secretary MRSI, Mumbai Chapter	26.12.2020	Dr. Pankit Gandhi

Workshop by Alumni (01)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	“MS Excel Demonstration” In association with Department of Mathematics, HR College	Mr. Kaushal Shah, Senior Manager, Reliance Limited	02.01.2021	F. Y B. Com & T.Y.B. Com students from KC and HR colleges- 100

Inter-disciplinary Activities (01)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Linear Algebra and It's Applications Using Python (Jointly organized with Department of Computer Science)	Dr. Aarati Nayak, Assistant Professor, Department of Mathematics and Statistics, S.K. Somaiya College, Mumbai	25.02.2021	FY/SY (Mathematics & CS) 73

Extension Activity (03)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Summer School (SHP CPCA) Online workshop on “Understanding Google Data Studio as a Research Tool”	Mr. Abhijeet Gole Assistant Professor, Ruia College of Arts and Science	02.05.2020	S. Y B. A/S.YB. Com and S.Y B.Sc. students from KC College – (41)
2.	Workshop for IIT-JAM	Mr. Shriprasad Tambe, (IIT Alumni)	08.02.2021 & 09.02. 2021	Under graduate students from colleges in Mumbai and rural area Mokhada, Kudal (270)
3.	SHP CPCA Module 'Trillionaire Mindset'	Ms. Natasha Nirmal Advani	19.03.2021	(S.Y B.A, S.YB.Com and S.Y B.Sc. students from KC college) (73)

Non-Teaching Activity (01)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Workshop on Origami "Happy Folding"	Mrs. Anushri Tambe, Assistant Professor, A P Shah Institute of Technology, Thane	08.09.2020	Joint activity for teaching and non-teaching staff (20)

Field Visit (01)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Virtual Field Visit to Institute of Chemical Technology	Dr. Amiya Bhowmick, Assistant Professor, Department of Mathematics, Institute of Chemical Technology, Mumbai	26.03.2020	F.Y B.Sc. (32)

Outreach Activity (01)

- All the four departments of DBT star scheme generated an online resource- Activity handbook "Learning Tips for Success @ School". 100 hard copies of the same have been sent to the two schools in the remote villages in Sindhudurg district of Maharashtra.

Invited Lectures (16)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	National Webinar on "Mathematical Models of Tipping Points in Ecosystem" (Jointly organised with Environment Committee, KC College)	Dr. Vishwesh Guttal , Associate Professor, Centre for Ecological Sciences, IISc, Bengaluru.	05.06.2020	Students and researchers from IISc, IIT, IISER and other colleges/institutes in India - (91)
2.	A talk on "Applications of Calculus"	Mr. Mohd. Faiz Ansari , Assistant Professor, Department of Basic Sciences and Humanities, St. Francis Institute of Technology, Mumbai	12.09.2020	Students of S.Y.B.Sc., KC college and junior college teachers from KC College - (29)
3.	A talk on "Applications of Mathematics and Statistics in Business"	Mr. Mohd. Faiz Ansari , Assistant Professor, Department of Basic Sciences and Humanities, St. Francis Institute of Technology, Mumbai	15.09.2020	Students of S.Y.B.Sc., KC college and junior college teachers from KC College - (27)

4.	Statements in Logic, Logical Negations	Dr. D. Sukumar , Associate Professor, IIT Hyderabad, Kandi 502285, Telangana	04.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
5.	Universal and Existential Quantifiers	Dr. D. Sukumar , Associate Professor, IIT Hyderabad, Kandi 502285, Telangana	06.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
6.	Sets and Subsets	Dr. Rekha Santhanam , Associate Professor, IIT Bombay, Mumbai	08.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
7.	Functions	Dr. A Chandrashekar , Associate Professor, Central University of Tamil Nadu, Thiruvarur	10.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
8.	Union and Intersections of sets	Dr. Rekha Santhanam , Associate Professor, IIT Bombay, Mumbai	11.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) (93) 700+ for live streaming on You Tube
9.	Graphs of Functions	Dr. A Chandrashekar , Associate Professor, Central University of Tamil Nadu, Thiruvarur	13.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
10.	Injective and Surjective Functions	Dr. A Chandrashekar , Associate Professor, Central University of Tamil Nadu, Thiruvarur	15.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana)- (93) 700+ for live streaming on You Tube
11.	Implication and Double Implication	Dr. D. Sukumar , Associate Professor, IIT Hyderabad, Kandi 502285, Telangana	17.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana)- (93) 700+ for live streaming on You Tube
12.	Cartesian Product of Sets	Dr. Rekha Santhanam , Associate Professor, IIT Bombay, Mumbai	18.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana)- (93) 700+ for live streaming on You Tube
13.	Nested Sets and Nested Intervals	Dr. Rekha Santhanam , Associate Professor, IIT Bombay, Mumbai	20.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana)- (93) 700+ for live streaming on You Tube
14.	Bijjective Functions (Continued...)	Dr. A Chandrashekar , Associate Professor,	22.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the

		Central University of Tamil Nadu, Thiruvarur		states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
15.	Partitions of sets	Dr. D. Sukumar, Associate Professor, IIT Hyderabad, Kandi 502285, Telangana	24.10.2020	Selected S.Y. B.Sc. Mathematics students in various colleges from the states of Maharashtra, Chhattisgarh, Andhra Pradesh and Telangana) - (93) 700+ for live streaming on You Tube
16.	A talk om “Applications of Mathematics and Statistics to Understand Species’ Distribution Interdisciplinary	Dr. Amiya Bhowmick Assistant Professor, Department of Mathematics, Institute of Chemical Technology, Mumbai	05.02.2021	Undergraduate, Post Graduate students and faculties in KC, Institute of Chemical Technology, Bhavan’s college) - (100)

COMPUTER SCIENCE & INFORMATION TECHNOLOGY DEPARTMENT

Hands-on Training (Virtual Training (12))

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Aerial Robots for Beginners	Mr. Christo Aluckal, Mr. Yashom Dighe, Research and Solution Architect, InfiCorridor Solution Pvt. Ltd, Mumbai	11.09.2020 12.09.2020	SY &TY (CS & IT) (100)
2.	Revealing the secret coding tricks to become an excellent UI/ UX Developer – HTML, CSS, JavaScript	Mr. Vinaykumar K Punamiya, Technical Lead, Kotak, Mumbai	26.09.2020	SY & TY (CS & IT) (70)
3.	Revealing the secret coding tricks to become an excellent UI/ UX Developer - jQuery, Ajax	Mr. Vinaykumar K Punamiya, Technical Lead, Kotak, Mumbai	03.10.2020	SY &TY (CS & IT) (70)
4.	2 Day PHP Mini Project Workshop	Mr. Ajit Vishwakarma, Corporate Master Trainer/Managing Director, VINAYAVISH, Mumbai.	24.10.2020 26.10.2020	SY &TY CS & IT (125)
5.	CorelDraw	Mr. Paresh Pandya Proprietor, Creative Line Computer Institute	28.11.2020	FY (CS & IT) (95)
6.	OOP and ML in Python	Ms. Jyoti Shukla, Trainer, Coder Technologies, Mumbai.	13.01.2021 20.01.2021	SY &TY (CS &IT) (85)
7.	Introduction to Cloud Computing	Mr. Richard joseph Assistant Professor, Computer Engineering Department, Vivekanand Education Society's Institute of Technology Mumbai	14.05.2020	SY & TY IT (90)
8.	IP Addressing Demystified	Ms. Prachi Mahajan, Assistant Professor, Vidyalankar School of Information Technology, Wadala	31.07.2020	SY (IT & CS) (70)
9.	Interaction with Database: SQL Server With Visual Studio	Dr. Tushar Sambare, Assistant Professor, S.M. Shetty College, Mumbai	16.10.2020	SY & TY (IT & CS) (75)
10.	PL/SQL ESSENTIALS	Ms. Rohini Desai Assistant Professor Vidyalankar School of Information Technology	24.11.2020	SY (IT & CS) (70)

11.	Applications of Geographic Information System	Ms. Jayshree Parab Assist. Professor Lala Lajpatrai College, Mumbai.	26.02.2021	T. Y B.Sc. (IT) (64)
12.	Controlling Actuators Using 8051	Mr. Sabir Moin Shaikh Assist. Professor Vidyalankar School of Information Technology	27.02.2021	S. Y B.Sc. (IT) (70)

New Practicals (15): Virtual - F.Y B.Sc. CS

Class and No. of Beneficiaries: F.Y BSc. CS (61)	
Sr. No.	List of Practical/Demonstrations
1.	To show display of 0 to 9 digits on 7-segment LED.
2.	Draw ER-diagram using virtual tools for a given case study.
3.	To backup and restore a single MySQL database.
4.	Using functions to represent the computational complexity of algorithms.
5.	Python Programming exercises on Sets, Relations, Recursion, Permutations and combinations.
6.	Using ggplot2 and dplyr library in R.
7.	Family of apply functions in R.
8.	To calculate sales tax using GUI programming in Python.
9.	Implementation of ADT - Linked List, Graphs, Stacks, Arrays using C programming
10.	PLSQL blocks to understand the concept of cursors.
11.	PLSQL blocks to understand the concept of cursors using procedures and functions.
12.	To insert multimedia elements in html web pages. (video and audio of different formats)
13.	To play YouTube videos in html web pages.
14.	To read and write a CSV file using python.
15.	To learn and understand various open-source tools.

New Practicals (15): Virtual - S.Y B.Sc. CS

Class and No. of Beneficiaries: S. Y. BSc. CS (69)	
Sr. No.	List of Practical/Demonstrations
1.	Understanding Process Control and resource scheduling in operating system
2.	Demonstration of heapq module in Python
3.	Implement case study on graph theory and its applications
4.	Design a webpage to handle asynchronous requests using AJAX on Mouseover
5.	Design a webpage to display data of food items (from text file) using mouseover effect on each item.
6.	Design a webpage to display data from a text file in a <div> on button click.
7.	Design a page using jQuery animate () method is used to demonstrate animations
8.	Design a page that shows and hide a paragraph on one button click using appropriate jQuery method.
9.	Case study on graph theory application.
10.	Permutations and Combinations in Python.
11.	Linear Algebra and its Applications.
12.	Video recording and playing using Pi-camera and Raspberry Pi.
13.	Performing Data-binding in windows application.
14.	Different Menus in Android Working with Multiple Layouts
15.	Using Packet Tracer, create a wireless network of 2 PCs, 2 Laptops, 1 Smartphone, 1 Printer.

New Practicals: (10) Virtual - T.Y B.Sc. CS

Class and No. of Beneficiaries: T.Y BSc. CS (71)	
Sr. No.	List of Practical/Demonstrations
1.	Implement decision tree learning algorithm for the restaurant waiting problem.
2.	Installing Mail server on Ubuntu 16.04 LTS using SMTP protocol.
3.	Creating LVM Extended partitions in Ubuntu 16.04 LTS.
4.	Installing NFS server on Ubuntu 16.04 LTS.
5.	Understanding Unity software for designing 3D game.
6.	Family of apply functions in R.
7.	Web Scraping in R.
8.	To write python program for web scraping to display textual data.
9.	To write python program for crawling web pages.
10.	To understand various open-source forensics tools and their purpose.

New Practicals: (20) Virtual - F.Y B.Sc. (IT)

Class and No. of Beneficiaries: F.Y B.Sc. (IT) (71)	
Sr. No.	List of Practical/Demonstrations
1.	Write a C++ program to illustrate that member function of one class can act as friend of another class.
2.	Write a C++ program to implement run time polymorphism using virtual function.
3.	To design & verify the operation of magnitude comparator in digital electronics.
4.	To study 4-bit ALU (IC 74181).
5.	Write a C-program to implement Disk scheduling algorithms.
6.	Write a C-program to present the Output for Producer– Consumer problem concept.
7.	To study standard graphics symbols for digital logic.
8.	Program to find Normal and Trace of a Square Matrix using Arrays.
9.	Understanding listening skills.
10.	Role –Play on any Two-Situations.
11.	The significance of telephone communication.
12.	Write a Python program to generate all permutations of a list.
13.	Write a Python program to check whether all dictionaries in a list are empty or not.
14.	Write a Python program to find a pair with highest product from a given array of integers.
15.	Write a Python program to find common divisors between two numbers in a given pair.
16.	To study programming and transmission & reception of data through serial port & study of parallel printer port.
17.	To study implementation and programming of Temperature measurement.
18.	Study and analyze the interfacing of 16 x 2 LCD.
19.	Understanding the Usage of power saving features.
20.	Understanding and Analysis of Purchase of energy saving hardware.

New Practicals :(22) Virtual - S.Y B.Sc. (IT)

Class and No. of Beneficiaries: S.Y B.Sc. (IT) (68)	
Sr. No.	List of Practical/Demonstrations
1.	Write a program to connect Python with MySQL using database connectivity and perform the following operations on data in database: Fetch, Update and delete the data.
2.	Understanding of ER diagram in terms of Normalization.
3.	Illustrate how you can embed PL/SQL in a high-level host language such as C/Java And demonstrates how a banking debit transaction might be done.
4.	Implement a program to convert infix notation to postfix notation using stack in c++.
5.	Write a C++ program for insert routine in input restricted dequeues.
6.	Write a C++ program to implement sparse matrix.

7.	To create a bus topology using cisco packet tracer.
8.	Demonstrating Distribution Layer Functions in networking
9.	Write a recursive python program to test if a string is palindrome or not.
10.	Write a Python program to count the number of vowels present in a text file.
11.	Write a Python program to count the number of times the occurrence of 'is' word in a text file
12.	Write a Python program to compute the similarity between two lists.
13.	Write a Python program to find the most common words in a file.
14.	Create a binary file with name and roll number of student and display the data by reading the file using Java.
15.	To demonstrate the procedure for flash programming for reprogrammable embedded system board using Flash Magic.
16.	Configure timer control registers of 8051 and develop a Embedded System program to generate given time delay.
17.	Compute the Linear Least Square Regression using R.
18.	Import the data from Excel / .CSV and perform the data Analysis.
19.	To identify the role of the software in today's world across a few significant domains of software engineering related to day to day life.
20.	To identify the usage of stubs or drivers in the context of an integration testing scenario using software engineering.
21.	To draw a line using Simple DDA Algorithm for negative line slope.
22.	To rotate a given triangle clockwise and anticlockwise about a given point.

New Practicals :(22) Virtual - T.Y B.Sc. (IT)

Class and No. of Beneficiaries: T.Y B.Sc. (IT) (64)	
Sr. No.	List of Practical/Demonstrations
1.	How software has been leveraged extensively in different domains?
2.	Identify the requirement development activities associated with each of the Given scenarios.
3.	Identify the requirements in the given software Requirements Specification document.
4.	Introduction to MS Project.
5.	Exercise on smart object API Gateway service reference implementation in IoT Toolkit.
6.	Experiment on application framework and embedded software agents for IoT Toolkit.
7.	Write a console application that obtains four int values from the user and displays the product.
8.	Create a website for a bank and include types of navigation.
9.	Write a Linux program to display the time in 12-Hour and 24 Hour Notation
10.	Perform Linux program for running multiple independent tasks in parallel on a multi-CPU machine.
11.	Develop a RMI application which accepts a sentence from client. Server module calculates number of words present within this sentence, number of vowels present within this sentence and output will be displayed within client.
12.	Write a Java application to invoke a stored procedure using a Callable Statement. For this a stored procedure called increment Salary may be developed to increase all the employees salary by a percentage specified in the parameter.
13.	Develop an application to demonstrate how the client (browser) can remember the last time it visited a page and displays the duration of time since its last visit. Using Cookies.
14.	Configure a DMZ, Static NAT, and ACLs.
15.	Analysis the Security Vulnerabilities of E-commerce services
16.	Configuring ASA Basic Settings and Firewall Using CLI.
17.	Use of BI tools in business applications.
18.	Data Modelling and Analytics with Pivot Table in Excel in Business Intelligence.
19.	Managing the spatial data within a QGIS framework.
20.	Digitizing Map data in GIS.
21.	Develop a Mobile application program for working with location-based services.
22.	Using Worker thread write Android code for a click listener that downloads an image from a separate thread and displays it in an Image View.

Training Received by Faculty (16) - Virtual

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Faculty
1.	National level Webinar on NAAC Assessment and Accreditation	Dr. Bhalchandra Bhole Mentor for the IQAC Cluster India	20-04-2020	Dr. Rakhi Gupta Ms. Geeta Brijwani Ms. Pragati Thawani
		Prof. Peeyush Pahade Vice-Principal and Professor, H. V. Desai College, Pune	21-04-2020	
		Dr. Hemant Chandak G S Science, Arts and Commerce College, Khamgaon	22-04-2020	
		Dr. Bhooshan Kelkar		
		Dr. Namita Rajput, Associate professor at sri Aurubindo college, university of Delhi.	23-04-2020	
		Prof. Shrihari Pingale, Vice Principal and Professor at S. N. Arts, D. J. M. Commerce and B. N. S. Science College, Sangamner Ahmednagar		
		Mr.Ghanshyam Nanaware,Mr.Amit Patil		
		Ms. Sneha Jadhav, Mr. Sandeep Nanaware	25-04-2020	
2.	FDP on Moodle Learning Management System	Spoken Tutorial, IIT Bombay	20-04-2020 to 25-04-2020	Ms. Pragati Thawani Ms. Neha Patel
3.	FDP on "JAVA"	Spoken Tutorial, IIT Bombay	20-04-2020 to 29-04-2020	Ms. Neha Patel
4.	FDP on "Scilab programming"	Spoken Tutorial, IIT Bombay	21-04-2020 to 25-04-2020	Ms. Sandhya Bhavsar
5.	Online Faculty Development Program on "R Programming"	Spoken Tutorial, IIT Bombay	23-04-2020 to 28-04-2020	Ms. Geeta Brijwani
6.	National level FDP on "Online college management and online content creation tools"	Mr. Hitesh Motwani, Director, North Storm Academy	30-04-2020 to 02-05-2020	Dr. Rakhi Gupta Ms. Pragati Thawani Ms. Sandhya Bhavsar
7.	One week FDP on "Current Trends and Future Technologies in Computing"	Pranav Viswanathan NETSIM, TETCOS, Banglore Vishwavidyalaya, Indore	08-05-2020	Ms. Sandhya Bhavsar
		Biswajit Nayak Grid Analytics India Ltd.	09-05-2020	
		Anjalah Keesari Solution Architect, California, US	10-05-2020	
		Dr. Rajkamal Former VC, Devi Ahilya	11-05-2020	
		Mr. Hrushikesh Kulkarni AD Technology, Vuclip, Pune	12-05-2020	

		Mr. Venu Gopal member, MHRD's Innovation Cell Mr. Satish Nair IIM Ahamadabad	13-05-2020	
8.	One week FDP on "R-Language for Analytics and data science"	Spoken Tutorial, IIT Bombay	10-05-2020 to 15-05-2020	Ms. Sandhya Bhavsar
9.	FDP on "online teaching and e-content"	Mr. Karan Shah, Founder and CEO IIIDE	16-05-2020 & 17-05-2020	Ms. Shalini Maheshgauri Ms. Geeta Brijwani Ms. Pragati Thawani Ms. Sandhya Bhavsar
10.	FDP on Basic and Advanced Excel Course	Mr. Kaushal Shah, Senior Manager, Reliance Power Ltd.	26.05.2020 27.05.2020	Dr. Rakhi Gupta Mrs. Shalini A. Maheshgauri Ms. Geeta N. Brijwani Ms. Pragati Thawani Ms. Neha patel Ms. Sandhya Bhavsar, Ms. Nashrah Gowalker
11.	FDP on "Evolution from Offline to Online Teaching"	Dr. Shubhangi Patil K.J Somaiya College of arts and Commerce, Mumbai.	30-05-2020	Mrs. Shalini A. Maheshgauri Ms. Geeta N. Brijwani Ms. Beenarani S. Karutharan Ms. Pragati Thawani Ms. Sandhya Bhavsar
		Ms. Bhavya Ahuja Ramanujan College, New Delhi	31-05-2020	
		Dr. Narendra Joshi YCMOU, Nashik	01-06-2020	
		Dr. Arjun Ghatule, YCMOU, Nashik		
		Dr. Yogendra Pai IIT Mumbai	02-06-2020	
		Dr. Janardan NITTR, Chennai Team Microsoft	03-06-2020	
12.	FDP on Machine Learning: Research and Practices	Dr. Ambuja Salgaonkar Associate Professor & Head UDCS, Mumbai.	03.06.2020 to 08.06.2020	Ms. Pragati Thawani
		Prof. Pawan Lingras Department of Mathematics and Computing Science, Saint Mary's University.		
		Prof. Siby Abraham Professor at Centre of Excellence in Analytics & Data Science, School of Management, NMIMS.		
13.	FDP on Enhancing Research work of Ph.D. Aspirants through Systematic Approach	Dr. S.B. Barve Professor & Associate Head School of Mechanical Engineering MIT World Peace University, Pune.	08.06.2020	Ms. Geeta N. Brijwani Ms. Pragati Thawani
		Dr. B. T. Patil Professor & Dean (R & D) Fr Conceicao Rodrigues College of Engineering,		

		Mumbai.		
		Dr. Sachin Waigaonkar Associate Professor Department of Mechanical Engineering BITS Pilani, KK Birla Goa Campus.		
		Dr. Vivek K. Yakkundi Dean (R&D) Department of Mechanical Engineering Lokmanya Tilak College of Engineering, Navi Mumbai.	09.06.2020	
		Dr. Suhas P. Deshmukh Associate Professor Department of Mechanical Engineering Government College of Engineering, Karad.		
		Dr. Chandrababu D. Professor & HOD Department of Mechanical Engineering Lokmanya Tilak College of Engineering, Navi Mumbai.	10.06.2020	
14.	A Boot Camp on Artificial Intelligence, Machine Learning and AI Chatbots	Dr. Hiren Dand , Head, Information Technology, Mulund College of Commerce, Mulund	22.06.2020	Mrs. Shalini A. Maheshgauri Ms. Geeta N. Brijwani Ms. Beenarani S. Karutharan Mr. Naveen Pahuja Dr. Rakhi Gupta Ms. Pragati Thawani Ms. Neha patel Ms. Sandhya Bhavsar, Ms. Nashrah Gowalker Total - 250 Faculty – Chidambaram, Cuddalore, Lucknow, Mumbai, Navi Mumbai, Nagpur, Delhi, Hyderabad, Kanyakumari, Silvassa, Rajahmundry, Trichi, Kolkata, Kuwait
	Introduction to Artificial Intelligence			
	Machine Learning & Applications	Mr. Harish Chandar , Director, India Tech International Pvt. Ltd., Mumbai	23.06.2020 & 24.06.2020	
	AI Chatbots	Mrs. Asha Bharambe , Associate Professor, VESIT, Chembur	25.06.2020 & 26.06.2020	
	Artificial Intelligence Applications	Mr. Ajit Joshi , Partner Manager, Red Hat ISV	27.06.2020	
15.	International FDP on “Gateway to Innovation”	Mr. Kaushik Karandikar , Full Stack Developer, Coronado Springs, US	22.06.2020	Ms. Sandhya Bhavsar
		Mrs. R Srivaramangi HOD, UDIT, Mumbai	23.06.2020	
		Dr. Rajendra Patil , Assistant Professor, IT Dept, VSIT, Mumbai	24.06.2020	
		Mr. Vipul Saluja R D National College, Mumbai.	25.06.2020	
		Mr. Prashant Keravadekar Coordinator, SRM College, Kudal, Sindhudurg	26.06.2020	
16.	One Week National	Mr. Rajesh Bhojar ,	29 .06.2020	Ms. Geeta N. Brijwani

Level Faculty Development Program on "G-Suite and Allied Tools in Education, Teaching & e-Content Development"	Assistant Professor, Sant Gadge Baba Amravati University, Amravati	to 04.07. 2020	Ms. Pragati Thawani
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Alumni Connect Webinar Series (10) - Virtual

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Machine Learning Technology Explained	Mr. Ajit Vishwakarma, Corporate Master Trainer/ Managing Director, Vinayavish	23.05.2020	120 (FY/SY/TY CS &IT)
2.	Understanding git	Mr. Chaitanya Deorukhkar, Frontend Engineer, Razorpay Software Pvt. Ltd.	27.05.2020	135 (FY/SY/TY CS &IT)
3.	Computer Network & beyond	Mr. Asif Rampurawala, Vice-Principal, VSIT College	27.05.2020	155 (FY/SY/TY CS &IT)
4.	Entity Framework	Ms. Kirti Bhatt, Visiting Faculty, KC College	29.05.2020	135 (FY/SY/TY CS &IT)
5.	SEO – Quick Guide	Mr. Yash Naik, SEO Analyst / Content Writer, FistBump Digital	29.05.2020	135 (FY/SY/TY CS &IT)
6.	Creative Art Therapy & Meditation	Ms. Pooja Karkera, International Meta Mind Trainer, Global Academy of Meta Mind Alignment (GAMMA)	30.05.2020	155 (FY/SY/TY CS &IT)
7.	Building a Simple Multi-Platform WebApp	Mr. Lokesh Iyer Proprietor, SI Technologies	16.05.2020	B.Sc. (IT) (102)
8.	Our Lives: Before, During and After Covid'19 An IT Perspective and its role in global crisis.	Mr. Sagar Mehta Curriculum Designer Lido Learning	16.05.2020	B.Sc. (IT) (102)
9.	A Glimpse into the world of IT	Ms. Tanvi Pednekar Analyst, Bank of America	17.05.2020	B.Sc. (IT) (85)
10.	Data Analysis using Python and Excel	Mr. Kaushal Shah Senior Manager Reliance Power Ltd.	17.05.2020	B.Sc. (IT) (85)

Extension Activities (03)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Emerging Career Post Covid 19 & Career in Digital Era	Dr. Vanita Joshi, Faculty, ICFAI Business School, Mumbai	05.09.2020	200 (SY&TY BA, BCOM, BSC, CS, IT)
2.	Career in Cyber Security	Mr. Yasir Arafat Shaikh Chief Technology Officer Macksofty Technologies	09.01.2021	120 (B.Sc. (IT+CS), BMS, BAF, BBI)
3.	Use of Latex Scripting for Documentation	Ms. Aafreen Shaikh Guest Lecturer	29.01.2021	100 (B.Sc. (IT+CS), Bcom)

Inter-disciplinary Activities (03)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Machine Learning – Data Science & OpenCV	Ms. Sanjeela Sagar Assistant Professor Vidyalankar School of Information Technology	17.08.2020 to 21.08.2020	T.Y B.Sc. (IT + CS) (100) KC, Siddharth, Elphinstone College
2.	IoT with Arduino	Mr. Manoj Kavedia, Assistant Professor Thadomal Shahani College of Engineering, Bandra.	07.10.2020 to 14.10.2020	T.Y B.Sc. (IT + CS) S.Y B.Sc. (IT + CS) (150) + Jai Hind College+ Siddharth College
3.	Oops and ML with Python	Ms. Jyoti Shukla Trainer at Coder Technologies	13.01.2021 to 20.01.2021	B.Sc. (IT+CS), Siddharth, Elphinstone college (120)

Inter-departmental Activities (03)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Happy Mind Happy Life	Ms. Inderpreet Kaur Psychologist	11.02.2021	SY & TY.B.Sc. (IT + CS) B.Sc. (Microbiology + Biotechnology) students (120) (Star Scheme + Star Status)

2.	Linear Algebra & its applications	Dr. Aarti Santosh Nayak, Assistant Professor Dept. of Mathematics, Statistics & Computer Science, S.K Somaiya College	25.02.2021	S.Y.B.Sc. (IT + CS) SY & FY B.Sc. (Mathematics) (100)
3.	Path from AI to Deep Learning	Dr. Pooja Raundale Professor & Head MCA Department, Sardar Patel Institute of Technology, Mumbai.	03.03.2021	B.Sc. (IT + CS) B.Sc. (Physics) (100)

Non-Teaching Activity (02)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	No of Beneficiaries
1.	Basic and Advanced Excel Course	Mr. Kaushal Shah Senior Manager, Reliance Power Ltd.	26.05.2020 27.05.2020	50 (KC, CHM)
2.	Cyber Suraksha (Inter-departmental Activity) with Dept. of Life Science (Star Scheme + Star Status)	Mr. Sai Satish, Founder & CEO, India Servers Mumbai.	27.01.2021	35 (KC) - Non-Teaching Staff Members of 10 Colleges across Mumbai and Parbhani Region, Maharashtra

Field Visit (Virtual: 01)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	No of Beneficiaries
1.	Virtual Industrial Visit: Blocklogy Edutech Pvt. Ltd. – Topic: “Blockchain Technology”	Mr. Vikash Kumar, Product Development & Marketing, Blocklogy Edutech Pvt. Ltd, Mumbai.	20.03.2021	F.Y+S.Y +T.Y(B.sc(CS+IT) 165

Outreach Activity (03)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Career Guidance after 10 th Std, Lourdes English High School, Kalyan(W)	Ms. Pragati V. Thawani Assistant Professor B.Sc(IT) Dept. K.C College	19.05.2020	10 th Std – (21)
2.	Online training Session on “Fundamentals of Computers” For Std X School Students from St. Joseph’s High School, Mumbai	Mr. Adnan Wadekar, IT Associate, SQL and Data Analysis Support, IndusInd Bank	27.03.2021	10 th Std – (50)

3.	A booklet on “Hands-on Information for High Schools – Learning Tips for success @ school” is designed and around 90 copies were distributed to 3 different schools - (90)
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Invited Lectures (10)

Sr. No.	Name of the Activity	Resource person	Date (DD/MM/YY)	Class & No of Beneficiaries
1.	Advanced Communication Skills	Mr. Martin Ebnazer , Assistant Professor, Dept. of English, D.G. Ruparel College, Mahim	05.12.2020	60 (FYCS)
2.	Project planning & Execution	Mr. Hiten Damania Head of Development, Pi Techniques	02.05.2020	B.Sc. (IT + CS) (130)
3.	A Holistic Approach to Technology & Information Security	Mr. Prabhav Daga Proprietor at Curaksha Partner at Gianda Trading Solutions, LLP	30.05.2020	B.Sc. (IT + CS) (110)
4.	How to Write a Right Research Paper	Dr. Shraddha M. Bhome Head of Department (B.A.F) Satish Pradhan Dnyanasadhana College	20.07.2020	T.Y B.Sc. (IT+CS) (65)
5.	RPA- the Robots are coming	Mr. Nikhil Pawanikar Assistant Professor, University Department of Information Technology	09.09.2020	T.Y B.Sc. (IT + CS) S.Y B.Sc. (IT + CS) (100)
6.	Digital Hygiene	Mr. Sohrab Vakharia Founder at Wisemonkeys Co-Founder, CTO, iDigitize Infotech LLP, Mumbai.	15.10.2020	S.Y B.Sc. (IT) T.Y B.Sc. (IT) (72)
7.	Broadway to the world of Automation	Mr. Manoj Kavedia , Assistant Professor Thadomal Shahani College of Engineering, Bandra	12.12.2020	F.Y.B.Sc (IT +CS) (45)
8.	Evolution from Data to Machine Learning	Mr. Adnan Wadekar I.T Associate SQL and Data Analysis Support	19.12.2020	F.Y B.Sc. (IT+CS) (98)
9.	Digital Marketing	Mr. J. P. Raut , Marketing Manager – SQUAD Infotech Pvt. Ltd.	24.12.2020	F.Y BSc. CS (65)
10.	Comprehending IPR	Mr.Kishor R.Kadbe Assistant Controller of Patents and designs at patent office, Mumbai.	13.01.2021	B.Sc. (IT+CS) (100)

10. Self-evaluation

Department	Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
Physics	To upgrade the existing facilities and to introduce new instruments in the laboratories according to today's requirements.	Marks = 02 100%	All equipment to upgrade the existing facilities and new instruments according to present needs have been procured this year.
	To conduct workshops and seminars on interdisciplinary topics for deeper insights into the primary subject	Marks = 1.8 90%	While several interdisciplinary extension activities in this direction were organized this year, the current pandemic situation prevented activities that are difficult to carry out online.
	To conduct Faculty Development Programs for in-house as well as other college teachers with the aim of sharing ideas, encouraging creativity and use of latest technologies in the teaching/learning process.	Marks = 1 50%	While we were planning to conduct two FDPs only one could be organized due to non-availability of common convenient time.
	To train in- house non-teaching staff as well as of other colleges in the maintenance of Laboratory equipment	Marks = 1.6 80%	While the workshop that was conducted trained them in a new contemporary skill, more such workshops could not be undertaken as they are necessarily hands – on and the current pandemic situation prevented them.
	To assign projects to students such as to provide better understanding of basic principles & concepts.	Marks = 1.0 50%	Due to the current pandemic situation the projects had to be necessarily online and these were not carried out as the necessary resources could not be procured on time.
	Total	74%	

Department	*Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
Mathematics	<p>1. Keeping in mind the future prospects offered by the subject we plan to create an environment for maximum number of students to get an opportunity to study Mathematics at the graduate level.</p> <p>2. To create facilities and to enhance expertise for better understanding and create interest in the subject as well as its applications to other disciplines.</p> <p>3. To get guidance from experts in the field, for enhancement of subject knowledge and hands-on skills to further understanding in the subject.</p> <p>4. To promote, learning new technologies related to present day Mathematics learning by the application of programming languages like Python, R etc.</p> <p>5. To improve the academic engagements across disciplines and institutions through training programs, and collaborative teaching.</p>	<p>Marks =1.2 60%</p> <p>Marks =1.6 80%</p> <p>Marks =1.7 85%</p> <p>Marks =1.6 80%</p> <p>Marks =1.6 80%</p>	<p>1. We are starting T.Y B.Sc. Mathematics for F.Y B.Sc. students of 2020-21</p> <p>Student projects, Online webinars by the Experts in the field on the topics relating environment, ecosystem, Finance Physics, chemistry Science, IITJAM training, Foundation Course in Mathematics.</p> <p>Organized webinars by various scholars in the field of application of mathematics. Foundation Course with MTTS Trust, with one of our faculty as mentor for the participants in G 3 Webinar with Environment Committee, Organized</p> <p>Organized online Workshop on Sage math, Excel, Python We conducted sessions of extension as well as add on practicals in Sage Math, Python. We joined C S dept for organizing Workshop on Data Analysis using Python for the students of both the Department</p> <p>Webinar with Environment Committee, Organized, National Foundation Course in Mathematics , MTTS Trust IIT-JAM training , We joined C S dept for organizing Workshop on</p>

	6. To engage non-teaching staff in the day-to-day and practical use of the subject.	Marks =1 50%	Data Analysis using Python. Organised a talk on “Applications of Mathematics and Statistics to Understand Species’ Distribution Interdisciplinary. Virtual field visit to ICT Organized on line session for origami (1)
	Average %	Marks=1.45 72.5%	

Department	*Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
Computer Science & Information Technology	Developing various automated Software and Hardware Applications for use in different fields like programming, networking, administration, computing, security etc.	Marks = 1.8 90%	A number of Web based, Android and IOT Apps were made in many different fields like Student Educational Document Verification App using Blockchain Technology, Social Networking Privacy, IOT based Continuous Monitoring Thermometer, Student academic management System etc.
	To get guidance from experts in the field of technology for enhancement of knowledge and hands-on skills.	Marks = 1.8 90%	14 planned 12 conducted
	To learn new technologies related to blockchain, cloud computing, big data analysis, Linux programming and cross platform development (using programming languages Java, Python, R etc.) as well as using Mathematical and Statistical Methodologies.	Marks = 1.6 80%	07 planned and 05 conducted.
	To improve the academic engagements within and across other institutions through training programs for students and teachers.	Marks = 1.6 80%	10 planned and 09 conducted.
	To engage with various sections of society through outreach programs.	Marks =2.0 100%	2 activities planned 2 conducted + 01 common outreach activity.
	Total	88%	

* For quantitative analysis you may fix five objective (max) each having 2 marks and accordingly can calculate the matrix.

Annexure 1 *

Annexure -I

No of Students		Admitted (2020-2021)						Total Students	Course
Male				Female					
SC	ST	OBC	General	SC	ST	OBC	General		
-	-	-	41	-	-	-	20	61	F. Y B.Sc. Computer Science 2020 - 2021
02	-	01	45	-	-	01	19	68	F.Y B.Sc. Information Technology 2020-2021
0	0	5	23	0	0	2	14	44	F.Y B.Sc. Physics 2020-2021
1	1	5	29	0	1	4	31	72	F.Y B.Sc. Mathematics 2020-2021

TY result Analysis (2019-2020)

No of Students	O	A+	A	B+	B	C	D	Fail ATKT	Pass %	Course
66	46	20	0	0	0	0	0	0	100	TYBSC Computer Science
64	0	64	0	0	0	0	0	0	100	TYBSC Information Technology
14	1	3	6	0	0	2	0	2	85.67	T.Y B.Sc. Physics
									NA	T.Y B.Sc. Mathematics is not there

S. S. S. S.
Course Coordinator
 (With Seal)



K. Bagle
Head of the Institution
 (With Seal) **Principal**
 Kishinchand Chellaram College
 Dinshaw Wacha Road,
 Churchgate, Mumbai - 400 020