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 : P.E.S.'s Modern College of Arts, Science and Commerce, Ganeshkhind

2. Name of Coordinator, designation, Address, Phone nos.

Ranjana Shevkar, Assistant Professor, Department of Computer Science, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16, 9850887338

3. Assessment duration : 01/06/2019 to   01/06/2020   Duration in years : 1 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.**
			4	**17**

5.   Number & Date of Advisory committee meeting:

6. Qualitative improvements due to DBT support. Please highlight 5 salient points
    (within 500 words).

a.   Students are able to explore various new research fields such as Quantum Computing, Blockchain Technology, Next generation sequencing, Digital Marketing, Cloud Computing, Handwritten text recognition using machine learning, Natural Language Processing, Motion of a charged particle in Electromagnetic field, and IT trends while participating in competitions like poster and project.

- Nidhi Bhosale, Gayatri Mane received first prize in Poster competition titled "**Quantum Computing**" in Science Exhibition
- Vishesh Malik, Laxminarayan Sharma and Prathmesh Kori won second prize in project competition titled "**Digital Green House for Strawberry**" during Science Exhibition conducted, first prize at Prof. Ramkrishna More College, Akurdi, Pune.
- Radhika Kulkarni won prize in Online Slogan Writing Competition organized by P.E.S's Modern College of Arts,Science and Commerce, Ganeshkhind 16
- FYBSc students Ritesh Rai, Shubham Chavan, Lovepreet Singh won third prize in Model Competition conducted at Jadhavar Science Fair 2020 at Dr. Sudhakar Jadhavar college
  b. ANUBHUTI: Regional Science Project and Poster Competition successfully conducted by college on 5th Feb 2020, was proposed by Head of Department Dr. Shubhangi Bhatambrekar.
- FYBSc students Abhijit Phate and Aman Giri bagged first prize in project competition in ANUBHUTI from physical science category.
  c. Department has successfully conducted Intercollegiate E-poster competition under DBT Star Scheme from 6/6/2020 to 20/6/2020. 105 students from various colleges, states and universities participated in the competition.
  d. During Covid 19, students participated in online quiz competition conducted by colleges like MIT, Sinhgad and Indira College

(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).

Sr. No	Project Title	Outcome
1		Display the information of Ayurvedic medicine based on the organ deices.
2	Woman Safety Switch	It's an embedded device using Raspberry Pi. After operating the device the Email notification is sent with location details to the respective registered mail detail
3	Online Student Attendance System	Teacher is able to mark the class wise student's attendance and also teacher can generate the student attendance performance through graph.
4	College Deadstock system	Maintain the overall department level deadstock information and also prepare the report of deadstock information year wise.
5		

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

a. Dr. Dipali Meher successfully completed her Ph.D on topic "A Study of Knowledge Sharing & it's Application for Designing a Framework for Research in Computer

Application" from Bharati Vidyapeeth Deemed to be University, Institute of Management and Entrepreneurship Development, Pune

b. To inculcate the Research oriented thinking among the students the department is planning to prepare the research publication in various Scopus Index / UGC Care List Journal.

c. Planning to do the MOU with Dr. Harish Patankar for the research based actives on Ayurveda based medicine

d. Department is planning to publish an annual Magazine that will highlight departmental activities and students achievements.

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

a. Students are able to interact with eminent speakers from different Universities, Colleges and Industry.

b. Planned to conduct hands on training after the theory examination of UG students in the month of April, but due to Covid-19 could not conduct it. Next the academic year 2020-21, as the situation gets normal, we are going to conduct activities like training programs, certificate course and industry visit.

9. **Key performance indicators**

S.no	Indicator	Pre-support	During /After Support	Remarks
1	No. of students admitted	**Total =577**	**Total =553**	

		M=321				F=256				M=329				F=224				
		SC	ST	OBC	G	SC	ST	OBC	G	SC	ST	OBC	G	SC	ST	OBC	G	
	FYBSc(CS)	18	5	37	105	18	0	17	63	22	3	44	113	16	1	17	45	
	SYBSc(CS)	10	0	12	54	11	2	11	58	10	1	21	51	10	0	16	42	
	TYBSc(CS)	11	1	15	53	14	1	13	48	8	0	11	45	10	1	9	57	

2	No. of students passing out	FY 57.97 %	61.00%
		SY 84.16%	89.00%

	(%)			
	Students Admitted/passing out (pass %)	TY 58.97%	82.14%	
3	Drop-out rates	15	-	
4	No. of students opting for MSc	46/64	• -	
5	Average marks	FY 87 SY 32 TY 37		
6	No. of hands-on experiments being conducted	-	-	
7	No. of new experiments introduced	-	-	

,8	Publications (scopus indexed) /patents, if any.	Dr. Shubhangi Bhatambrekar, Deepak Kumbhar, Shubhangi Taur, H.C. Chaudhari. IoT Based Home Security System Using Raspberry Pi-3. *International Journal of Research and Analytical Reviews.* Jan 19 ISSN:23495138 **(Publication by PG students)**	Niket Tajen, Dr. Kirti N. Mahajan. Utilization of Deep learning in Handwritten Text Recognition. *AICTE Sponsored "National Conference on Emerging Trends, Challenges and Opportunities in Data Mining and Information Security" NTCOMIS2020* Jan 20 ISBN 9788192011349	
		Dipali Meher, Nilesh Mahajan. An Overview of Need of Knowledge Management in Various Fields. *International Journal of Emerging Technologies and Innovative Research* August-2018, ISSN:2349-5162	Satish Ambike, Satish Gujar. Ubiquitous Cloud Enabled Healthcare System. Ubiquitous Cloud Enabled Healthcare System Feb 20. ISBN 0975 - 8887	
			Niket Tajen, Dr. Kirti N. Mahajan. A Systemic Study of Indian Ancient Script by determining the Issues for Effective use of Handwritten Character Recognition. UGC-CARE List Journal Mukt Shabd. Jun 20. ISBN 2347-3150	

9	Training received by faculty	-	Staff members have attended following training program and FDP's [**Appendix A**]	
10	Exhibitions/ seminars/trai ning courses conducted	Department of Statistics in association with Department of Computer Science organized a certificate course on Data Science using Python from 15/4/2019 to 24/4/2019. Total number of participants =37	Planned to conduct Training programs on Digital Marketing, Python in the month of April-2020.	
11	Books/journ als subscribed from grants	-	-	
12	Outreach activities (Popular lectures)	-	-	
13	Colleges mentored to apply for DBT Star College grants			

| 14 | Invited lectures | 1 | | 4 Guest Lectures conducted under DBT Star scheme for UG students [**Appendix B**] | |

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.

10. Self evaluation

Department	*Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
Computer Science	Give add-on courses with hands on training apart from syllabus (Microsoft Certification course conducted by Knowledge solution India)	70 %	Could not conduct the other training program due to Covid-19 Pandemic from march
	Identify the projects and publish research paper in reputed journals	-	Could not recognized the appropriate research oriented project.
	Eminent Guest Lectures series	100 %	-
	Motivate students to participate in various intercollegiate	100 %	-

	competitions.		
	MOU with industry Vizitech Solution PVT.LTD	100 %	-

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

Course Coordinator   **Head of the Institution**

      (With Seal)

                                                    (With Seal)

Appendix A

Sr.No.	Staff Name	FDP / Training Program	
		2018-2019	2019-2020
1	Dr. Shubhangi S. Bhatambrekar		Successfully attended and actively participated Faculty Development Programme on "***Introduction to Internet of Things***" conducted by NPTEL in jan-apr 2020.
2	Dr. Pallawi Bulakh		• Successfully completed Refresher Course on Teacher & Teaching in Higher Education conducted by SWAYAM,ARPIT Online Course Exam conducted on 16/02/2020 • Successfully completed Seven days Faculty Development Program on Holistic Teacher Training in Innovative Skills of Cooperative Learning & Development of E-content for Teaching Pedagogies in Higher Education
3	Dr. Dipali Meher		Successfully completed Seven days Faculty Development Program on Holistic Teacher Training in Innovative Skills of Cooperative Learning & Development of E-content for Teaching Pedagogies in Higher Education
4	Ms. Sonal Kulkarni	Patent-An important area to know	Successfully completed Refresher Course on Teacher & Teaching in Higher Education conducted by

			SWAYAM,ARPIT Online Course Exam conducted on 16/02/2020
5	Mr. Amol Patil	• The Joy of computing using Python • Deep Learning ONRAMP conducted by Matlab	• Image and Video Processing from Mars to Hollywood with a stop at Hospital) • FDP on Various Aspects of Teaching Learning such as Pedagogical tool's, Assessment & Evaluation Methods, ICT & Familiarizing them with the framework of Higher Education in India held at IISER, Pune
6	Mr. Niket Tajne	• Patent-An important area to know • Matlab using Octave	Successfully attended and actively participated Faculty Development Programme on "*Teaching Skills and Strategies*" conducted by P.E.S's B.Ed. College, Shivajinagar, Pune-05 from 11/07/2019 to 13/07/2019.
7	Mrs. Ranjana Shevkar		• Successfully attended and actively participated Faculty Development Programme on "*Theory of Computation*" conducted by NPTEL in jul-oct 2019. • Successfully attended and actively participated Faculty Development Programme on "*Introduction to Operating System*" conducted by NPTEL in jul-oct 2019.
8	Ms. Dipali Tamhane		• Successfully attended and actively participated Faculty Development Programme on

			"*Teaching Skills and Strategies*" conducted by P.E.S's B.Ed. College, Shivajinagar, Pune-05 from 11/07/2019 to 13/07/2019.
			• Successfully attended and actively participated Faculty Development Programme on "*Introduction to Internet of Things*" conducted by NPTEL in jul-oct 2019.
			• Successfully attended and actively participated Faculty Development Programme on "*Programming In Java*" by NPTEL conducted by NPTEL in jul-oct 2019.
			• Successfully attended and actively participated Faculty Development Programme on "*Problem Solving through Programming in C*" by NPTEL conducted by NPTEL in jul-oct 2019.
			• Successfully attended and actively participated Faculty Development Programme on "*Some Aspects of Computational Mathematics*" jointly organized by Department of Computer Science and Department of Mathematics of SPPU, Pune from 10/12/2019 to 14/12/2019.
9	Mrs. Ashwini		Successfully attended and actively

	Pawar		participated Faculty Development Programme on "**Database Management System**" by NPTEL conducted by NPTEL in jul-oct 2019.
10	Ms. Chaitali Makashir, Mr. Vedant Muley, Mr. Nilesh Arote, Mr. Aishwarya Nayak, Ms. Kalyani Patil		Successfully attended and actively participated Faculty Development Programme on "**Teaching Skills and Strategies**" conducted by P.E.S's B.Ed. College, Shivajinagar, Pune-05 from 11/07/2019 to 13/07/2019.

Appendix B

Sr. No.	Date & Time	Topic	Speaker	No. of Students
1	10/8/2018 9:10 AM to 11:00 AM	Career in IT	Mr. Manish Kulkarni (NIIT, Pune)	97
1	30/08/2019 10:00 AM – 11:00 AM	Success in Research	Mr. Rajmohan Pardeshi Assistant Professor & Assistant IQAC Co-coordinator Department of Computer Science, Karnatak Arts, Science & Commerce College, Bidar - 585401	56
2	06/01/2020 10:30 am – 11:30 am	Text Mining	Dr. Prafulla Bharat Bafna, Assistant Professor, Symbiosis Institute of Computer Research and Studies	148
3	06/01/2020 12:30 pm – 1:30 pm	Careers in Windows Kernel, Security Testing and DevSecOps	Basant Sekhani, Co-founder and Chief Architect Incrux Technologies Pvt. Ltd	110
4	02/03/2020 09:00 am – 10:00 am	Recent Trends in Computing Networks	Dr. Baljeet Kaur, Assistant Professor, Bharati Vidyapeeth Deemed to be University, Institute of Management and Entrepreneurship Development,	118

			Erandwana, Pune	