Annual Progress Report of College

Internal Quality Assurance Cell

2018-2019

Name of the College	Fergusson College (Autonomous), Pune
Address of College	Fergusson College Road, Deccan Gymkhana, Pune
Type of College/Financial Status	Grant-In-Aid and Self Finance
Year of Establishment	1885
Status of College	Autonomous
Date of conferment of Autonomous Status by UGC	16th June, 2016
Name of the Affiliating University	Savitribai Phule Pune University
Type of Faculty/ Programmes	Arts and Science
Name of Principal	Dr. Ravindrasing Pardeshi
Special Status	UGC-CPE and CE Status DBT STAR College Scheme and STAR Status
New Programmes Introduced (undergraduate/post graduate/ diploma/ Certificate)	M. Sc. Data Science Certificate in IPR Certificate Course in Content Writing

Curricular Aspects

Details of Syllabi Revised

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BA	HIN	HINDI	05/02/2019
BA	MAR	MARATHI	16/02/2019
BA	MTA	MATHEMATICS	25/01/2019
BA	LOG	LOGIC	13/02/2019
BA	PHI	PHILOSOPHY	13/02/2019
BA	PSY	PSYCHOLOGY	29/01/2019
BA	SAN	SANSKRIT	05/02/2019
BA	SOC	SOCIOLOGY	09/02/2019
BA	STA	STATISTICS	12/01/2019
BA	HIS	HISTORY	02/02/2019
BVoc	BVM	B Voc Media and Communication	16/02/2019
BVoc	BVA	B Voc Digital Art and Animation	16/02/2019
BSc	ANI	ANIMATION	01/02/2019
BSc	STC	COMPUTER SCIENCE	25/01/2019
BSc	BTH	BIOTECHNOLOGY	14/02/2019
BSc	BOT	BOTANY	18/02/2019
BSc	CHE	CHEMISTRY	22/02/2019

BSc	ELE	ELECTRONIC SCIENCE	02/03/2019
BSc	EVS	ENVIRONMEN TAL SCIENCE	02/03/2019
BSc	GLY	GEOLOGY	22/01/2019
BSc	MTS	MATHEMATICS	25/01/2019
BSc	MIC	MICROBIOLOGY	15/02/2019
BSc	PHY	PHYSICS	15/01/2019
BSc	ZOO	ZOOLOGY	29/01/2019
BSc	STS	STATISTICS	12/01/2019
MSc	BTH	BIOTECHNOLOGY	14/02/2019
MSc	BOT	BOTANY	18/02/2019
MSc	ELS	ELECTRONIC SCEINCE	02/03/2019
MSc	EVS	ENVIRONMEN TAL SCIENCE	02/03/2019

Internships/ Field Projects

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
MSc	Industrial Mathematics with Computer Applications	26
MSc	Geology	24
BSc	Animation	5
MSc	Physics	32
MSc	Biotechnology	48
MSc	Botany	22
MSc	Environmental Science	7

1. Curriculum Development workshops for all departments. These workshops were organized by the departments to prepare structure of third year syllabi. In this workshop, experts and academicians apart from those in Board of studies participated and gave their valuable inputs. These inputs were presented in Board of Studies meetings and then incorporated in the syllabi.
2. Structured feedback is taken through an online mechanism integrated with college ERP system. The schedules are announced on the college website and through Circulars informing students about the opening and closing dates. Teachers are rated on a scale of 0 to 4. The bench mark is 2.5 as per policy taken by the IQAC Committee. The feedback is then collected/ assimilated class wise and subject wise with UG and PG being two categories. The suggestions/ recommendations given by students are taken into consideration and shared with Teachers, again through their ERP LogIn and through onetoone interaction. The feedback is used for enhancement of the following:
    a) Teaching-Learning Process
    b) Effective Use of ICT in Teaching-Learning
    c) Knowledge base of the teacher
    d) Use of ICT methods in the classroom and laboratories

e) Availability/ Accessibility of teacher to the students. Teachers who need improvement in communication skills are given short term training and also counselling by their department colleagues and they are also trained for use of basic ICT tools.

f) At the same time IQAC also takes efforts in organising knowledge enhancement programmes especially for teachers of professional courses. They are trained for upcoming/ emerging areas in their respective fields. If needed, they are given specific industry based training modules which helps them to train students and make students industry ready. The feedback also helps in enhancing the process of mentoring in individual departments with special reference to career guidance and choice of subjects. The process also helps in getting new ideas like Bridge courses for newly started programmes like Data Science which itself is multidisciplinary. It also helps in improving course material for individual courses and laboratory manuals.

Teaching- Learning and Evaluation

Mentoring

For all Science Departments • The mentor teachers for the TY and PG students should be allocated by the Head of the department in consultation with the class incharges. • For F.Y and S.Y.BSc students it is proposed that single department (parent department) will take the role of Parent /Incharge for a particular Division allocated to it as per table given below. The Head of that department along with the Class Incharge should assign students to teachers. Class Parent/Incharge Department F. Y. B. Sc. (Division A) Groups: CPMS, PMSG Statistics F. Y. B. Sc. (Division B) Groups: PMSE, PMEPh, PMEEEM, PCMPh Electronics F. Y. B. Sc. (Division C) Groups: CBZG

Botany F. Y. B. Sc. (Division D) Groups: CPMG,CPBZ Geology F. Y. B. Sc. (Division E) Groups: CPME Chemistry F. Y. B. Sc. (Division F) Groups: CBZMicro, CBZEvs Microbiology S. Y. B. Sc. (Division A) Groups: PME, PEEEM, PMPh, PEPh, PMG, PCPh, MEEEM Mathematics S. Y. B. Sc. (Division B) Groups: PMS, PCE, PCM, PCS, PGS, CMS, MGS Physics S. Y. B. Sc. (Division C) Groups: BZG, CBG, CBZ, CZG, PCG, CBVoc. BT., BZVoc. BT Zoology S. Y. B. Sc. (Division D) Groups: BZMicro, CBMicro, CZMicro, CBEvs, CZEvs, BZEvs Environmental Science • In case of Animation,Biotechnology, B Voc. And Computer Science the Head of the department should allocate students to teachers for all classes from FY to PG. For all Arts Departments.

The mentor teachers for the SY, TY and PG students should be allocated by the Head of the department in consultation with other teachers. • For FY BA divisions all departments need to participate. The Head of department will be allocating teachers as specified in the table below. Teachers who teach the division should be preferred over others. Class Division Department with number of teacher to be allocated FY BA A and B English, Philosophy, French, German, Maths, Statistics, Psychology, Economics, FY BA C Marathi, Hindi, Sanskrit, Geography, History, Economics, FY BA D Economics, Psychology, Political Science, Sociology and the students with special needs and International students will not be mentored separately.

Feedback on teaching - learning: (Scale 0 to 4)
1. On-line Mechanism (ERP)
2. Separate dedicated Feedback Team; meets every Saturday during implementation period
3. Conducts regular orientation / awareness programmes for all UG and PG students
4. Cut Off: 2.5; Teachers scoring below 2.5 are communicated
5. Conducted for all semesters for all academic programmes
6. Parameters for teachers' assessment:
   Communication skills (in terms of articulation and comprehensibility)
   Knowledge base of the teacher
   Inputs beyond the curriculum
   Use of ICT and other teaching methods
   Accessibility of the teachers in and out of the class (includes availability of the teacher to motivate further study and discussion outside the class)
   Overall Quality of teaching

Awards for Teachers

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr Raka Dabhade	Associate Professor	INSA Teacher Award
2019	Dr. Sunil Kulkarni	Assistant Professor	Bhaskar Raye Award

Research, Innovations and Extension

Teachers Awarded with Research Fellowships

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
International	Dr. Rohitkumar Gore	European Union Seventh Framework Programme	01/06/2018	Tallinn University, Estoniay of Technology

Research Projects

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	1095	Board of Research in Nuclear Science (DAE)	2831025	500000
Minor Projects	730	University Research Grant SPPU	160000	160000
Minor Projects	365	University Research Grant SPPU	210000	210000
Minor Projects	730	UGC	270000	270000
Minor Projects	730	BCUD	130000	130000
Minor Projects	365	BCUD	180000	180000
Minor Projects	730	BCUD	140000	140000
Students Research Projects (Other than compulsory by the	365	UGCCE Scheme	53400	53400

Consultancy

Name of the Consultant(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)

PSYCHOLOGY	Learning Development	Swasti Institute and National Integrated Institude CME, Pune	25300
Geology	Petrography of rock samples	Soiltech India PVT LTD	183666

Extension and Outreach

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Nirmal Vari Programme	SPPU, Govt.of Maharashtra and Seva Sahyog Foundation	3	150
National Integrity Tour	Gov. of Meghalaya, Nagaland, Assam and Seva Bharati	6	25
Shirole Vasti (slum) Shala Sanskar Varg	NSS	3	25
EK Rakhi Sainikan Sathi	Sarhad NGO	3	30
Police Mitra	Deccan Police Station	3	100
Varsa Project	NSS	3	25
Plastic Free Village	NSS and Grampanchayat	3	150
Blood Donation Camp	Jankalyan Blood Bank	3	100
Voter's Awareness Programme	Election Commission	3	50
Consumer's Awareness Programme	Grahak Sanrakshak Manch	3	50

Students association and activities with NGOs

Name of the scheme	Organizing unit/Agency/ collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities

Aasra	SOEC, Fergusson College	Teaching less privilege children	2	20
Ankur Vidyamandir	SOEC, Fergusson College	Working for inclusive school	2	23
Akanksha	SOEC, Fergusson College	Making charts and posters	2	5
Seva sahayog	SOEC, Fergusson College	Engaging socially conscious corporates to teach children	2	13
Green steps	SOEC, Fergusson College	Create awareness on environmental issues	2	13
Muse	SOEC, Fergusson College	Creating menstrual awareness	2	20
Prism	SOEC, Fergusson College	Vocational training	2	5
Doorsteps	SOEC, Fergusson College	Teaching children of construction workers	2	17

a) Science popularization through exhibitions and awareness generation programmes
b) Reaching out to schools

Infrastructure and Learning Resources

Facilities added

1. Laboratories
2. Classrooms with LCD facilities
3. Classrooms with Wi-Fi and LAN

Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	77277	6685866	0	0	77277	6685866
Reference Books	166313	15600354	2120	1140182	168433	16740536
e-Books	132	884548	22	135374	154	1019922
Journals	139	323831	14	33790	153	357621

Technology Upgradation

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MGBPS)	Others
Existing	320	17	1	1	2	2	27	200	0
Added	0	0	0	0	0	0	0	0	0
Total	320	17	1	1	2	2	27	200	0

Maintenance Policy and Process (General, Library and Sports)

Physical Facilities Adequate infrastructure facilities are keys for effective and efficient conduct of the educational programmes. The growth of infrastructure thus has to keep pace with the academic developments in the institution. The other supportive facilities on the campus are developed to contribute to the effective ambience for curricular, extracurricular and administrative activities. Classrooms The college has a sufficient number of classrooms which are very well ventilated with spacious seating arrangements. All classrooms are well equippedand ICT supported. The classrooms are made available to all the concerned departments through central timetable management committee. Amphitheatre, Audio Visual Halls, Kimaya and Lower Recreation Hall There are 13 audiovisual halls and one Amphitheatre (Heritage Building) and recently 1 open air Amphi Theatre has been constructed. Kimaya and Lower Recreation Hall are separate spaces marked for extracurricular activities. To utilize these infrastructures, the concerned department has to book their timeslot for the activities in the register kept in the office at the main building. Laboratory All departments should have separate laboratories for general as well as research programmes. All laboratories should be ICT supported. All laboratories should be made available to all the staff members and students of concerned department as and when required for their general as well as research work. The laboratories should be kept clean. Entry without identity card should be prohibited. Entry register should be maintained for staff and students at the laboratory. Lab attendant as well as lab assistant should monitor the usage of equipment. Issue and return register for equipment should also be maintained. All concerned departments should define Do's and Don'ts for their respective laboratory. Purchase of equipment should be carried out using the resolutions circulated through college Central Purchase Committee. Dead stock register should be maintained for the equipment in the laboratory. Equipment related scrap should be done through proper committee. The final authority for appeal and for adjudication of any decision regarding the functioning of the laboratoriesis the Principal.

Sports Complex

The College should have separate sports complex along with gymkhana. College should encourage students and faculties for physical activities like sports for their social, emotional, and their personality development. College should motivate students to participate in competitive sport programmes. Physical education must be an integral part of educational system to promote physical activity among sedentary students/non sportsman.

1. College should involve faculty members to assist the Physical education department and Sports complex. Sports complex should provide roles and responsibilities of the following entities:
2. The College should provide enough infrastructure and relevant amenities required for the sport complex.
3. Department of Physical Education and Sports Management To organize various levels of tournaments (Intra and Inter) for various age groups. There must be a proper procedure maintained by college management for Dead stock management and register should be maintained for the consumable and non-consumable equipment. Equipment related scrap should be done through proper committee.
4. The faculties to work as a coach / team manager for out station tournament.

Student Support and Progression

Scholarships

Financial Support from institution	The Champutai and Vinayakrao Gokhale Scholarship	10	500000
Financial Support from Other Sources			
a) National	Minority and central sector	35	165000
b)International	Indian council for cultural relation	98	3173150

Capacity Building Workshops

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
demonstrate handling and utility of foldscope (paper microscope)	19/01/2019	70	Department of Biotechnology (DBT), Government of India.
"PCB Design"	27/07/2018	50	Fergusson College
"IOT with Rasberry Pi", by Electro Cloud Tech Hub	02/02/2019	40	Fergusson College
" RTOS"	16/02/2019	50	Fergusson College
"Sacred Groves: Traditional treasure trove of Environment"	11/02/2019	40	Fergusson College
Clash of Tigers	02/01/2019	30	Fergusson College
Unraveling the Cosmos	05/09/2018	60	Fergusson College
"Techniques In Sericulture"	10/01/2019	120	Sericulture department, BAIF, Pune.
Amphibians as model system in understanding biological phenomena"	13/02/2018	35	department of Zoology, SPPU, Pune
"First aid in laboratory and Good Laboratory practices	05/03/2019	52	GM College of Paramedical Science, Pune
"Cell Culture "	07/08/2019	25	Cell Culture Laboratory of Dr. DY Patil University, Pune.

Industry Interface and Career Guidance

Sectorial Career Summit: To give an insight to the students about various opportunities in different allied sectors other than their academic specialization and Campus to Corporate Program: To upgrade the skills of the students according to the industry standards.

Placements

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
Syngene International, Bangalore, Enzene Biosciences, Lupin Biopharma, Accenture, Aurigene, Discovery Technologies Pvt., Ltd, Cipla, Dr.Reddys	598	108	Biosciences, Serum Institute, Perian DX, TUV, Nord Serum, GVK Biosciences	58	50

Internal Quality Assurance System

1. Continuation of Choice Based Credit System and designing of syllabi as per UGC- LOCF.

2. Implementation of flexible and Online Examination

3. Promotion of Research in Interdisciplinary domain.

4. Promotion of Skill Components for undergraduate science programmes.

5. Enhanced Industry Institute interactions.

Other Initiatives

1. Training of Laboratory Assistants and Attendants at IISER, Pune.

2. Training of Accounts personnel in EAT (Expenditure, Advance and Transfer) module of PFMS (Public Finance Management System)

3. One Day Training of Office Staff (Accounts) for GST and other Financial matters conducted by parent organization Deccan Education Society.

4. 15 different training modules for Examination Staff on use of ERP System for mark entry and data generation.

Professional Development Programmes

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	Train the Trainers Programme the	Train the Trainers Programme the for IQAC Corodinators	02/10/2018	02/11/2018	21	0
2018	PYTHON Pro gramming	PYTHON Pro gramming	21/06/2018	23/06/2018	22	0
2019	Training of Laboratory personnel	Training of Laboratory Personnel	19/01/2019	19/01/2019	0	14
2018	Training on EAT Module of PFMS	EAT Module of PFMS	10/08/2018	10/08/2018	4	25
2018	Ruby on Rails	Ruby on Rails	07/01/2018	14/01/2018	6	0
2019	Tectonic Evolution of India	Tectonic Evolution of India	23/08/2019	23/08/2019	25	0

Institutional Values and Best Practices

The College is committed to a culture of participative management. The Principal, VicePrincipal, Registrar and IQAC coordinator are responsible for academic and administrative leadership of the college. The Principal meets at least thrice in a month with Heads of departments and Vice Principals to discuss academic or administrative issues. The IQAC meets periodically to discuss the points related to the quality policy and plans. The apex decision making body at College level is the Governing Body under organizationizational structure of Autonomous College. In addition to this, the College has also College Development Committee (CDC).The CDC has representatives from teaching as well as non teaching staff. All the issues regarding academics, administration and enhancement of infrastructure, sanctioning of sabbatical/ study leave etc., are decided by the CDC. The IQAC also includes faculty members along with members from the society for the policy / plan formulation and its implementation. Faculty members from IQAC play an active role in the management of academic activities of the college. Students actively participate in various curricular, cocurricular and extracurricular activities. Faculty members participate in the management process not only through the CDC, but are also part of the Board of Life members and on the Governing body and the council of parent organization Deccan Education Society. The stakeholders are given highlights of the achievements and activities during the annual general meeting of DES. Various committees in the college help in monitoring and facilitating several administrative functions and thus make administration open and transparent. The decentralization of power is evident from these committees, some of them are statutory and the others nonstatutory in nature.

The list of committees is given below: • Academic Council • Internal Quality Assurance Cell • Admission Committee • AntiRagging Committee • Committee for Prevention of Sexual Harassment • Board of Examination • Board of Studies • Finance Committee • Committee for Earn and Learn Scheme • Forum of Arts and Science Heads • Grievance Committee • Gymkhana Managing Committee • International Students' Cell Committee • Research Coordination Committee • RTI Cell • Student Council • Time Table Committee • Planning Board for

UGC, DBT and DST Schemes • Advisory of DBT Scheme (STAR College Scheme) The IQAC has to ensure that whatever is done in the institution for "education" is done efficiently and effectively with high standards. In order to do this, the IQAC has to establish procedures and modalities to collect data and information on various aspects of institutional functioning. The Coordinator of the IQAC and the Secretary have a major role in implementing these functions. The IQAC derives major support from the already existing units and mechanisms that contribute to the functions listed above. The operational features and functions discussed so far are broadbased to facilitate institutions towards academic excellence and institutions adapt them to suit their specific needs.

The staff is entrusted the responsibility for different tasks such as college admissions, examinations, document verifications, form collection for scholarships, Rail/bus concessions as well as handling the university/government correspondence.

Dr. Samir Terdalkar   Principal
Coordinator, IQAC