# Fergusson College (autonomous) Pune

### Action plan of UGC scheme -College of Excellence

#### a) Teaching (UG)

#### 1. Encouraging Students for making career in Arts and basic Sciences.

This activity will focus on enabling students to learn beyond the structured curriculum. Inquisitive students will be identified and screened through a simple assessment method. These students will be provided with scholarships. They will be assigned to mentor teachers who will nurture and nourish their talent by guiding them in projects. They will be encouraged to explore the way of Learning By Doing in Lab (LBDL). These students will also get an opportunity to interact face to face with Experts/ Scientists of National and International repute.

#### 1. Strengthening Laboratory and Teaching Infrastructure.

Potential laboratories in the campus will be identified for the LBDL activity. The present infrastructure of these laboratories will be strengthened by adding new instruments/ equipments/ apparatus/ consumables etc. The facilities for teaching-learning will be identified as per Learners needs and then augmented. The Classrooms will ne transformed into e-classrooms to make teaching more effective.

#### 2. Softwares for Language Laboratory.

Language laboratory has been established and presently utilized for enhancing linguistic skills in English. The same facility will be extended for Foreign language especially French and German. In this way the number of beneficiaries would be increased. Presently, "CLARITY" software is used for English Language. Softwares like Orell, iTell can be procured and used for foreign languages after training of teachers in respective subjects.

#### 3. Initiating —MAST Program (Model for Arts & Science Teachers).

This programme has gained popularity amongst teachers and now it a well established method of training teachers of our College. This will enhance teaching learning skills of teachers. They will be encouraged to prepare teaching aids like models, charts and CD's. Experts will be invited to conduct special sessions on how teaching could be made more effective by using different pedogogies. In addition to this, the grant assigned for this activity will be also utilized for promoting teachers to participate in training programmes at various centers of excellence and higher learning in the country.

#### b) Teaching (PG)

#### 1. Enriching e-Resources and Uploading on Internal Server.

Some teachers have been trained for preparation of e-resources. e-resources in some subjects like Economics, Computer Sciences, Geology and Electronic Science have been generated. The Department of Electronic Science is a partner in preparing e-resources in Electronic Science under UGC e-PG pathshala scheme. Expertise from this department will be utilized for training teachers and this activity can be conducted on a larger scale. A dedicated Server will be procured for uploading of these e-resources which will be made available to students.

#### 2. LIFE (Learn to innovate For Excellence) programme

LIFE programme includes training os students in variety of areas like Communication Skills, Scientific language and writing, writing proposals and project reports and publishing research data. Workshops on "New Technologies" in Science will be conducted under this programme which will focus on Skill Development of Students. Special projects which will lead to innovation and application will be identified and exceuted.

#### 3. Establishment of Entrepreneurship Development Cell

Entrepreneurship has become an important aspect of basic as well as professional education. Keeping this view in mind, the College proposes to establish an entrepreneurship Development Cell. The Cell will be conducting activities which would lead to development of entrepreneurial attitude amongst students. It is also proposed to include this component as a part of their regular curriculum especially for PG courses in "Autonomous" status of the College. In the first phase the teachers will be undergoing 'Entrepreneurship Development Programme" and they will be trained to train the students. Experts/ Expertise have been identified from neighbouring University and Institutes who would be sharing their expertise with our College. Training workshops for students which would focus on Business opportunities search and scanning, Bankable detailed business plan, Management of SMEs, Marketing research and innovation based entrepreneurship.

#### c) Research:

## 1. Evolving STAR (Special Teacher And Researcher) Program.

The Special Teacher and Researcher Program has provided Internship for aspiring teachers and researchers which was proposed in CPE scheme. The internship program has proved as platform where the teacher/ researcher are exposed to basic teaching and research techniques. This has been very successful activity under the CPE scheme. The seed provided to teachers as well as students to do research, after appropriate screening of the proposals has yielded better results with more number of students and teachers participating in this, doing research and publishing papers. The same activity would be continued under the CE scheme.

#### 2. Additional Facility for Research and Instrumentation

The College has nine recognized research centres. These centres have significant number of PH.D. students. To cater to the needs of these students' an additional

	facility for instrumentation where latest/ advanced instruments will be procured and utilized by the research students.
	3. <b>Computational Center</b> A separate computational center with 50 computers and internet will be provided to the post graduate and research students. The center will help the students for
	literature and references.
d) Extension	1. Strengthening of "Social Outreach and Enabling Center"
	The SOEC was established by the College in the year 2010. 700 student volunteers were a part of this programme It has proved to a center for differently abled students as well as a center where students from both the faculties come together and participate in social activities. The center has linkages with 18 different NGOs. Students actively conduct social surveys and generate reports. The Center has equipped the students with skills, attitudes and knowledge to work with the people. Strengthening of the Center will result in increased number of students and more activities. "SAATHI" is another enabling center for students' with blindness. Academic Assistance is provided through the Study Circle to students' with blindness. The activities include Group and individual study, Providing recorded notes, Providing writers during exams. <i>Saathis</i> (peer mentors) are responsible for General well being of the students with disabilities, Negotiating day to day life on college campus, Reading notice boards and filling up scholarship forms and exam forms. Strengthening this center will support students' with blindness.
	2. Science Education Initiative (SEI) SEI has been initiated by Department of Physics (Students of Astrophysics). SEI focuses on teaching fundamental science education especially maths and science in schools (low income) at the primary level. A separate curriculum has been prepared. Volunteers for teaching maths and science in schools are selected by a screening cum interview. Selected volunteers are trained to teach maths and science by peers. This activity has gained popularity amongst students with increased participation of students. Hence a separate center to carry out this activity has been proposed under the CE scheme.
e) Any other: (Please specify)	1. Complete Automation of Examination Center  The College has separate Examination Center which has been recently set up. The student strength of College is more than 5,500 with variety of subjects offered at undergraduate and post graduate level. It is proposed to strengthen by supporting it with latest automation and equipments needed for the Center.
	2. Strengthening Industry-Institute Interaction Cell The College has a formal Industry-Institute Interaction Cell with a Teacher In- Charge. The Cell mobilizes resources from Industries and has created a platform for interaction with Experts from the Industry (Specifically from Life Science Industries). Workshops and Panel Discussions with Industry have been a routine activity of the Cell. Corporate ethics Trainings and Workshops, Ethical HR

Training, Training programmes on market needs, Commercialization of Innovations, Patenting and Laws will be conducted. This will help in bridging the gap between the curriculum and Industry needs.

#### 3. Modernization of Library

Bai Jerbai Wadia Library(BJWL) of Fergusson College is active partner in teaching, learning and research activities which in turn contributes to the achievements of the College. Library functioning and services have undergone a sea of transformation with automation of library services. The Library is endowed with a rich collection of books, periodicals, journal and manuscripts. This has been compiled over decades through acquisition and also through generous donations from well-wishers and past students.

The Library has been supported by National Archives of India for Digitization of old and rare manuscripts which will now be made available to users in digitized form.

The next step would be modernization of Library. Subscription of Online databases, such as JSTOR, Science Direct, SSRN etc., which offer interdisciplinary and high quality resources, which covers e-journals and e-books will be procured.

Digital Library initiative will be implemented through this scheme which will function as Institutional depository and cover full text resources like faculty and students' publications, research projects and video lectures.

The College has significant number of visually challenged students. Few computers are made available to these students with "JAWS" software. This facility needs immediate enhancement with procurement of more number of computers and more licensed keys for students. Braille Mitra (Braille display) will also be procured.