A. In-House Research Projects

1. Title of the Practice
   In house research projects

2. Objectives of the Practice

What are the objectives / intended outcomes of this “best practice” and what are the underlying principles or concepts of this practice (in about 100 words)?

The intended outcomes of this best practice were honing the research skills in undergraduate students for ease of correlating the theoretical concepts to practical application.

The basis of “In-house short term research projects” is a fact that curriculum of B Pharm involves a lot of theoretical concepts and the experiments can be designed to give students, an opportunity to get “hands-on” experience. Also inculcating spirit of scientific enquiry through literature survey and online tools is also achieved. Students get an opportunity to present their work at conferences and seminars.

3. The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The concept was challenging one to introduce as there were issues such as

Administrative permissions.
Making rules and designing standard operating procedures.
Explaining the concept and its advantages to students.
To find time for the practical work from tight academic schedule.
Encouraging students to do better quality work within the timeframe.
Providing platforms to help students to present their work.
4. The Practice
Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

- Here the students (group of max 05) choose a teacher under whom they want to do a project and make an application in the prescribed format.
- After the approval from Hon. Secretary, students have to complete the work in given time frame without skipping any academic schedule.
- The report/outcome is submitted by PI to the coordinators of activity
- The students are encouraged to present/ publish the work at different conferences or journals.
- Two research presentation competitions are organised by college to provide the students a platform to present their work
  1) “Best in-house project competition” an annual event is organised for students of AISSMS college and winner group/team is given cash award
  2) A state level competition “SYNAPSE”, which is a biannual event, is organised where students participate along with the students from other pharmacy colleges in Maharashtra.
- The students can mention the outcomes of these activities in their “Letters of recommendation (LORs)” which help them to seek admissions abroad for further studies.
- The best projects get an opportunity to participate in “Avishkar” the state level competition for innovative research, and represent the University at state level.

Uniqueness in the context of India higher education:
Looking at the focus of government of India on inventions and innovations, the effort is a unique one which prepares the students to work on their ideas and develop them into a tangible product which is further tested by scientific evaluation at various platforms where it is presented.

5. Evidence of Success
Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

The evidence of success of practice lies in

- Number of projects done (98) and number of students (362) participated since inception of this practice in 2007.
- The practice has continued uninterrupted since last 12 years.
- We were able to simplify the administrative process by modifying the application format to smaller and easier one.
- The students have shown enthusiastic response to the ‘Best In-house Project Competition’
- Number of publications (17) and number of presentations (18) by B Pharm students.
- Number of students (21) went for higher education to countries such as USA, Canada with favorable impression created due to project work and the publication / presentations as an outcome of their research project.
6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

Problems encountered are-
1. Initially motivating the students to undertake the projects.
2. Short term project has to be finalized that will help the undergraduates to clearly understand newer concepts in theory.
3. As per new academic pattern of “CA” (continuous assessment), the time management for projects has become difficult.
4. Teachers today have to play the role of an educator, motivator and entertainer combined, rather than just a tutor. Most of the faculty members are a part of multiple departments/committees and it becomes challenging for them to work with optimum efficiency in every department/committee.

Problems were overcome by carefully planning the activities

The resources required are-
1. Well maintained laboratory facility
2. Time management by the students.

7. Notes
Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).

The logistic steps to start this activity of “In-house short term Research Projects” will be administrative permission, scheduling the project without hampering the routine academics, encouraging students to complete the project with an objective to present/publish the outcome.
B. Alumni contributions to student’s development.

1. Title of the Practice
This title should capture the keywords that describe the practice.

Alumni contributions to student’s development.

2. Objectives of the Practice
What are the objectives / intended outcomes of this “best practice” and what are the underlying principles or concepts of this practice (in about 100 words)?

The objective of the practice is to make the apt use of expertise of alumni in different fields in order to update and upgrade the technical and skill based attributes in the current students. The practice is aimed to provide the platform for discussion and answering the queries of the students.

3. The Context
What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The practice of Alumni contributions to current student’s development was designed in context of:

- Improving participation of alumni with faculty and students.
- Enlightening the students about current pharmaceutical industry needs.
- Personality development of the students.
- Improving the decision making about choosing the right career path.
- Increasing the number of students qualifying different entrance exams for post graduation.
- Better understanding about the University rankings, infrastructure and learning resources related issues.
- Knowing the career opportunities in different fields in pharmaceutical sciences.

4. The Practice
Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

- The practice is designed in two steps; identifying the various disciplines of pharmaceutical industry.
- Creating the groups as per disciplines on alumni portal.
- Motivating and inspiring the current students to keep on asking queries to alumni as per each discipline.
- Requesting each alumni to share their views, inputs, upload recorded talk, lecture, video etc.
• Organizing video conferencing interactions with alumni and current students.
• Requesting alumni to write blogs for career guidance, importance of personality grooming etc.
• Creating different staff and student portfolios for the smooth planning and effective implementation of the activities planned.
• Based on needs, allotting the alumni mentors that alumni can guide them how to become self sufficient, raise funds, do the part time job, online work on weekends, guide about different scholarships etc.
• Collecting regular feedback every quarter.
• Generating action plan for evaluation of long term progress of each activity.

Many of the activities are run through AISSMS Pharma Graduates Association (APGA), which is registered with Registrar of Societies, Dist. Pune. Every year new APGA working committee is formed amongst current students from each class which work in consultation with Core committee members and APGA advisor (Staff member). The web portal https://alumni.aissmscp.com/ has been subscribed through Almashines which acts as bridge between alumni and current students as well as college staff.

**Uniqueness in the context of India higher education:**

As per the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE), we will organize various activities in the interest of students of AISSMS College of Pharmacy Pune. The objective of this Skill Certification Scheme is to enable a large number of our students to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). The college has initiated involvement of experienced alumni for providing skill based education to current students.

**5. Evidence of Success**

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

1. Many students have been benefitted by way of inplant training organised by alumni
2. Alumni has conducted career guidance sessions,
3. Many alumni delivered expert talks on different technical and skill based topics, which helped them in getting better placements
4. Students have been entered in entrepreneurship due to motivation from alumni
5. Certificate course on Intellectual Property Rights (IPR) has been started by one of our alumni Miss. Asha Hole for postgraduate students
6. Alumni are working on various college bodies like College Development Committee, Internal Quality Assurance Cell, contributing significantly by providing suggestions in syllabus revision to tune with current pharma practices

**6. Problems Encountered and Resources Required**
Please identify the problems encountered and resources required to implement the practice (in about 150 words).

Problems encountered are-
1. The first time registration of each student as a member of alumni association.
2. Resources in terms of finance are continuously required to upgrade technology and infrastructure requirements, to organize the training sessions for special technical areas and entrepreneurship and skill development areas. Financial constraints occasionally hamper the rapid implementation of these trainings.

The resources required are-
1. Trained trainers and faculty to handle the responsibilities assigned.
2. Financial resources to update the knowledge, technology and infrastructure time to time.

7. Notes
Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).

We have to compose subcommittees for effective implementation of the activities planned under the banner of APGA and AISSMS College of Pharmacy, Pune. We will have to apply for different state and central Govt.’s funding agencies, private sponsors etc. Different student representatives will have to be assigned for the smooth, effective implementation of the above mentioned events.