Best practice -1

I. Title of the best practice: ICT Enabled Teaching-Learning

II. Objectives of the best practices:

1. To develop independent knowledge and skills.
2. To analyze and interpret the data.
3. To engage in higher order thinking and engage in active learning.
4. To work collaboratively with others.
5. To empower students to take ownership of their learning.
6. To develop research skills.
7. Refine and update their advanced technological skills.
8. To increase a variety of educational services.
9. To promote equal opportunities to obtain education and information.
10. To develop a system of collecting and disseminating educational information.
11. To promote technology literacy of all citizens, especially for students.

III. The Context:

Education is the manifestation of perfection already in men. It helps all round development in persons. Education without Philosophy is blind and Philosophy without education is invalid. Hence education is key to development through which skills for life achieved. Teaching learning is a dynamic and interactive process which includes norms, policies and practices. There are two challenging issues in present education. We are following semesters with CBCS pattern of grading system in education. It is a difficult and challenging issue in completion of syllabus in each semester by implementing comprehensive teaching learning methods along with teaching aids with in stipulated time. The teachers find it difficult to keep pace with the techno – savvy student learners. It has become essential for some of the teachers to adapt to the latest pedagogic styles and include ICT in class room teaching. The mismatch between the student learner and the teacher in the use and comfort of handling varieties of tools (Eg. Edmodo) available for teaching learning needs to be bridged.

IV. The Practice:

1. **ICT Enabled Learning:**

a. ICT refers to the use of Information and Communications Technology to teach the scientific ideas that promotes open source learning. Most of the departments in our college are using ICT in Teaching and Learning.

b. In order to make the accessing, storing, transmitting, and manipulation of information more easy, this approach integrates telecommunications, computers and relevant enterprise software, storage, middleware, and audio-visual systems required to handle the topic. We are conducting digital classes to encourage students in advanced learning.

c. ICT in education is the mode of education that uses information and communications technology to support, enhance, and optimise the delivery of information. Students are improved after their exposure to ICT education.
d. ICT can lead to an improved student learning and better teaching methods.
e. Online digital repositories for lectures, course materials, and digital library.
f. Employing the flipped classrooms.
g. Making use of handheld computers, audio players, and projector devices. By using these facilities our lecturers are delivering good ICT classes along with daily classes.
h. Enhancing learning experiences and providing new sets of skills.
i. We are encouraging students to enrol in Massive Open Online Courses (MOOCs). Interested lecturers completed on line Refresher Courses through SWAYAM to enrich their skills. Some of our lecturers completed MOOCs courses from STANFORD UNIVERSITY and Technical University of Denmark (DTU). Students are also doing MOOCs courses.
j. The use of ICT in pedagogy improves learning and creates a learner centered learning culture. The creativity and critical thinking in students is improving. The overall development of student is important which can be achieved by the integration of pedagogy –technology.

2. Video clips:

a. This teaching technique makes use of instructional video clips available online or in libraries to show and teach a new concept.
b. The evolution of a process can be conveyed better with animation videos. It can also be videos of demonstration of an idea or an application side of a theory or an interview with a scientist, tutorial by a subject expert and more.

3. Power Points Presentations (PPTs):

a. Instead of the conventional talk and chalk methods, teachers now include power point presentations in their classroom sessions to make it more interesting.
b. They connect the computers to projectors to address a larger classroom and include interesting slides with diagrams and flow charts to make the teaching more interactive.
c. Using innovative teaching methods we can get good learning outcomes.

5. Evidence of success:

a. The teachers have adopted modern pedagogic styles and ICT in their classes.
a. Some of the notes are scanned and uploaded in the Departmental computer.
b. Some of the prepared notes shared to students through mail or some advanced ICT tools.
c. Appropriately paced and timely completion of syllabus
d. Increased attendance in the classes
e. Improvement in results.
f. Increase in the number of students securing high marks.
g. Increase in the enrolment to higher education institutes from the college.
h. Increase in the quality of results (number number of first classes, etc.)
i. Attendance in the classes by these classes of students has improved.
j. ICT has impacted on the quality and quantity of teaching, learning, and research.

k. It has the potential to accelerate, enrich, and deepen skills of the students.

l. ICT Enabled Learning motivates and engages students in learning.
m. Teacher education and professional development of teachers is achieved.
n. The pervasiveness of ICT has brought about rapid technological, social, and economical transformation.

The above results indicated that following and usage of methodologies properly in time to time along with traditional methods of teaching. The collaborative mode of teaching enrich the knowledge and increases the comprehension in students.

6. Problems encountered and Resources required:

Problems encountered and resources required: Identify the problems encountered and resources required to implement the practice.

a. Lack of infrastructure so as to equip with all kinds of experimental instruments.

b. Lack of second experimental laboratory.

c. Lack of technical lab assistants (Human resources) to keep up the furniture properly in the laboratory and to arrange during conduction of practicals.

d. Concentrating more on other than the academic activities.

e. Extra curricular activities are given more important.

f. Poor attendance of students in very 1st period.

g. Development of animation based power point presentations in teaching, particularly in science subjects, has been hindered due to the want of technical expertise.

h. The demand for ICT resources is increasing and paucity of funds has been the biggest impediment which may dampen the spirit of technology adoption by teachers.
i. Lack of genuine software, inadequate computers in the classroom, and low speed internet.

7. Notes (Optional):

1.Computer experts and programmers train the traditional teachers in the use of Power Point Presentations, advanced ICT tools, educational apps, browsing the internet for useful resources, uploading content on the college website, use of google docs, sheets for information sharing, etc.