**Shri Sant Gajanan Maharaj College of Engineering Shegaon**

**Computer Science & Engineering Department**

Course Title & Course Code: DBMS 5KS01

Class: Third year CSE  Semester: V

Name of the Course Teacher: Dr J.M.Patil

Title of the innovative practice: Power Point Presentation

**Objectives / Goals of the Practice**

- To promote deep understanding of core DBMS concepts
- To enhance student engagement and comprehension
- To improve clarity through structured visual delivery
- To support exam readiness and academic performance

**Use of Appropriate Methods**:

To achieve the stated goals, the following methods were implemented:

- PowerPoint presentations tailored to each topic in the DBMS syllabus were designed and delivered
- Presentations were enriched with visual aids, including ER diagrams, normalization tables, SQL query walkthroughs, and transaction flowcharts.
- Complex concepts such as Indexing, Query Optimization, and Concurrency Control were explained using step-by-step visual presentations and practical analogies.
- Demo sessions were conducted using tools like MySQL Workbench, Oracle, or MS SQL Server to showcase real-time query execution and database design.
- Interactive teaching methods were integrated into the presentations, including mini-quizzes, class discussions, and live SQL coding demonstrations.
- Q&A sessions were held at the end of each topic to reinforce student understanding and engagement.

**Significance of Results:**

Presentation approach led to a notable improvement in students' conceptual clarity across key DBMS topics such as ER Modelling, SQL, and Normalization.

Students demonstrated enhanced classroom engagement, as evident from increased participation during Q&A and discussion sessions

Academic performance improved, with a measurable rise in average scores in internal assessments and university examinations in the DBMS subject

The visual and demo-based delivery helped bridge the gap between theoretical understanding and practical application, especially in complex topics like transactions and indexing.

The availability of shared presentation materials enabled self-paced learning and revision, supporting diverse learning styles and preparation strategies.

**Effective Presentation:**

The presentations were carefully structured to cover each DBMS topic clearly and logically, beginning with fundamental concepts and progressing to advanced areas

Use of high-quality visuals such as ER diagrams, flowcharts, normalization tables, and SQL query snapshots helped simplify complex information

Real-time demonstrations were incorporated using tools like MySQL Workbench and Oracle to show practical applications alongside theory

Presentations were interactive, with frequent pauses for questions, mini-quizzes, and group discussions to maintain student engagement and check understanding

Each presentation included clear learning objectives at the start and summary points at the end to reinforce key takeaways.

The use of consistent formatting, color coding, and bullet points enhanced readability and focus during the sessions.

Faculty shared presentation slides and related resources, enabling students to review material at their own pace.

Pos Mapped: PO1, PO2, PO3, Po5, PO10, PO12

**Reflective Critique**

Faculty observed student engagement levels, participation rates, and problem-solving approaches during the crossword activity.

……Faculty noted that the use of visual aids and live demos made complex DBMS topics more accessible, especially for students with varying learning styles.

A few students felt that the presentation materials greatly supported their revision, but they suggested that follow-up sessions or assignments could further reinforce learning

Critique Review Form Link**: https://forms.gle/LPtH1Gc7wRJ1DLPF7**

**Evidences of success**

Enhanced Student Engagement: Attendance and participation during DBMS lectures improved, with more students actively asking questions and contributing to discussions.

Positive Feedback: students found the presentations clear, engaging, and helpful for understanding difficult concepts

Increased Use of Learning Resources The shared presentation materials and demo sessions were frequently accessed and reviewed by students for self-study and exam preparation.

**Challenges faced during implementation**

**Time Constraints:** Covering all DBMS topics thoroughly within the limited class hours was challenging, especially when incorporating interactive demos and Q&A sessions.

**Technical Issues:** Occasional technical difficulties with demo software or presentation equipment disrupted the flow of some sessions.

**Student Dependency:** Some students tended to rely heavily on presentation materials without engaging deeply

PPT Link: https://drive.google.com/drive/mobile/folders/1YDakPccmQHfa_8lA_A-V_C1L0KMTpqAD?usp=sharing