Shri Sant Gajanan Maharaj College of Engineering, Shegaon

Department: Computer Science & Engineering

Course Title & Course Code: **Digital Forensics** (7KS04)

Class: Second year Semester: Seventh

Name of the Course Teacher: Prof. S. B. Pagrut

Title of the innovative practice: New Experiment development and testing

a) Objectives/Goals of the practice:

• To promote awareness of tools used by industry

- To enhance student engagement and comprehension
- To support placement readiness in domain of cyber security

b) Use of Appropriate Methods

To implement this practice effectively, the following methods are used:

- Students in the batch of Digital Forensics are instructed to understand concept of password recovery in the practical.
- Students will have to implement practical out of listed ones instructed by subject in charge.
- Understanding of Key logger working and its impact implemented by students and small practical / mini project report is submitted.

c) Significance of Results

This practical yields several educational benefits:

- Improved Concept Retention: Students who implemented and tested this practical demonstrate better long-term retention of concepts.
- Development of Higher-Order Thinking: Encourages application, analysis, and synthesis of Digital Forensics concept rather than rote memorization.
- Increased Student Engagement: Shifts students from passive learners to active participants in their own learning process.
- Enhanced Collaboration & Peer Learning: Encourages discussion and knowledge-sharing among students, leading to a more interactive learning environment.

d) Effective Practice

- The activity covered each DF unit logically, ensuring comprehensive question coverage from basics (investigation, data recovery tools) to advanced topics (risk assessment and analysis).
- The use of Bloom's taxonomy ensured diversity in cognitive challenge across the question sets.
- Group work and peer review fostered teamwork and constructive feedback culture.
- The practice developed critical thinking, valuable for both academics and industry readiness.
- **POs Mapped**: PO1, PO2, PO5, PO9, PO11, PO12

e) Evidences of Success

• Enhanced classroom engagement during DF lectures, practicals and discussions.

Innovative Practice- New Experiment Conducted (Practical Report) - Document Link: <u>Click</u> Here