

Open Book Exam (Unit V – Research Communication & Dissemination)

Q. Comprehensive Scenario on Research Communication, Ethical Dissemination & AI Usage

(10 Marks)

You are leading a small research team working on “Machine Learning Models for Early Flood Prediction.” After completing your experiments, your team prepares a manuscript and plans for publication. During the internal review meeting, the following issues and concerns arise:

1. The **abstract** only explains the problem and motivation; it does not include the methodology, key results, or final conclusion.
2. The **paper structure** is inconsistent—results and discussion are mixed, and the introduction lacks a proper research gap.
3. The team is debating whether to submit first to a **conference** for quick visibility or to a **journal** for higher academic weightage.
4. A senior researcher advises selecting a **Scopus or Web of Science indexed** venue to increase credibility.
5. One team member wants the publication to contribute to their **h-index**, especially for upcoming promotions.
6. The previous version of the paper was rejected due to shortcomings highlighted by **peer reviewers**, particularly regarding experimental details.
7. The team used a **generative AI tool** to rewrite some paragraphs, but they are unsure how to disclose AI assistance ethically.
8. Another member suggests sharing the full dataset publicly without anonymization for visibility.
9. The team wants to increase the **research visibility** by posting about the work on ResearchGate, LinkedIn, and academic repositories.

Based on this scenario, explain how you would prepare, revise, and ethically disseminate the research for successful publication.

Your answer must address all the following points:

- Correct components of an effective research abstract
- Proper IMRaD structure and why it is essential
- Choosing between conference vs journal publications
- Importance of Scopus/WoS indexing for visibility and academic credibility
- How indexing and publication venue influence future citations and h-index
- How the peer review process helps improve research quality
- Responsible and ethical use of generative AI in academic writing
- Ethical considerations in data sharing and avoiding plagiarism or duplicate submission
- Appropriate methods for research dissemination beyond journal publication