

## **Paper – 2 : Research and Publications Ethics**

**Instruction hours per week :2hrs**

**Credits :2**

**Max. Marks: 100**

### **Course objectives :**

- 1) To provide with the fundamental knowledge of bases of philosophy of ethics, research integrity and publications ethics.
- 2) To create awareness about the publications ethics and publications misconducts.
- 3) To make the researcher familiar with indexing and citation database, open access publications, research matrices (citation, h-index, impact factor etc.)

### **Course outcomes :**

At the end of the course, students will be able to

- 1) Demonstrate research and publication ethics.
- 2) Identify publication misconduct and predatory journals.
- 3) Identify different tools for plagiarism check.
- 4) Utilize various indexing and citation database and outline research matrices.
- 5) Appraise research integrity.

### **Theory**

#### **Unit-1: Philosophy and Ethics (3 hrs)**

1. Introduction to philosophy : definition, nature and scope, concept, branches.
2. Ethics : Definition, moral philosophy, nature of moral judgments and reactions.

#### **Unit-2: Scientific Conduct (5 hrs)**

1. Ethics with respect to science and research.
2. Intellectual honesty and research integrity.
3. Scientific misconducts : Falsification, Fabrication, and Plagiarism(FFP).
4. Redundant publications : duplicate and overlapping publications, salami slicing

5. Selective reporting and misrepresentation of data.

### **Unit-3: Publication Ethics (7 hrs)**

1. Publication ethics : definition, introduction and importance.
2. Best practices/standards setting initiatives and guidelines: COPE, WAME etc.
3. Conflicts of interest.
4. Publication misconduct : definition, concept, problems that lead to unethical behavior and vice versa, types.
5. Violation of publication ethics, authorship and contributorship.
6. Identification of publication misconduct, complaints and appeals.
7. Predatory publishers and journals.

### **Practice:**

### **Unit-4: Open Access Publishing (4 hrs)**

1. Open access publications and initiatives.
2. SHERPA/ROMEO online resource to check publisher copyright and self-archiving policies.
3. Software tool to identify predatory publications developed by SPPU.
4. Journal finder/journal suggestion tools viz., JANE, Elsevier Journal Finder, Springer Journal Suggested etc.

### **Unit-5: Publication Misconduct (4 hrs)**

#### **A. Group Discussions (2 hrs)**

1. Subject specific ethical issues, FFP, Authorship.
2. Conflicts of interest.
3. Complaints and appeals : Examples and fraud from India and abroad.

#### **B. Software tools (2 hrs)**

Use of plagiarism software like Turnitin, Urkund and other open source software tools

### **Unit-6: Databases and Research Metrics (7 hrs)**

#### **A. Databases (4 hrs)**

1. Indexing databases
2. Citation databases : Web of Science, Scopus etc.

## **B. Research Metrics (3 hrs)**

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics : H-index, G Index, i10 index, altmetrics

### **References:**

1. Bird A. (2006), Philosophy of Science, Routledge.
2. MacIntyre, Alasdair (1967) A Short History of Ethics, London.
3. P.Chaddah, (2018), Ethics in Competitive Research : Do not get scooped; do not get plagiarized, ISBN : 978-9387480865
4. National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009), on being a Scientist : A Guide of Responsible Conduct in Research : Third Edition. National Academies Press.
5. Resnik D.B.(2011), What is ethics in research & why is important. National Institute of Environmental Health Sciences, 1-10 Retrieved from
6. <https://www.njehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
7. Beall J.(2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179, <https://doi.org/10.1038/489179a>
8. Indian national science academy (INSA), Ethics in Science Education, Research and Governance(2019), ISBN : 978-81-939482-1-7.  
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