

## **Ph. D Written Test Format and Syllabus**

Department of Agriculture, Faculty of Agriculture

### **Ph.D. Admission Test Format**

The written test consists of two parts.

1. **Part A:** Research Methodology 25 questions.
2. **Part B:** Agriculture 25 questions

### **Part A: Research Methodology Syllabus**

#### **Research Fundamentals:**

Meaning of research; objectives of research; characteristics of good research, Research problem: Identification, selection, and techniques for defining research problem, Research process, Research outcomes, Review of Literature, Hypothesis: Definition and Types

#### **Types of Research:**

Types of research, fundamental and applied research, qualitative and quantitative. Research Design: Types of research design – Exploratory, Descriptive, Casual Analytical

#### **Sampling, Data Collection and analysis:**

Types and sources of data: Primary and secondary, Methods of collecting data: questionnaire, interview, observation, case study, experiments etc., Sampling and sampling methods, characteristics of good sample, sampling techniques, Statistical Methods for Data Analysis: measures of central tendency and dispersion

#### **Research Report:**

Main body of report, abstract and keywords, Referencing styles and bibliography. Journal and author indexing

#### **Ethics in Research:**

Biasing: Definition and Types, Plagiarism -Definition and forms, IPR, copyright infringement, AI Generated Content

## **Part B: Faculty of Agriculture**

### **Basics of General Agriculture:**

General Agriculture, (Basic information related to agriculture including policies & scheme, important ICAR institutions, CGIAR, SAU, KVK), Agricultura scenario at national and global level

### **Basics of Agronomy, Soil Science and Horticulture:**

Basics of Agriculture Sciences including Agronomy, Soil Science and Horticulture.

### **Basics of Plant Protection, G&PB, Crop Physiology and Ag. Biotechnology:**

Basics of Agriculture Sciences including Plant Protection, Plant Breeding & Genetics, Agricultural Biotechnology, Microbiology, Biochemistry and Crop Physiology.

### **Basics of Ag. Extension, Economics & Farm Management:**

Basics of Agriculture Sciences including Agriculture Extension Education, Agriculture Economics & Farm Management.

### **Basics of Animal Husbandry and Ag. Engineering:**

Basics of Agriculture Sciences including Animal Husbandry and Farm Machinery & Power.