

WE TEACH



KingMakers
IAS Academy
BY IAS FOR IAS

YOU REACH

AGRICULTURE

OPTIONAL TEST SERIES-2025

STARTS ON: JUNE 21, 2025

8 TESTS | 4 SECTIONAL TEST + 4 FULL LENGTH TEST

Guidance By
Mr. Bharath
AGRICULTURE FACULTY

www.kingmakersiasacademy.com

APPROACH AND STRATEGY

Our approach is grounded in simplicity, practicality, and precision, enabling aspirants to grasp the true demands of the UPSC examination. By continuously innovating, we ensure that the preparation process remains adaptable and personalized. We tailor our guidance based on each aspirant's core strengths, time availability, access to resources, and the specific expectations of the Civil Services Exam. Through our interactive learning methods—including expert consultations via email and phone—we provide ongoing mentorship that sharpens performance and ensures focused progress in the right direction.

FLEXIBILITY

We also offer our students the flexibility of personalized scheduling, allowing them to reschedule their tests according to their individual study plans for the examination.

SECTIONAL TEST

FULL LENGTH TEST

TOTAL NUMBER OF TEST

4

4

8

FEES : RS. 4000/-

STARTS ON: JUNE 21, 2025

METHODOLOGY




Methodology for evaluation of Answer sheet: Our expert will evaluate aspirant's

EVALUATION INDICATORS
1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

NOTE

- » Question cum answer booklet, approach - answer - analysis of mock test papers will be provided in PDF format For Online students.
- » Supplementary material/Reference material/Support material will be provided in PDF format.
- » Information related test discussions will be notified on telegram Group.

AGRICULTURE TEST SCHEDULE

 Test No.	 Date	 Units and Topics covered
Test 1	June 21,2025	<p>PAPER – I</p> <p>Unit –1 Ecology and its relevance to man, natural resources, their sustainable management and conservation. Physical and social environment as factors of crop distribution and production. Agro ecology; cropping pattern as indicators of environments. Environmental pollution and associated hazards to crops, animals and humans. Climate change – International conventions and global initiatives. Green house effect and global warming. Advance tools for ecosystem analysis – Remote sensing (RS) and Geographic Information Systems (GIS).</p> <p>Unit –2 Cropping patterns in different agro-climatic zones of the country. Impact of highyielding and short-duration varieties on shifts in cropping patterns. Concepts of various cropping and farming systems. Organic and Precision farming. Package of practices for production of important cereals, pulses, oil seeds, fibres, sugar, commercial and fodder crops.</p> <p>Unit –3 Important features and scope of various types of forestry plantations such as social forestry, agro-forestry, and natural forests. Propagation of forest plants. Forest products. Agro forestry and value addition. Conservation of forest flora and fauna.</p> <p>Unit –4 Weeds, their characteristics, dissemination and association with various crops; their multiplications; cultural, biological, and chemical control of weeds.</p>
Test 2	June 28,2025	<p>PAPER – II</p> <p>Unit –1 Cell structure, function and cell cycle. Synthesis, structure and function of genetic material. Laws of heredity. Chromosome structure, chromosomal aberrations, linkage and cross-over, and their significance in recombination breeding. Polyploidy, euploids and aneuploids. Mutations – and their role in crop improvement. Heritability, sterility and incompatibility, classification and their application in crop improvement. Cytoplasmic inheritance, sex-linked, sex-influenced and sex-limited characters.</p> <p>Unit –2 History of plant breeding. Modes of reproduction, selfing and crossing techniques. Origin, evolution and domestication of crop plants, center of origin, law of homologous series, crop genetic resources conservation and utilization. Application of principles of plant breeding, improvement of crop plants. Molecular markers and their application in plant improvement. Pure-line selection, pedigree, mass and recurrent selections, combining ability, its significance in plant breeding. Heterosis and its exploitation. Somatic hybridization. Breeding for disease and pest resistance. Role of interspecific and intergeneric hybridization. Role of genetic engineering and biotechnology in crop improvement. Genetically modified crop plants.</p>

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Test 3	July 05,2025	<p>PAPER - I</p> <p>Unit -5 Soil- physical, chemical and biological properties. Processes and factors of soil formation. Soils of India. Mineral and organic constituents of soils and their role in maintaining soil productivity. Essential plant nutrients and other beneficial elements in soils and plants. Principles of soil fertility, soil testing and fertilizer recommendations, integrated nutrient management. Biofertilizers. Losses of nitrogen in soil, nitrogen-use efficiency in submerged rice soils, nitrogen fixation in soils. Efficient phosphorus and potassium use. Problem soils and their reclamation. Soil factors affecting greenhouse gas emission.</p> <p>Unit -6 Soil conservation, integrated watershed management. Soil erosion and its management. Dry land agriculture and its problems. Technology for stabilizing agriculture production in rain fed areas. Water-use efficiency in relation to crop production, criteria for scheduling irrigations, 2 ways and means of reducing runoff losses of irrigation water. Rainwater harvesting. Drip and sprinkler irrigation. Drainage of waterlogged soils, quality of irrigation water, effect of industrial effluents on soil and water pollution. Irrigation projects in India.</p> <p>Unit -7 Farm management, scope, importance and characteristics, farm planning. Optimum resource use and budgeting. Economics of different types of farming systems. Marketing management - strategies for development, market intelligence. Price fluctuations and their cost; role of cooperatives in agricultural economy; types and systems of farming and factors affecting them. Agricultural price policy. Crop Insurance.</p> <p>Unit -8 Agricultural extension, its importance and role, methods of evaluation of extension programmes, socio-economic survey and status of big, small and marginal farmers and landless agricultural labourers. Training programmes for extension workers. Role of Krishi Vigyan Kendra's (KVK) in dissemination of Agricultural technologies. Non Government Organization (NGO) and self-help group approach for rural development.</p>

Test 4	July 12,2025	PAPER – II Unit –5 Enzymes and plant pigments; photosynthesis- modern concepts and factors affecting the process, aerobic and anaerobic respiration; C3, C4 and CAM mechanisms. Carbohydrate, protein and fat metabolism. Growth and development; photoperiodism and vernalization. Plant growth substances and their role in crop production. Physiology of seed development and germination; dormancy. Stress physiology – draught, salt and water stress. Unit –6 Major fruits, plantation crops, vegetables, spices and flower crops. Package practices of major horticultural crops. Protected cultivation and high tech horticulture. Post harvest technology and value addition of fruits and vegetables. Landscaping and commercial floriculture. Medicinal and aromatic plants. Role of fruits and vegetables in human nutrition. Unit –7 Diagnosis of pests and diseases of field crops, vegetables, orchard and plantation crops and their economic importance. Classification of pests and diseases and their management. Integrated pest and disease management. Storage pests and their management. Biological control of pests and diseases. Epidemiology and forecasting of major crop pests and diseases. Plant quarantine measures. Pesticides, their formulation and modes of action. Unit –8 Food production and consumption trends in India. Food security and growing population – vision 2020. Reasons for grain surplus. National and international food policies. Production, procurement, distribution constraints. Availability of food grains, per capita expenditure on food. Trends in poverty, Public Distribution System and Below Poverty Line population, Targeted Public Distribution System (PDS), policy implementation in context to globalization. Processing constraints. Relation of food production to National Dietary Guidelines and food consumption pattern. Food based dietary approaches to eliminate hunger. Nutrient deficiency – Micro nutrient deficiency : Protein Energy Malnutrition or Protein Calorie Malnutrition (PEM or PCM), Micro nutrient deficiency and HRD in context of work capacity of women and children. Food grain productivity and food security.
Test 5	July 19,2025	Complete Syllabus of Agriculture Paper I (Full Length Test)
Test 6	July 26,2025	Complete Syllabus of Agriculture Paper II (Full Length Test)
Test 7	August 02,2025	Complete Syllabus of Agriculture Paper I (Full Length Test)
Test 8	August 02,2025	Complete Syllabus of Agriculture Paper II (Full Length Test)