



**SHANKAR
IAS ACADEMY™**
Best Academy for Civil Services Exam Coaching

2026 TEST BATCH FOR AGRICULTURE OPTIONAL



**Test Starts
from
02.07.2025**

R. KANAGARAJ
Faculty, Agriculture

Shankar IAS Academy
Experience - 9 years, UPSC Interview - 5
(IAS - 3 times and IFS - 2 times)



*Carefully designed test schedule to achieve **300+**
in the Optional paper.*



- ✓ 8 Sectional test, 2 revision test and 4 full mock Tests.
- ✓ 75% of the questions reflected in CSE 2024.
- ✓ Detailed Answers key
- ✓ Toppers' Answer copy
- ✓ All India highest scores
- ✓ Personal mentoring by Kanagaraj sir

Online / Offline



86374 97447

Some of our successful candidates



AIR
24

Nila Bharathi
(IFoS 2024)



AIR
37

Sumant
(IFoS 2024)



AIR
69

Lochan Bopanna
(IFoS 2024)



AIR
88

Bibisha
(IFoS 2024)



AIR
125

Saranya
(CSE 2024)



AIR
192

Apsara
(CSE 2024)



AIR
304

Pushparaj
(CSE 2024)



AIR
407

Hariprasath
(CSE 2024)



AIR
546

Kavinmozhi
(CSE 2024)



AIR
726

Mohanapourani
(CSE 2024)



AIR
122

Vinay Sunil Patil
(CSE 2023)



AIR
560

Shubam Pawar
(CSE 2023)



AIR
573

Devi Priya Ajith
(CSE 2022)



AIR
689

Ramakrishna Saran
(CSE 2022)



AIR
42

Swathi Sree T
(CSE 2021)



AIR
20

Rahul Gowda
(IFoS 2023)



AIR
33

Sowmya R A
(IFoS 2023)



AIR
100

WALE AKSHAY POPAT
(IFoS 2023)



AIR
107

Aseem
(IFoS 2023)



AIR
38

Kaaviya
(IFoS 2021)



AIR
56

Menaga
(IFoS 2021)



AIR
77

Valli
(IFoS 2021)

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AGRICULTURE TEST SCHEDULE 2026

Test No	Date	Detailed Syllabus	Reference Books
1.	02.07.2025	<p>Ecology and Environment, Cropping System and Forestry</p> <ul style="list-style-type: none"> 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. Greenhouse effect and global warming. Advance tools for ecosystem analysis—Remote Sensing (RS) and Geographic Information Systems (GIS). <p>Cropping System</p> <ul style="list-style-type: none"> Cropping patterns in different agro-climatic zones of the country. 	<p>Agriculture Optional Material by R.Kanagaraj</p> <p style="text-align: center;">Or</p> <ul style="list-style-type: none"> Ecology and Environment - P.D.Sharma NCERT – 12th Biology Chapter Ecology



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		<ul style="list-style-type: none">▪ Impact of high-yielding 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>Forestry</p> <ul style="list-style-type: none">▪ Important features and scope of various types of forestry plantations such as social forestry, agroforestry, and natural forests.▪ Propagation of forest plants.▪ Forest products. Agroforestry and value addition.▪ Conservation of forest flora and fauna.	<ul style="list-style-type: none">▪ Agritech portal by TNAU▪ Principles of Agronomy – Yellamandha Reddy
2.	16.07.2025	<p>Cell Biology, Genetics and Plant Biotechnology</p> <ul style="list-style-type: none">▪ Cell structure, function and cell cycle.▪ Synthesis, structure and function of genetic material.▪ Laws of heredity.▪ Chromosome structure, chromosomal aberrations.	<p>Agriculture Optional Material by R.Kanagaraj</p> <p>Or</p>



		<ul style="list-style-type: none"> ▪ Linkage and cross-over, and their significance in recombination breeding. ▪ Polyploidy, euploids and aneuploids. ▪ Mutation 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. ▪ Role of genetic engineering and biotechnology in crop improvement <p>Genetically modified crop plants.</p>	<ul style="list-style-type: none"> ▪ Fundamentals of Genetics – B.D. Singh ▪ Plant Breeding Principles and Methods – B.D.Singh
3.	30.07.2025	<p>Weed Science and Irrigation Management</p> <ul style="list-style-type: none"> ▪ Weeds, their characteristics, dissemination and association with various crops; their multiplications; ▪ Cultural, biological, and chemical control of weeds. <p>Irrigation Management</p> <ul style="list-style-type: none"> ▪ Water-use efficiency in relation to crop production, ▪ Criteria for scheduling irrigations, 	<p>Agriculture Optional</p> <p>Material by R.Kanagaraj</p> <p>Or</p> <ul style="list-style-type: none"> ▪ Agritech portal by TNAU ▪ Principles of Agronomy – Yellamandha Reddy



		<ul style="list-style-type: none"> Ways and means of reducing run-off losses of irrigation water. Rainwater harvesting. Drip and sprinkler irrigation. Drainage of water-logged soils, Quality of irrigation water, Effect of industrial effluents on soil and water pollution. Irrigation projects in India. 	<ul style="list-style-type: none"> ICAR – E-courses Agriculture website
4.	13.08.2025	<p>Plant Breeding and Seed Technology</p> <ul style="list-style-type: none"> History of plant breeding. Modes of reproduction, Selfing and crossing techniques. Origin, evolution and domestication of crop plants, Centre 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. 	<p>Agriculture Optional Material by R.Kanagaraj</p> <p>Or</p> <ul style="list-style-type: none"> Fundamentals of Genetics – B.D. Singh Plant Breeding Principles and Methods – B.D.Singh Seed Technology – R.L.Agarwal



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		<ul style="list-style-type: none">▪ Heterosis and its exploitation.▪ Somatic hybridization.▪ Breeding for disease and pest resistance.▪ Role of interspecific and intergeneric hybridization <p>Seed Technology</p> <ul style="list-style-type: none">▪ Seed production and processing technologies.▪ Seed certification, Seed testing and storage.▪ DNA finger printing and seed registration.▪ Role of public and private sectors in seed production, and marketing.▪ Intellectual Property Rights (IPR) issues▪ WTO issues and its impact on Agriculture.	
5.	28.08.2025	Revision Test I - Ecology and Environment, Cropping System, Forestry, Weed Science and Irrigation Management	

6.	10.09.2025	<p>Soil Science, Nutrient Management, Soil and Water Conservation and Dryland Agriculture</p> <ul style="list-style-type: none"> ▪ 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 <p>Nutrient Management</p> <ul style="list-style-type: none"> ▪ Essential plant nutrients and other beneficial elements in soils and plants. ▪ Principles of soil fertility, soil testing and fertiliser 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. 	<p>Agriculture Optional</p> <p>Material by R.Kanagaraj</p> <p>Or</p> <ul style="list-style-type: none"> ▪ Principles of Agronomy – Yellamandha Reddy ▪ Introductory Soil Science – Dilip Kumar Das
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		<ul style="list-style-type: none"> ▪ Soil factors affecting greenhouse gas emission. <p>Soil and Water Conservation and Dryland Agriculture</p> <ul style="list-style-type: none"> ▪ Soil conservation, integrated watershed management. ▪ Soil erosion and its management. ▪ Dry land agriculture and its problems. ▪ Technology for stabilising agriculture production in rainfed areas. 	
7.	24.09.2025	<p>Plant Physiology and Horticulture</p> <ul style="list-style-type: none"> ▪ Principles of Plant Physiology with reference to plant nutrition, absorption, translocation and metabolism of nutrients. ▪ Soil-water-plant relationship. ▪ 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. 	<p>Agriculture Optional Material by R.Kanagaraj</p> <p>Or</p> <p>Fundamentals of Plant Physiology – V.K.Jain Hand book of Horticulture - ICAR</p>

		<ul style="list-style-type: none"> ▪ Physiology of seed development and germination; dormancy. ▪ Stress physiology—drought, salt and water stress. <p>Horticulture</p> <ul style="list-style-type: none"> ▪ 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. 	
8.	08.10.2025	<p>Farm Management, Agricultural Economy and Agricultural Extension</p> <ul style="list-style-type: none"> ▪ 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 co-operatives in agricultural economy; 	<p>Agriculture Optional</p> <p>Material by R.Kanagaraj</p> <p>Or</p> <ul style="list-style-type: none"> • Economics of Farm Production and Management – VT Raju



		<ul style="list-style-type: none"> Types and systems of farming and factors affecting them. Agricultural price policy. Crop Insurance. <p>Agricultural Extension</p> <ul style="list-style-type: none"> 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 Organisation (NGO) and self-help group approach for rural development. 	<ul style="list-style-type: none"> Hand Book of Agricultural Extension – ICAR ICAR – E-courses Agriculture website
9.	29.10.2025	<p>Revision Test II - Cell Biology, Genetics, Plant Biotechnology</p> <p>Plant Breeding, Seed Technology and Plant Physiology</p>	
10.	12.11.2025	<p>Entomology, Pathology, Food Production, Food Security and Nutrition</p> <ul style="list-style-type: none"> Diagnosis of pests and diseases of field crops, vegetables, orchard and plantation crops and their economic importance. 	<p>Agriculture Optional Material by R.Kanagaraj</p>

	<ul style="list-style-type: none"> ▪ Classification of pests and diseases and their management. ▪ Integrated pest and diseases 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. <p>Food Security</p> <p>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 – Micronutrient 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.</p>	<p>Or</p> <ul style="list-style-type: none"> • Plant Pathology – R.S.Mehrotra • Elements of Economic Entomology – Vasantharaj David • ICAR – E-courses Agriculture website • Agritech Portal by TNAU
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11.	26.11.2025	Full Mock Test-I Fore Noon - Paper I After Noon – Paper II	
12.	03.12.2025	Full Mock Test-II Fore Noon - Paper I After Noon – Paper II	

Fee : ***New Students – Rs.9000/-***
Old Students – Rs.7500/-