

AgriToppers Classes

-be the Next Topper

www.agritoppers.com

AIEEA-PGS JRF (Junior Research Fellowship) Coaching Program: Starting at 8th March, 2020

Total Package includes: (What you will get)

Expert support:

Telephonic discussion/ Whatsapp interaction with IARI toppers. The whole program will be guided by free service from IARI scholars. Free guidance is supplementary free service without adding any further cost.

- 1. JRF study planner for JRF 2020
- 2. Topic wise video lectures (Complete JRF syllabus of selected subject group)
- 3. Class notes of IARI Toppers
- 4. Test series with detailed analysis (Sectional + Full set)

General agriculture package will include:

- 5. General Agriculture Video lectures
- 6. General Agriculture Notes
- 7. General Agriculture Test series

Program Objective: The basic purpose of the program is to provide all-round guidance, notes & test in as an 'interactive' platform through both <u>www.agritoppers.com</u> website and telephonic personal contact to the JRF aspirants across India for 2020. We will provide step by step guidance to aspirants for understanding the basic concepts of both Subjects and General Agriculture for scoring good rank and securing Junior Research Fellowship.





Approach & Strategy: We will follow each student specific simple, practical and point based approach so that each and every student's doubt is cleared and he/she gets the clear understanding. Our student's specific strategy and interactive guidance by previous years' JRF toppers (Telephonic Discussion and Whatsapp interaction: Experts with Aspirants) will continuously help in development of better understanding of subject and direct their preparation to the right direction.

COURSE FEE: Rs. 7999/ (inclusive of all taxes) (Offer Price: Rs. 3999/ + General Agriculture Package worth Rs. 1499/ is exclusively FREE [inclusive of all taxes])

Login ID: Login ID for aspirants for AgriToppers portal (<u>www.agritoppers.com</u>) will be provided to access video lectures, toppers notes and other digital materials anywhere, any time.

Mode of Dispatch: Postal dispatch (AgriTopper's Series: General Agriculture) + Non downloadable video lectures [Website based: www.agritoppers.com] + Test series [Website based: www.agritoppers.com] + Telephonic / Whatsapp interaction.

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- Fee once paid in non-refundable and non-transferable in all circumstances.
- AgriToppers Classes reserves all rights to make any changes in coaching program/ schedule and timing etc., if need is felt.





PLANT BIOTECHNOLOGY

Schedule, Content & Syllabus

Lecture number	Lecture Topic	Major Topic	Suggested reading list
0	Introduction, suggested reading list, approaches	Introduction	-
1	Recombinant DNA technology (Part 1- Enzymes)		 Gene cloning & DNA analysis- T.A. Brown
2	Recombinant DNA technology (Part 2- Linker & Adapter, Vector)		 Plant Biotechnology- Slater
3	Recombinant DNA technology (Part 3- Transgenics)		
4	Recombinant DNA technology (Part 4- Application of Transgenics, Gene revolution & GURT technology)	Plant Biotechnology	
5	Tissue culture and Molecular markers (Part 1- Concepts, Suspension culture, Single cell culture)		1. An expanding Horizon- B.D. Singh
6	Tissue culture and Molecular markers (Part 2- Micropropagation, Somaclonal variation, Protoplast culture)		





7	Tissue culture and Molecular markers (Part 3- Somatic embryogenesis, Anther culture, Artificial seed production, Germplasm conservation & secondary metabolite) Tissue culture and Molecular markers (Part 4- Molecular markers) DNA replication (Prokaryotes & Eukaryotes)		2. Genetics: B.D. Singh
9	Transcription	Plant Biotechnology	3. Bios Instant Biochemistry:
	Post transcriptional modification (Basic concepts, Capping,	5	Hames & Hooper
11	Splicing, Tailing & RNA editing)		
12	Translation (Basic concepts and process)		
13	Operon (lac & trp operon)		
14	Basic techniques in biotechnology	Biochemistry	 Techniques of Biophysics & Molecular Biology: Pranav Kumar
14	Photosynthesis (Part 1- Chlorophyll, Pigments, Light		1. Plant Physiology: V K Jain
15	reaction, C3, C4, CAM & P2 cycle)	Plant Physiology	/ Pandey & Sinha (Any one
16	Photosynthesis (Part 2- Dark reaction [C3, C4, CAM & C2 cycle], Light & Carbon dioxide compensation point)		book)





17	Nitrate assimilation	6	
18	Biological nitrogen fixation and Nitrogen cycle		0
19	Enzymology (Part 1- Properties & Classification	S	1. Bios Instant Biochemistry:
20	Enzymology (Part 2- Kinetics, Inhibition & Regulation)	200	Hames & Hooper2. Fundamentals of
	Lipid metabolism (Part 1- Basic concepts, Types, Beta,		Biochemistry: J L Jain
21	Omega and Alpha oxidation)		
22	Lipid metabolism (Part 2- Fatty acid synthesis)		
	Carbohydrate metabolism (Part 1- Monosaccharides,	Biochemistry	
23	Disaccharides & Poly saccharides)	Dioenennistry	
	Carbohydrate metabolism (Part 2- Glycolysis &		
24	Gluconeogenesis)		
	Carbohydrate metabolism (Part 3- Pentose phosphate		
25	pathway, Glyoxylate cycle & TCA)		
	Carbohydrate metabolism (Part 4- Electron transport system,		
26	Glycogen metabolism etc.		





				1. Plant Physiology: V K Jain
				/ Pandey & Sinha (Any one
	27	Physiology- hormones, vernalization and photoperiodism	Plant Physiology	book)
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- Follow AgriTopper's Classes time manager schedule for timely completion of syllabus, revision and appearing test in **TARGET program 2020**.
- + Raise your queries and doubts. In each doubt clearing session each individual query will be cleared by experts.
- Read AgriTopper's Classes toppers notes, marked books very thoroughly after going through video lectures for proper understanding and conceptual build up.

Contact us:		~Online Coaching~
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