Question Booklet Alpha Code



Total Number of Questions : 100

Time : 90 Minutes

Question Booklet SI. No.

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

- 1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A**, **B**, **C** & **D**.
- 2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
- 3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
- 4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
- 5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.
- 6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
- 7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
- 8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.
- 9. Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.
- 10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
- 11. Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.
- 12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
- 13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

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		ble for ratoon cropping B) Groundnut		Coconut	D) Tapioca
/	Pick out bulky organic A) Bone meal C) Groundnut cake	c manure from the fol	B)	ing : Vermicompost None of the abov	
i	Acidic soils can be re i. Ground limestone iii. Gypsum A) i, ii and iv		iv.	Burnt lime Hydrated lime ii, iii and iv	D) i, iii and iv
0	Which of the following district ? A) Red loam C) Laterite	g soil is an alkaline sc	B)	ound in Chittur area Black cotton soil Brown hydromor	
k	Calculate the quantity palms under average A) 64 kg	/ of urea required for management. B) 84 kg		numbers of 25 ye 94 kg	ars old coconut D) 74 kg
	-	c bacteria used as bic B) Azospirillum		ilizer in leguminou Azolla	s plants. D) Rhizobium
/	Which of the following A) Disc harrow C) Cultivator	g is a primary tillage i	B)	ement ? Wooden plough None of the abov	re
i	Which of the following i. Mixed cropping iii. Bench terracing A) i and iii	g are agronomic mea B) ii and iv	ii. iv.	es of water conser Contour bunding Cover cropping i and iv	vation ? D) i, ii and iv
9		e material that is used e wind and water eros	sion B)		

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- 10. Growing different types of crops with different spatial orientation and height on same piece of land at same time is known as
 - A) Intercropping B) Strip cropping
 - C) Contour farming D) None of the above
- 11. Which of the following statements is/are correct about agricultural seasons of Kerala ?
 - i. There are three main agricultural seasons in Kerala.
 - ii. Virippu is the first crop season and is from April-May to September-October.
 - iii. Mundakan season is from December-January to March-April.
 - iv. Punja season coincides with South West Monsoon.
 - A) Only i and iii B) Only i and iv
 - C) Only i and ii D) All the above
- 12. What is the approximate concentration of Carbon dioxide in the Earth's atmosphere expressed in ppm ?
 - A) 200-250 ppm B) 350-450 ppm
 - C) 450-500 ppm D) 550-600 ppm
- 13. Which of the gases has the highest Global Warming Potential (GWP) over a hundred year time frame ?
 - A) Carbon dioxide (CO₂) B) Nitrous Oxide (NO₂)
 - C) Methane (CH_4) D) Sulphur Hexafluoride (SF_6)
- 14. What is the name of the International agreement aimed at limiting Global Warming to a well below 2°C above pre-industrial level and pursuing efforts to limit it to 1.5°C?
 - A) Kyoto protocol B) Paris agreement
 - C) Copenhagen accord D) Lima declaration
- 15. Which is the instrument used to measure the amount of solar energy received by the Earth's surface ?
 - A) CeilometerB) PyranometerC) LuxmeterD) Badiacondo
 - C) Luxmeter D) Radiosonde

- 16. Which of the following statements is correct regarding the Kissan Credit Card (KCC) scheme implemented by NABARD ?
 - i. Collateral free credit up to 5 lakh.
 - ii. Interest rate 4% per annum.
 - iii. Repayment period of 5 years.
 - iv. Regional Rural Banks are also involved in implementing KCC schemes.
 - A) Only i and iii B) Only ii and iv
 - C) Only i and ii D) Only iii and iv
- 17. What is the primary objective of the AGMARK certification mark in India ?
 - A) To promote the export of agricultural products
 - B) To ensure the quality of agricultural products
 - C) To regulate the price of agricultural products
 - D) All the above
- 18. Which of the following statements about State Warehousing Corporation is/are correct ?
 - i. Only agricultural commodities notified by the Government are accepted for storage in a warehouse.
 - ii. The warehousing scheme enables the agriculturists to get a better price for their produce.
 - iii. The idea behind the whole warehousing scheme is to give scientific storage to the agricultural produce.
 - iv. A warehouse receipt incorporating the quality, market value and particulars of insurance will be issued to the depositors.
 - A) Only iii and iv are correct B) Only i and ii are correct
 - C) Only ii, iii and iv are correct D) All statements are correct
- 19. Which is the lead agency for implementing e NAM (National Agricultural Market) under the aegis of Ministry of Agriculture and Farmers Welfare, Govt. of India ?
 - A) Food Corporation of India (FCI)
 - B) Small Farmers Agri Business Consortium (SFAC)
 - C) Commission for Agriculture Costs and Prices (CACP)
 - D) National Agricultural Cooperative Marketing Federation (NAFED)

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20.	What is the term used an increase in the getA) InflationC) Stagflation		ods B)			-
21.	Hydrosphere account	ts for perc	ent	of the earth's mas	ss.	
	A) 6.91	B) 71.3	C)	15.2	D)	25.8
22.	Most abundant miner		\sim	Foldonor	וח	Durito
	A) Malachite	B) Tourmaline	C)	reiuspai	U)	Pyrite
23.	 Which of the following i. A = Soil loss per u R = Rainfall factor ii. A = Soil loss per u K = Soil erodibility iii. L = Slope length factor A) Only i and ii 	init area init area factor		al soil loss equatic Only i and iii	n A	= RKLSCP ?
	C) Only ii and iii		,	All of the above (i, ii a	and iii)
24.	Kerala is divided into	agroecolo	gica	al zones.		
	A) 3	B) 5	C)		D)	10
25.	Neutralising value of A) 179	CaCO ₃ is B) 197	C)	100	D)	136
26.	Which of the following i. Sandstone-Quartz ii. Shale-slate iii. Limestone-Marble iv. Granite-Gneiss A) i only	zite		i and iii	D)	All the above
27.	Biofertilizer recomme A) Rhizobium C) VAM	nded for wetland rice	B)	tivation. Azolla Azotobacter		

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28.	Who is known as Fat A) Dokuchev		C) I	Hillgard	D)	Liebig
29.	Which of the following A) Basin listing C) Zero tillage	g is an agronomic me	B) \$	es of soil and wat Subsoiling Contour bunding	er c	onservation ?
30.	Name the application easy calculation of th A) KAU FERTULATO C) NPK FERTILISER	e fertilizers OR	B)	erala Agricultural FERTILISER CAI FERTISOLVER		-
31.	The amount of lime r A) 250 kg	equired for cultivating B) 240 kg		in an area of 1 ac 300 kg		700 kg
32.	IPDM (Integrated PerA) Chemical methodC) Biological method	S	B)	ent) includes Physical methods All the above	6	
33.	Which of the following companion crop with A) PTB – 1	•				n as a Pournami
34.	Red rot disease in Su A) Infected setts C) Both infected sett		B)	Flowing water		
35.	Which of the followin A) Bhagya	g is not a biopesticide B) Nanma		eloped from Tapio Menma		? Shreya
36.	, , , , ,	Cl followed by hot wa ${}_{2}SO_{4}$ followed by hot ter	ter tre	eatment	eatı	ment is

37.	37. The nursery area required for producing minisetts for planting one hectare area Tapioca								
	A) one acre	B) 220 m ²	C) 500) m ²	D) 400 m ²				
38.	If the recommended I then how many kilogr potato ?								
	A) 163 kg	B) 200 kg	C) 204	1 kg	D) 150 kg				
39. Name the system of Rice cultivation where a mixture of se and photosensitive variety of rice in 70 : 30 proportion is s					•				
	A) Pokkali		,	B) Onattukara					
	C) Kaipad		D) Kut	ttumundakan					
40.	Which of the followingA) Also known as eleB) It grows throughoutC) It can be intercropD) Also known as but	ephant grass ut the year in tropics ped with legumes	rect abo	out Hybrid Nap	ier grass ?				
41.	The recommended set A) 450 gha	eed rate for Tomato B) 500 gha	C) 400) gha	D) 350 gha				
42.	Apricot is a variety of A) Vanilla	B) Marigold	C) Car	rrot	D) Garlic				
43.	For inducement of un ethephon used to pre A) 2.5 ppm	• •	•••	·	D) 25 ppm				
44.	Commonly used surfa A) Sodium hydrochlo C) Magnesium hypoo	orite	B) Pot	n tissue culture tassium hypoc lcium hypochlo	hlorite				
45.	The tolerable level of A) 10% – 20% C) 40% – 50%	light in the tropical re	B) 30%	the better grov % – 40% % – 30%	wth of Anthurium				

46. Oozing out of a vis the holes in coconA) Coreid bugC) Red Palm Wee	ut trees is characteristi	•	etle		
 A) 50 : 50 : 150 N B) 50 : 150 : 150 N C) 50 : 50 : 50 N : 	7. The general recommendation of nutrient dosage for pepper A) 50 : 50 : 150 N : P_2O_5 : K_2O g/vine/year B) 50 : 150 : 150 N : P_2O_5 : K_2O g/vine/year C) 50 : 50 N : P_2O_5 : K_2O g/vine/year D) 150 : 150 : 150 N : P_2O_5 : K_2O g/vine/year				
48. The recommend s A) 2m × 2m	bacing for cucumber B) 2m × 1.5m	C) 1.5m × 2m	D) 1.5m × 1.5m		
49. The most commonA) Simple LayeringC) Compound Lay	g	n in Guava B) Trench Layeriı D) Air Layering	ng		
50. Queen of Spices A) Pepper	B) Clove	C) Cardamom	D) Cinnamon		
51. The process of bre make it permeableA) ScarificationC) Dormancy	aking, scratching alter to water and grasses	ing or softening the s B) Stratification D) Imbibition	seed covering to		
52. Yield potential of B A) 50-100 q/hac C) 150-200 q/hac	ittergourd	B) 100-140 q/hac D) 200-250 q/hac			
53. CTC in Tea refers A) Cut Tear and C C) Curl Tear and C	url	B) Cut Tear and (D) Crush Tear an			
54. Mohitnagar is varie A) Coconut	ety of B) Arecanut	C) Oil Palm	D) Cocoa		
55. The rain shelter va A) Akshaya	riety of Tomato B) Adithya	C) Ananya	D) Anjana		

- 56. Which of the following statements is/are not true about C_4 plants ?
 - i. They are more efficient in photosynthesis.
 - ii. The leaves of such plants have Kranz anatomy.
 - iii. Oats and Rye are examples for plants having C₄ pathway.
 - A) Only i and ii B) Only iii
 - C) Only i and iii D) Only ii
- 57. Which of the following statements is/are true about Ethylene ?
 - i. It induces cell elongation.
 - ii. It is used for synchronising fruit set in pineapple.
 - iii. It is highly effective in hastening fruit ripening.
 - A) Only i and ii B) Only ii and iii
 - C) Only i and iii D) All are correct
- 58. Which of the following statements is/are false ?
 - A) Pollen release and stigma receptivity are synchronized in some plants to encourage cross pollination
 - B) Maize is monoecious
 - C) Continued self pollination may result in Inbreeding Depression
 - D) Dioecy prevents both Autogamy and Geitonogamy
- 59. Which of the following statements is/are true about Artificial Hybridisation ?
 - i. It is one of the major approaches of crop improvement program.
 - ii. If the female parent produces bisexual flowers emasculation is not needed.
 - iii. Emasculation and bagging help to protect from pollen contamination.
 - A) Only i and ii B) Only ii and iii
 - C) Only i and iii D) All are correct
- 60. Which novel strategy was adopted to prevent the infestation of Nematode, *Meloidogyne incognita* on the roots of tobacco plants ?
 - A) Recombinant DNA technology
- B) RNA interference (RNAi)
- C) Artificial Hybridisation D) Polymerase Chain Reaction (PCR)

61. Which of the following statements is/are true about Human Genome Project (HGP) ?

- i. It was a 13 year long project, started in 1990.
- ii. A major goal of the project was to identify all the approximately 20000-25000 genes in human DNA.
- iii. Bioinformatics was extensively used in this project.
- A) Only i and ii B) Only i
- C) Only ii and iii D) All the above

62. Poor availability of ______ and accumulation of high concentration of ______ around the roots can be a possible reason of flood injury in plants.

A) O_2, CO_2 B) CO_2, O_2 C) CO_2, N D) CI, CO_2

63. Which of the following statements is/are true about NBPGR ?

- i. It is the nodal organization in India for management of plant genetic resources.
- ii. NBPGR is the abbreviation of National Board for Plant Genetic Resources.
- iii. It has a regional station at Thrissur, Kerala.
- A) Only i and ii B) Only ii and iii
- C) Only i and iii D) All are correct

64. Part of soil water that is held very tightly and is not available to the plant roots is called

- A) Gravitational water B) Capillary water
- C) Hygroscopic water D) None of the above
- 65. Loss or exudation of water as liquid droplets from leaves or other uninjured parts of a plant is called
 - A) Evaporation B) Transpiration C) Osmosis D) Guttation

66. Which of the following is an example of Insecticide ?

- A) Acephate B) Benomyl
- C) Carbendazim D) Mancozeb
- 67. Bio-agent for controlling *Parthenium hysterophorus*
 - A) Bactra verutana B) Zygogramma bicolorata
 - C) *Chrysolira* D) Flea beetle

68.	Silver shoot is caused A) Gall midge C) Thrips	d by	,	Gundhi bug Aphid	
69.	Roundup herbicide is A) Butachlor	the trade name of B) Oxyfluorfen	C)	2, 4-D	D) Glyphosate
70.	A perennial weed tha A) <i>Lantana camera</i> C) <i>Mikania micrantha</i>		B)	rhizomes Cynodon dactylo Echinochloa colo	
71.	A mycoherbicide is A) Bt C) NPV		,	Collego Zygogramma	
72.	Khaira disease of pao A) Boron deficiency C) Calcium deficienc	-	B)	cy of Zinc deficiency Magnesium defic	ciency
73.	Which among the foll A) Pleurotus sps. C) Calocybe sps.	owing is not an edible	B)	ushroom ? Volvariella sps. Amanita sps.	
74.	Which one among the A) Rhizobium C) Acetobacter	e following does not fi	B)	itrogen ? Trichoderma Azospirillum	
75.	Black heart is a physic A) Tomato	iological disorder of B) Chilli	C)	Potato	D) Cabbage
76.	Striga is included in A) Fungi C) Phanerogamic pla	ant parasite		Mycoplasma like Bacteria	organisms
77.	Muscardine disease (A) <i>Bombyx mori Der</i> C) <i>Beauveria bassia</i>	nsonucleosis	B)	<i>Bacillus thuringie</i> None of these	ensis
78.	A Copper based fung A) Fytolan 50W C) Dithane M-45	icide is	,	Zineb 75 Captan 75% WP	
Α		-12			

79. Forewings of bugsA) ElytraC) Halteres	s is called	,	Membraneous Hemelytra	
80. The lowest popula A) GEP	tion density that will caus B) ETL		conomic damage DB	is known as D) EIL
81. Only larva can cauA) Red flour beetlC) Khapra beetle	use damage in the case o e	B)	Rice weevil Rice moth	
82. Which of the followA) Zinc ChlorideC) Zinc Phosphide	ving is used as Rodentici e	B)	? Zinc Sulphide Zinc Bromide	
83. The parasitoid that KeralaA) Acerophagus sC) Trichogramma	•	B)	e Papaya Mealy b Trichopoda sps. Anagyrus sps.	ug population in
 84. Which among the i. Stirring and Pu ii. Aerating and L iii. Remove Weed A) Only i and ii C) All of the above 	oosening soil. Is.	B)	Cultivators ? Only iii Only ii	
i. It cuts a 'V' Sha ii. It turns furrow	t statement with regard to aped furrow and opens th slice to one side with a so pans in soil with less dist	ne s coop urba B)	oil but there is no bing action.	ers.
86. Any sprayer whichA) Rocker sprayeC) Knapsack spra		B)	operator is called Power sprayer Hand sprayer	

- 87. A hydrothermal treatment to unhulled rice to obtain gelatinized rice.
 - A) Parboiling B) Milling
 - C) Cleaning and Hulling D) Polishing

88. Which of the following are green house gases causing Global Warming ?

- i. Carbon dioxide
- ii. Methane
- iii. Nitrous Oxide

C) Only i and iii

A) Only i

- B) Only i and ii
- D) All of the above (i, ii and iii)

89. Which Internal combustion engine uses spark ignition ?

- i. Petrol Engine
- ii. Diesel Engine
- A) Only i
- C) All of the above (i and ii)
- B) Only ii
- D) None of the above
- 90. The Photo Voltaic Cell (PV Cell) is used for converting.
 - A) Solar energy to electrical energy
 - B) Solar energy to chemical energy
 - C) Chemical energy to electrical energy
 - D) Electrical energy to light
- 91. Which among the following is not an advantage of drip irrigation system ?
 - A) Suitable for irrigating crops where plant population per unit area is very high
 - B) Less weed growth
 - C) Loss of water through evaporation and seepage is reduced
 - D) Suitable for areas where water is scarce

92. Application of pesticides through irrigation water

- A) Fertigation
- C) Irrigation

- B) Chemigation
- D) All of the above

D) Grain formation

- 93. Critical stages for irrigation of Rice
 - A) Preflowering stage

- B) Boot stage and dough stage
- C) Initial tillering and flowering
- ,

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- 94. Communication through TV is an example for
 - A) Interpersonal Communication

C) Group Communication

B) Mass Communication D) Intrapersonal Communication

B) Only ii and iii

- 95. Approaches used for transfer of technology
 - i. Consultancy
 - ii. Promotional
 - iii. Participative
 - A) Only i and ii
 - C) Only i and iii D) All of the above (i, ii and iii)

96. The flow of information initiates from the top level to the bottom in the organization is

- A) Vertical communication
- C) Star communication D) Horizontal communication
- 97. In agricultural extension, farm and home visit is an example for
 - A) Individual contact method
 - C) Mass contact method D) None of the above
- 98. E-extension in agriculture use
 - A) Internet
 - C) Computer based training system
- B) Multimedia Learning system

B) Upward communication

B) Group contact method

- D) All of the above
- Identify incorrect statement regarding agricultural extension.
 - A) Extending scientific knowledge of agriculture to farming community
 - B) Increase efficiency in agricultural production
 - C) It is a formal education system
 - D) Promote community development and rural area development
- 100. Which among the following is a limitation of Audio Visual aid?
 - A) Reduce verbalism
 - C) Speed up the process of learning
- B) Overcome language barrier
- D) Reduce teacher involvement

Space for Rough Work