# DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

**Test Booklet Series** 

# T. B. C. : AAO - 2/22



## TEST BOOKLET

SI. No.

ASSISTANT AGRICULTURE OFFICER
PAPER – II

Time Allowed: 2 Hours

Maximum Marks: 100

### : INSTRUCTIONS TO CANDIDATES :

- IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET OF THE SAME SERIES ISSUED TO YOU.
- 2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D, AS THE CASE MAY BE, IN THE APPROPRIATE PLACE IN THE ANSWER SHEET USING BALL POINT PEN (BLUE OR BLACK).
- 3. You have to enter your Roll No. on the Test Booklet in the Box provided alongside. DO NOT write anything else on the Test Booklet.
- 4. YOU ARE REQUIRED TO FILL UP & DARKEN ROLL NO., TEST BOOKLET / QUESTION BOOKLET SERIES IN THE ANSWER SHEET AS WELL AS FILL UP TEST BOOKLET / QUESTION BOOKLET SERIES AND SERIAL NO. AND ANSWER SHEET SERIAL NO. IN THE ATTENDANCE SHEET CAREFULLY. WRONGLY FILLED UP ANSWER SHEETS ARE LIABLE FOR REJECTION AT THE RISK OF THE CANDIDATE.
- 5. This Test Booklet contains 100 items (questions). Each item (question) comprises four responses (answers). You have to select the correct response (answer) which you want to mark (darken) on the Answer Sheet. In case, you feel that there is more than one correct response (answer), you should mark (darken) the response (answer) which you consider the best. In any case, choose ONLY ONE response (answer) for each item (question).
- You have to mark (darken) all your responses (answers) ONLY on the separate Answer Sheet provided, by using BALL POINT PEN (BLUE OR BLACK). See instructions in the Answer Sheet.
- 7. All items (questions) carry equal marks. All items (questions) are compulsory. Your total marks will depend only on the number of correct responses (answers) marked by you in the Answer Sheet. There shall be negative marking for wrong answers (responses) with a deduction of 0.25 marks for every wrong answer (response).
- 8. Before you proceed to mark (darken) in the Answer Sheet the responses (answers) to various items (questions) in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per the instructions sent to you with your **Admission Certificate**.
- 9. After you have completed filling in all your responses (answers) on the Answer Sheet and after conclusion of the examination, you should hand over to the Invigilator the Answer Sheet issued to you. You are allowed to take with you the candidate's copy / second page of the Answer Sheet along with the **Test Booklet**, after completion of the examination, for your reference.
- 10. Sheets for rough work are appended in the Test Booklet at the end.

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HM - 2A/15 (Turn over)

1.	GIS deals with which kind of data?		(B) 10 nm
	(A) Numeric data		(C) 100 nm
	(B) Binary data		(D) 1000 nm
	(C) Spatial data	197	DA Trestalas
	(D) Complex data	6	Tale Held Between,
2.	By 'spatial data' we mean data that	t	(A) Saturation to wilting point
	has:		(B) Field capacity to hygroscopic
	(A) Complex values		coefficient
	(B) Positional values		(C) Only field capacity
	(C) Graphic values		(D) Field capacity to wilting point
	(D) Decimal values	7.	Mica is a type of clay mineral :
3.	A (geographic) field is a geographic		(A) 1:1
	phenomena for which, for every point in the study area:		(B) 2:1 01 (B)
	(A) A value can be determined		(C) 2:1:1
	(B) A value cannot be determined		(D) None of these
	(C) A value is not relevant	8.	Denitrification is a process of :
	(D) A value is missing		(A) Oxidation
4.	The first talk about nano-technology		(B) Reduction
	was given by :		(C) Hydration
	(A) Albert Einstein		(D) Carbonation
	(B) Newton		Missansia
	(C) Gordon E. Moore	9.	Microorganism involved in conversion
	(D) Richard Feynman		from nitrite to nitrate:
5.	Nano materials are the materials with		(A) Nitrosomonas
	at least one dimension measuring		(B) Nitrobactor
	less than:		(C) Pseudomonas
	(A) 1 nm	4U T.I.	(D) Bacillus Toll 1330 Toll 00
НМ	-2A/15 (	2)	Contd.

10. Most of the soil organism is:	(C) Metamorphic rocks
(A) Psychrophiles	(D) All of these
(B) Mesophiles	15. Red colour of soil is due to
(C) Thermophiles	(A) Hematite
(D) All of these	(B) Geothite
11. Fungi growth optimum in pH:	(C) Glauconite
(A) 2.5 – 4.5	(D) Maghemite
(B) 4.5 – 6.5	
(C) $6.5 - 7.5$	16. Olsen method is used for phosphorus estimation:
(D) 7.5 – 8.5	
12. Improper development of wheat	(A) Acidic soil
inflorescence is due to deficiency of :	(B) Neutral to alkali soil
(A) Molybdenum	(C) Saline soil
(B) Boron	(D) All of these
(C) Calcium	17. Which instrument is used for the
(D) Magnesium	estimation of potash (K)?
	(A) Spectrophotometer
13. Organic matter obtained:	(B) Flamephotometer
(A) OC × 1.724	(C) Colorimeter
(B) OC × 2.24	(D) Atomic absorption
(C) OC × 1.55	
(D) OC × 1.64	18. Base saturation in lateritic soil :
14. Feldspars is primary mineral that	(A) < 40%
occurs pre-dominantly in :	(B) > 40%
(A) Igneous rock	(C) < 20%
(B) Sedimentary rock	(D) > 20%
HM – 2A/15	(3) (Turn over)
and the second second	× ====================================

19.	Maximum N content found in N-	23	. In children, this disease	e is caused due
	fertilizer:		to excess nitrate fertiliz	zers usage :
	(A) Urea		(A) Mumps	
	(B) Anhydrous ammonia		(B) Jaundice	
	(C) Sodium nitrate		(C) Septicemia	
	(D) Ammonium sulphate		(D) Methaemoglobina	aemia
20.	Which fertilizer produce acidity in	24.	Green manure is:	
	soil?		(A) Maize	
	(A) Ammonium sulphate		(B) Rice	
	(B) Sodium nitrate		(C) Sorghum	
	(C) Calcium ammonium nitrate		(D) Sesbania	
	(D) Calcium nitrate	25.	Azolla is used as a bid	ofertilizer as it
21.	Green manure plants are:		possesses:	·(e)
	(A) Poaceae		(A) Humus in large qua	antities
	(B) Solanaceae		(B) Rhizobium	
	(C) Leguminosae	Ä	(C) Mycorrhiza	
	(D) Compositae		(D) Cyanobacteria	
22.	This is not included in organic	26.	Which of the following io	ns is not found
	farming :		in excess in acidic soils	
	(A) Crop rotation		(A) Al	
	(B) Chemical fertilizer		(B) Fe	
	(C) Green manures		(C) Mg	
	(D) Compost and farmyard manures		(D) Cu	Mil Sedime
HM -	-2A/15 (	4)	li m	Contd.
			8	

27.	Which of the following is majorly found	31.	Reclamation is process of removal of
	in acid sulphate soils?		salts from :
	(A) Pyrite		(A) Saline soil
	(B) Copper		(B) Saline sodic soils
	(C) Aluminium		(C) Degraded sodic soils
	(D) Magnesium		(D) Sodic soils
28.	Which of the following substance can	32.	In water logged soil, crops should be
	be used for soil reclamation?		sowing:
	(A) Gypsum		(A) On leveled soil
	(B) Citric acid		(B) On ridges
	(C) Phosphoric acid		(C) On flat top ridges
	(D) Oxalic acid		(D) On round top ridges
	e marionosti e en llega e		In waterlogged soils the aeranchyma
29.	Which of the following in deficient in		formation takes place in :
	saline soils?		(A) Leaves
	(A) Nitrogen		(B) Stem
	(B) Sulphur		(C) Roots
	(C) Oxygen		(D) Shoots
	(D) Calcium	24	In saidie seil in rice eren the alternate
30.	Crops that are grown on acidic		In acidic soil in rice crop the alternate wetting and drying in early growth
to 19	sulphate soils gets destroyed due to		season:
	nutrient deficiency caused due to :		(A) Improve the aeration
	(A) Aluminium toxicity		(B) Reduce the severity of reducing
	(B) Sodium toxicity		condition
			(C) Both (A) and (B)
	(C) Oxygen toxicity		
	(D) Nitrogen toxicity		(D) Save water
HN	1 – 2A/15	(5)	(Turn over)

	(A)	NaCO <sub>3</sub>		(C) 91.63
	(B)	NaHCO <sub>3</sub>		(D) 94.66
	(C)	Both (A) and (B)	40	. The seed viability test is also known
	(D)	CaCl <sub>2</sub>	40	as:
36.	Nuc	cleus seed is produced by :		(A) T-test
	(A)	Breeder seeds		(1) 1 1001
	(B)	Foundation seed		(B) Z-test
	(C)	Plant breeders		(C) Germination test
	(D)	Nucleus seeds		(D) TZ-test
37.	Hea	adquarter of National Seed	41.	Isolation distance is necessary to:
	Cor	poration:		(A) Avoid cross pollination
	(A)	New Delhi		(B) Avoid self pollination
	(B)	Mumbai		(C) Both (A) and (B)
	(C)	Bangalore		(D) None of these
	(D)	Kolkata	42	Test Weight is:
38.	Wha	at is the colour tag of certified	72.	
	see			(A) Weight of 10 seeds
	(A)	White		(B) Weight of 1000 seeds
	(B)	Azure blue		(C) Weight of 100 seeds
	(C)	Golden brown		(D) Weight of 10000 seeds
	(D)	None of these	43.	Who is known as the "Father of
39.	Give	en: Militaria de la servicio della s		Genetics"?
	Puri	ty % of seed = 99.97		(A) Morgan
	Geri	mination % = 91.66		(B) Mendel
	The	n, what will be real value of seed?		(C) Watson
	(A)	92.78		(D) Bateson
НМ	– 2A	/15	)	Contd.

(B) 95.80

35. Sodic soils are generally high in:

	an individual can be determined by:		chromosomes.
	(A) Back cross		(C) It is a cross between Secale
	(B) Self-fertilization		cereale and Tritium vulgare.
	(C) Test cross		(D) None of these
	(D) All of these	49.	Which is the base pair of a DNA
45.	Which term represents a pair of		molecule?
	contrasting characters?		(A) Adenine – Uracil
	(A) Heterozygous		(B) Thymine – Guanine
	(B) Homozygous		(C) Cystine - Guanine
	(C) Codominant genes		(D) Uracil – Guanine
	(D) Allelomorphs	50.	The quickest method of plant breeding
46.	The Origin of Species's is written by:		is:
	(A) Charles Darwin		(A) Introduction
	(B) Mendel		(B) Selection
	(C) Jeoen Bakker		(C) Hybridization
	(D) Meindent Boon		(D) Mutation breeding
47.	The term Genetics was given by:	51.	Desired improved variety of
	(A) Bovery		economically useful crops are raised
, 1, 4,1,	(B) Y. L. Ping		by:
	(C) Suttan		(A) Natural Selection
	(D) Beston		(B) Hybridization
48	. Which is true about triticale ?		(C) Mutation
	(A) It is high degree of fertility.		(D) Biofertilisers
HN	M – 2A/15	(7)	(Turn over)
			54

44. Homozygosity and heterozygosity of (B) It is amphidiploid with 54

52.	Progeny obtained as a result of repeat	56	6. Among the following, which is a C4
	self pollination a cross pollinated crop		Plant?
	to called :		(A) Pineapple
	(A) Pure line		(B) Soybean
	(B) Pedigree line		(C) Corn
	(C) Inbreed line		(D) All of these
	(D) Heterosis		
53.	Crosses between the plants of the	5/	. What is the rate of Photosynthesis in
	same variety are called :		C4 Plants ?
	(A) Inter-specific		(A) Higher
	(B) Inter-varietal		(B) Moderate
	(C) Intra-varietal		(C) Low
	(D) Inter-generic		(D) Very low
54.	What is the End Product of the Calvin	58	Among the following, which Acid is a
	Cycle?		derivative of Carotenoids?
	(A) PGA		(A) Gibberellic acid
	(B) ADP + NADP		(B) Indole butyric acid
	(C) RuBP		(C) Indole-3-acetic acid
	(D) PGAL		(D) Abscisic acid
55.	Which Metabolic Pathway produces	59.	What is the reason for Seed
	Carbohydrate?		Dormancy?
	(A) Glycolysis		(A) Starch
	(B) Krebs cycle		(B) Glucose
	(C) Cyclic electron pathway		(C) Ethylene
	(D) Calvin cycle		(D) Abscisic acid
НМ	-2A/15 (8	)	Contd.
			8

60. Which of the following is an exan	
of Gaseous Plant Hormone?	(A) Internegation
(A) IAA	(B) Intra-personal
(B) Gibberellins	(C) Dyadic
(C) Ethylene	(D) Intra-organization
(D) Abscisic acid	tioans are a problem, a true of the contract of
	65. Who is Father of Extension in India?
61. 'Farmers first' model was	
forwarded by:	· · · · · · · · · · · · · · · · · · ·
(A) Robert Chamber	(C) K. N. Singh
(B) A. Reddy	(D) D. Berlo
	66. What is the early adopters
(C) Knapp	percentage ?
(D) D. Berol Management of	(A) 2.5
62. The main mode of extension in	he (B) 13.5
'farmers first' model is :	(C) 16
(A) Farmer to farmer	(D) 10
	67. By nature, extension teaching is:
(B) Agent to farmer	(A) Horizontal
(C) Research to agent	(B) Vertical
(D) Farmer to scientist	(C) Vertical – horizontal
63. The learning curve in teaching follo	(D) None of these
י עלאוראיני זוה יש בי פול בצורן מסטבעיסן (a:	68. The role of extension education in India
Table makes to the second of	is performed by :
(A) S-shape	(A) State Agricultural University
(B) U-shape	(B) Central Agricultural University
(C) V-shape	(C) Both (A) and (B)
(D) I-shape will be analy a Comp	(D) Krishi Vigyan Kendra
(D) L-shape	
HM – 2A/15	(9) (Turn over)

69. KCC was launched by:	(C) Kolkata
(A) NABARD	(D) Nagpur
(B) RBI	74. Which is a Scheme of NABARD related with agriculture?
(C) RRB (D) SBI	(A) Agriclinic (B) Agribusiness Centres Scheme
<ul><li>70. Kisan Credit Card (KCC) offers credit to the farmers by :</li><li>(A) Cash credit</li></ul>	(C) Both (A) and (B)  (D) None of these
(A) Guard Gradie  (B) Term loan  (C) Both (A) and (B)  (D) None of these	<ul><li>75. What do you mean by degrees of freedom?</li><li>(A) Number of independent observations</li></ul>
71. NABARD is :	(B) Number of independent contrasts
<ul><li>(A) An autonomous body</li><li>(B) Fully owned by Government of India</li><li>(C) Private-public Sector</li></ul>	(C) Number of observations in the design  (D) Number of contrasts  76. What are the basic principles of
(D) All of these	design of experiments?  (A) Randomization
72. Office of AGMARK is located at / in :  (A) Mumbai  (B) Delhi	(B) Local control (C) Replication (D) All of these
(C) Faridabad  (D) Udayapur	77. Which of the following design does not follow local control?
<ul><li>73. The Central Agmark Laboratory is located in :</li><li>(A) Jajpur</li><li>(B) Mumbai</li></ul>	(A) BIB design  (B) Completely Randomized design  (C) Randomized block design  (D) None of these
HM – 2A/15	(10) Contd.

78. The cause of experimental error is: (C) Who identifies new ideas and (A) Variation in treatment delegate idea responsibility to others (B) Unknown factors effects (D) Who takes corrective action (C) Experimenter's mistakes during disputes (D) None of these 82. What is the cause of problem of low 79. To find out CD values of a design, profit? what test is used? (A) Poor market research (A) F-test (B) Organic farming (B) t-test(C) Faulty Government schemes (C) Z-test (D) Inflation in country (D) Chi - square test 83. What do you understand by 80. Mintzberg's set of managerial role 'employees believe that they are not includes how many roles of a valued'? Manager? (A) High rate of absenteeism (A) 8 roles (B) Low morale (B) 7 roles (C) Both (A) and (B) (C) 10 roles (D) None of these (D) 12 roles 84. Which is a step of decision making? (A) To define the problem 81. Who is an Entrepreneur? (B) To identify limiting factors (A) Who performs ceremonial and (C) To establish a control and symbolic duties evaluation system (B) Who directs and motivates (D) All of these subordinates HM - 2A/15(11) (Turn over)

- 85. Who recommends the MSP and issue prices?
  - (A) Ministry of Agriculture
  - (B) Planning Commission
  - (C) Commission for Agricultural
    Costs and Prices
  - (D) NABARD
- 86. Which of the following is the implementing Agency for National Agricultural Insurance Scheme?
  - (A) Food Corporation of India
  - (B) Commission for Agricultural
    Costs and Prices
  - (C) Agricultural Insurance Company
    of India Limited
  - (D) NABARD
- 87. Which of the following is a function of NABARD?
  - (A) Monitoring flow of ground level credit to agriculture
  - (B) Credit planning and monitoring
  - (C) Formulation of operational guidelines for rural financial institutions
  - (D) All of these

- 88. Read the following statements and identify the right ones:
  - (i) The Kisan Credit Scheme was launched in 2015.
  - (ii) The Scheme provides adequate and timely credit support to the farmers for their cultivation needs.
  - (A) (i) only
  - (B) (ii) only
  - (C) Both (A) and (B)
  - (D) None of these
  - 89. Read the following statements and identify the right ones:
    - (i) The Antyodaya Anna Yojana provides food security to the poorest families.
    - other than BPL and APL in the PDS.
    - (A) (i) only
    - (B) (ii) only
    - (C) Both (A) and (B)
    - (D) None of these

90. Read the following statements and 93. Where is the Central Rice Research identify the right ones: Institute located? (i) The Agricultural Price Policy (A) Bangaluru aims at providing assured (B) Kanpur price to the farmers. (C) Coimbatore (ii) It aims at inducing farmers to (D) Cuttack bring in their surplus produce to the market. 94. Under which Five Year Plan agriculture (A) (i) only register negative growth? (B) (ii) only (A) Third (C) Both (A) and (B) (B) Fifth (D) None of these (C) Seventh 91. Indian Agriculture is typically (D) Ninth characterized as: 95. What do you mean by MSP? (A) Land surplus, labour scarce (A) Minimum Support Prices economy (B) Minimal Support Price (B) Land surplus, labour surplus (C) Maximum Support Price economy (D) Minimum Support Price (C) Land scare, labour surplus economy 96. "Operation Flood" is a: (D) Land scare, labour scarce (A) Mission to Increase Performance economy of the Dairy Sector 92. The Blue Revolution is related with: (B) River Management Mission (A) Fish production (C) Mission to save rainwater for (B) Food grain production irrigation (C) Oilseed production (D) Mission to increase underground (D) Milk production water

(13)

(Turn over)

HM - 2A/15

- 97. Which of the following organisations approves the Fair and Remunerative (F. R. P.) of the Sugarcane?
  - (A) Cabinet Committee on Economic Affairs
  - (B) Commission for Agricultural Costs and Prices
  - (C) Directorate of Marketing and Inspection Ministry of Agriculture
  - (D) Agricultural Produce Market
    Committee
  - 98. The difference of the Government
    Minimum Support Price (MSP) and
    Market Prices, which is paid directly
    to the farmers under W. T. O. is called:
    - (A) Blue box subsidies

- (B) Green box subsidies
  - (C) Yellow box subsidies
  - (D) Pink box subsidies
- 99. Green Revolution was confined to:
  - (A) Rice in West Bengal
  - (B) Cotton in Maharashtra
  - (C) Wheat in Punjab and Haryana
  - (D) Oilseeds in Andhra Pradesh
- 100. Pink Revolution is concerned with:
  - (A) Prawn Production
  - (B) Egg Production
  - (C) Potato Production
  - (D) Solar Energy

AGRICULTURE

# SPACE FOR ROUGH WORK



HM - 2A/15

(15)

AAO - 2/22

# Adda 247 AGRICULTURE