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

**Test Booklet Series** 

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

# A

### TEST BOOKLET

SI. No.

ASSISTANT AGRICULTURE OFFICER
PAPER – II

20473

Time Allowed: 2 Hours

Maximum Marks: 100

#### : INSTRUCTIONS TO CANDIDATES :

- 1. 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)

(A) Numeric data	(C) 100 nm
(B) Binary data	(D) 1000 nm
(C) Spatial data	D) 1000 IIII
(D) Complex data	6. Available water held between:
2. By 'spatial data' we mean data that	(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
(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	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	We will be the state of the sta
(C) Gordon E. Moore	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	(D) Bacillus
HM – 2A/15 (2)	Contd.
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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	- 240	(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		
10	Improper development of wheat		(A) Acidic soil
12.	inflorescence is due to deficiency of :		(B) Neutral to alkali soil
			(C) Saline soil
	(A) Molybdenum  (B) Boron		(D) All of these
		17.	Which instrument is used for the
	(C) Calcium		estimation of potash (K)?
	(D) Magnesium		(A) Spectrophotometer
13.	Organic matter obtained:		(B) Flamephotometer
	(A) OC × 1.724		82 5 2 2 1 1 1
	(B) OC × 2.24		(C) Colorimeter
	(C) OC × 1.55		(D) Atomic absorption
	(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%
НΝ	<b>1</b> − 2A/15	(3)	(Turn over)
1 111	LAVIO	( - )	

19.	Maximum N content found in N-	23	3. In children, this disease is caused due
	fertilizer:		to excess nitrate fertilizers usage:
	(A) Urea		(A) Mumps
	(B) Anhydrous ammonia		(B) Jaundice
	(C) Sodium nitrate		(C) Septicemia
	(D) Ammonium sulphate		(D) Methaemoglobinaemia
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 biofertilizer as it
21.	Green manure plants are :		possesses:
	(A) Poaceae		(A) Humus in large quantities
	(B) Solanaceae		(B) Rhizobium
	(C) Leguminosae		(C) Mycorrhiza
	(D) Compositae		(D) Cyanobacteria
22.	This is not included in organic	26.	Which of the following ions is not found
	farming:		in excess in acidic soils ?
	(A) Crop rotation		(A) AI
	(B) Chemical fertilizer		(B) Fe
	(C) Green manures		(C) Mg
	(D) Compost and farmyard manures		(D) Cu
нм.	-2A/15 (4)		Contd.
5	₹		and the second of the

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
6.5.6	and mark as the large of		In waterlogged soils the aeranchyma
	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	34.	In acidic soil in rice crop the alternate
30.	Crops that are grown on acidic		wetting and drying in early growth
	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) Oxygen toxicity		(C) Both (A) and (B)
	(D) Nitrogen toxicity		(D) Save water
НМ	- 2A/15	(5)	(Turn over)

35. Sodic soils are generally high in:	(B) 95.80
(A) NaCO <sub>3</sub>	(C) 91.63
(B) NaHCO <sub>3</sub>	(D) 94.66
(C) Both (A) and (B) (D) CaCl <sub>2</sub>	40. The seed viability test is also known as:
<ul><li>36. Nucleus seed is produced by:</li><li>(A) Breeder seeds</li><li>(B) Foundation seed</li><li>(C) Plant breeders</li><li>(D) Nucleus seeds</li></ul>	<ul><li>(A) T-test</li><li>(B) Z-test</li><li>(C) Germination test</li><li>(D) TZ-test</li></ul>
<ul><li>37. Headquarter of National Seed Corporation:</li><li>(A) New Delhi</li></ul>	<ul><li>41. Isolation distance is necessary to:</li><li>(A) Avoid cross pollination</li><li>(B) Avoid self pollination</li></ul>
(B) Mumbai (C) Bangalore  (D) Kolkata	(C) Both (A) and (B) (D) None of these 42. Test Weight is:
<ul><li>38. What is the colour tag of certified seed?</li><li>(A) White</li><li>(B) Azure blue</li></ul>	<ul><li>(A) Weight of 10 seeds</li><li>(B) Weight of 1000 seeds</li><li>(C) Weight of 100 seeds</li></ul>
(C) Golden brown (D) None of these	(D) Weight of 10000 seeds 43. Who is known as the "Father of
39. Given:	Genetics"?
Purity % of seed = 99.97  Germination % = 91.66  Then, what will be real value of seed?  (A) 92.78	<ul><li>(A) Morgan</li><li>(B) Mendel</li><li>(C) Watson</li><li>(D) Bateson</li></ul>
	(6) Contd.
*	

44.	Homozygosity and heterozygosity of	(B) It is amphiciploid with 54
	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
, Juggi	(A) Bovery	economically useful crops are raised
1,1 ,5,1,	(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)
	14. W	

52.	. Progeny obtained as a result of repeat	56	6. Among the following, which is a Ca	4
	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		en unessant as wear sel to	
53.	Crosses between the plants of the	57	. What is the rate of Photosynthesis in	1
	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 Cycle?	58.	Among the following, which Acid is a 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 Carbohydrate?	59.	What is the reason for Seed 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.	

6	0. Which of the following is an example	64	4. Reading newspaper is which level of
	of Gaseous Plant Hormone?		communication?
	(A) IAA		(A) Inter-personal
	(B) Gibberellins		(B) Intra-personal
	(C) Ethylene		(C) Dyadic (D) Intra-organization
	(D) Abscisic acid	65	. Who is Father of Extension in India?
61	1. 'Farmers first' model was put		(A) Robert Chamber
	forwarded by :		(B) A. Reddy
	(A) Robert Chamber		(C) K. N. Singh
	(B) A. Reddy		(D) D. Berlo
	(C) Knapp	66.	What is the early adopters percentage?
	(D) D. Berol		(A) 2.5
62	2. The main mode of extension in the		(B) 13.5 (C) 16
	'farmers first' model is :		
	(A) Farmer to farmer		(D) 10
	(B) Agent to farmer	67.	By nature, extension teaching is:
	(C) Research to agent		(A) Horizontal (B) Vertical
	(D) Farmer to scientist		(C) Vertical – horizontal
63	. The learning curve in teaching follows		(D) None of these
	a:	68.	The role of extension education in India
	(A) S-shape		is performed by :
	(B) U-shape		(A) State Agricultural University
			(B) Central Agricultural University
	(C) V-shape		(C) Both (A) and (B)
	(D) L-shape		(D) Krishi Vigyan Kendra
HN	M – 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
	(C) RRB	related with agriculture?
	(D) SBI	(A) Agriclinic
70	Kisan Credit Card (KCC) offers credit	(B) Agribusiness Centres Scheme
fest	to the farmers by :	(C) Both (A) and (B)
	(A) Cash credit	(D) None of these
	(B) Term loan	75. What do you mean by degrees of
	(C) Both (A) and (B)	freedom?
	(D) None of these	(A) Number of independent observations
71.	NABARD is :	(B) Number of independent contrasts
	(A) An autonomous body	(C) Number of observations in the
	(B) Fully owned by Government of India	design (D) Number of contrasts
	(C) Private-public Sector	76. What are the basic principles of
	(D) All of these	design of experiments?
72	. Office of AGMARK is located at / in :	(A) Randomization  (B) Local control
	(A) Mumbai	(C) Replication
	(B) Delhi	(D) All of these
	(C) Faridabad	77. Which of the following design does not
	(D) Udayapur	follow local control?
73	3. The Central Agmark Laboratory is	s (A) BIB design
	located in:	(B) Completely Randomized design
	(A) Jajpur	(C) Randomized block design
	(B) Mumbai	(D) None of these
Н	M – 2A/15	(10) Contd.

78. The cause of experimental error is: (C) Who identifies new ideas and delegate idea responsibility to (A) Variation in treatment 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? 81. Who is an Entrepreneur? (A) To define the problem (B) To identify limiting factors (A) Who performs ceremonial and symbolic duties (C) To establish a control and 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.
  - (ii) It includes a new category other than BPL and APL in the PDS.
  - (A) (i) only
  - (B) (ii) only
  - (C) Both (A) and (B)
  - (D) None of these

(12)

Contd.

HM - 2A/15

- 90. Read the following statements and identify the right ones:

  (i) The Agricultural Price Policy aims at providing assured price to the farmers.

  (ii) It aims at inducing farmers to bring in their surplus produce to the market.

  (A) (i) only

  (B) (ii) only
  - (C) Both (A) and (B)
  - (D) None of these
- 91. Indian Agriculture is typically characterized as:
  - (A) Land surplus, labour scarce economy
  - (B) Land surplus, labour surplus economy
  - (C) Land scare, labour surplus economy
  - (D) Land scare, labour scarce economy
- 92. The Blue Revolution is related with:
  - (A) Fish production
  - (B) Food grain production
  - (C) Oilseed production
  - (D) Milk production

- 93. Where is the Central Rice Research Institute located?
  - (A) Bangaluru
  - (B) Kanpur
  - (C) Coimbatore
  - (D) Cuttack
- 94. Under which Five Year Plan agriculture register negative growth?
  - (A) Third
  - (B) Fifth
  - (C) Seventh
  - (D) Ninth
- 95. What do you mean by MSP?
  - (A) Minimum Support Prices
  - (B) Minimal Support Price
  - (C) Maximum Support Price
  - (D) Minimum Support Price
- 96. "Operation Flood" is a :
  - (A) Mission to Increase Performance of the Dairy Sector
  - (B) River Management Mission
  - (C) Mission to save rainwater for irrigation
  - (D) Mission to increase underground water

HM - 2A/15

(13)

(Turn over)

- 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

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## SPACE FOR ROUGH WORK

HM - 2A/15

(15)

AAO - 2/22