

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

Test Booklet Series

T. B. C. : AAO – 1/22

**A**

**TEST BOOKLET**  
**ASSISTANT AGRICULTURE OFFICER**  
**PAPER – I**

Sl. No.  
**13565**

**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).
6. 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 – 1A/12

(Turn over)

1. The Rice Inflorescence is known as :
  - (A) Panicle
  - (B) Spikelets
  - (C) Ear
  - (D) Siliqua
2. The Kresek phase occurs in early stage of plant growth of rice in :
  - (A) BLB
  - (B) Bacterial leaf streak
  - (C) Tungrovirus
  - (D) False smut
3. Wheat is originated in :
  - (A) South America
  - (B) Central Asia
  - (C) South Eastern Asia
  - (D) Europe
4. First irrigation to the wheat crop should be given at :
  - (A) CRI stage
  - (B) Tillering stage
  - (C) Jointing stage
  - (D) Dough stage
5. The Inflorescence of sugarcane is known as :
  - (A) Arrow
  - (B) Panicle
  - (C) Capitulum
  - (D) Racemose
6. Most common herbicides used for weed control in sugarcane is / are :
  - (A) Simazine
  - (B) Atrazine
  - (C) Alachlor
  - (D) All of these
7. Triticale is the cross between :
  - (A) Wheat × Rye
  - (B) Oat × Barley
  - (C) Wheat × Barley
  - (D) None of these
8. The fruit of rapeseed and mustard is known as :
  - (A) Pod
  - (B) Grain
  - (C) Siliqua
  - (D) Caryopsis

9. The Criteria of essentiality of nutrients in plant was given by :
- (A) DJ Nicholas  
(B) Arnon and Stout  
(C) JS Kanwar  
(D) Rajendra Prasad
10. Potato is the :
- (A) Modified stem  
(B) Modified root  
(C) Modified leaf  
(D) Modified flower
11. The type of germination in mung bean is known as :
- (A) Epigeal  
(B) Hypogeal  
(C) Hypoepigeal  
(D) Epihypogeal
12. Sesamum belongs to the family :
- (A) Chenopodiaceae  
(B) Papilionaceae  
(C) Leguminosae  
(D) Pedaliaceae
13. What is the importance of vertical farming in sustainable agriculture ?
- (A) Year around production  
(B) Less land requirement  
(C) Efficient use of water  
(D) Less fertilizer requirement
14. Which is the main problem of sustainable agriculture ?
- (A) Lack of benefits  
(B) International rules and regulations  
(C) Market acceptance  
(D) All of these
15. Stem nodulation occurs in green manure crop of :
- (A) **Sesbania aculeata**  
(B) **Sesbania cannabina**  
(C) **Crotolaria juncea**  
(D) **Aeschynomene afraspera**
16. Crop logging is used in :
- (A) Sugarcane  
(B) Sugarbeet  
(C) Maize  
(D) Tea
17. In which crop the use of BGA as a biofertilizer, will be most useful ?
- (A) Maize  
(B) Potato  
(C) Rice  
(D) Sugarcane

18. National center of organic farming in India is located in :
- (A) Ghaziabad
  - (B) Hyderabad
  - (C) Kochi
  - (D) Pune
19. An example of companion cropping is :
- (A) Sugarcane + Potato
  - (B) Potato + Mustard
  - (C) Potato + Radish
  - (D) Wheat + Mustard
20. Arrowing is known as :
- (A) Tillering of sugarcane
  - (B) Emergence of inflorescence in sugarcane
  - (C) Arrow like shape of sugarcane
  - (D) None of these
21. LEISA is related to :
- (A) Organic farming
  - (B) Inorganic farming
  - (C) Natural farming
  - (D) All of these
22. Organic carbon is a measure of :
- (A) Available N in soil
  - (B) Available P in soil
  - (C) Available K in soil
  - (D) Available Mg in soil
23. Which one of the following is not allowed in organic cultivation ?
- (A) Sewage sludge
  - (B) Crop rotation
  - (C) Using black soil
  - (D) Monoculture
24. The ratio between gross and net cropped area is called an index of :
- (A) Cropping intensity
  - (B) Multiple cropping
  - (C) High intensity cropping
  - (D) None of these
25. Chipsona is a variety of :
- (A) Tapioca
  - (B) Sweet potato
  - (C) Elephant foot
  - (D) Potato

26. Zero-till seed drill is used for sowing of :
- (A) Wheat in maize – wheat cropping system
  - (B) Wheat in Mung – wheat cropping system
  - (C) Wheat in rice – wheat cropping system
  - (D) None of these
27. The most concentrated fertilizer used for nutrient supply is :
- (A) Urea
  - (B) DAP
  - (C) Anhydrous ammonia
  - (D) SSP
28. Which gas is released from paddy fields ?
- (A)  $\text{CH}_4$
  - (B)  $\text{H}_2\text{S}$
  - (C)  $\text{CO}_2$
  - (D)  $\text{NH}_3$
29. Most common herbicide used in maize is :
- (A) Atrazine
  - (B) Alachlor
  - (C) Simazine
  - (D) Metribuzin
30. Soil sickness is caused by :
- (A) Maize
  - (B) Jowar
  - (C) Linseed
  - (D) Both (B) and (C)
31. The optimum seed rate for sunflower is (kg / ha) :
- (A) 8 – 10
  - (B) 10 – 15
  - (C) 18 – 20
  - (D) 30 – 35
32. The ideal temperature for tuberization in potato is :
- (A)  $14^\circ\text{C}$
  - (B)  $18^\circ\text{C}$
  - (C)  $21^\circ\text{C}$
  - (D)  $34^\circ\text{C}$
33. UG – 99 is a stem rust causing fungi in wheat was reported first time from :
- (A) Uganda
  - (B) Pakistan
  - (C) America
  - (D) Ukraine

34. Which of the clay minerals are found most in agriculture soils ?
- (A) Cyclosilicates
  - (B) Phyllosilicates
  - (C) Sorosilicates
  - (D) Nesosilicates
35. Sorghum crop is considered as camel crop because of :
- (A) Deep root system
  - (B) Resistant to drought
  - (C) Shallow root system
  - (D) Nutrient Exhaustiveness
36. The stem above the ground in banana is known as :
- (A) Rhizome
  - (B) Pseudostem
  - (C) Sucker
  - (D) None of these
37. Which of the following fruits are botanically called as "Hesperidium" ?
- (A) Jackfruit
  - (B) Orange
  - (C) Litchi
  - (D) Apple
38. Which one of the following is not a variety of mango ?
- (A) Arka Aruna
  - (B) Arka Puneet
  - (C) Arka Anmol
  - (D) Arka Hans
39. Pruning in ber is done :
- (A) During rainy season
  - (B) During winter
  - (C) During spring
  - (D) During summer
40. Fruits are blanched before canning at :
- (A) 80° C
  - (B) 90° C
  - (C) 100° C
  - (D) None of these
41. National Horticulture Board was established in :
- (A) 1976
  - (B) 1984
  - (C) 1987
  - (D) 1990

42. D-leaf is a best indicator of nutrient status of :
- (A) Pineapple  
(B) Apple  
(C) Banana  
(D) Ber
43. Exhausting temperature of canned fruits and vegetables is :
- (A) 70 – 72° C  
(B) 80 – 82° C  
(C) 90 – 92° C  
(D) 100 – 102° C
44. Varsha upahar is a variety of :
- (A) Okra  
(B) Cabbage  
(C) Chilli  
(D) Cowpea
45. "Pungency" in chilli is due to presence of :
- (A) Capsaicin  
(B) Sulphur  
(C) Amides  
(D) Magnesium
46. Optimum seed rate (g / ha) of cabbage is :
- (A) 200  
(B) 300  
(C) 400  
(D) 500
47. Buttoning is a physiological disorder in :
- (A) Cabbage  
(B) Cauliflower  
(C) Onion  
(D) Garlic
48. The red color in tomato is due to pigment :
- (A) Lycopine  
(B) Capsaicin  
(C) Capsanthin  
(D) None of these
49. Shoot and fruit borer of Okara belongs to :
- (A) **Earias vitella**  
(B) **Amrasca biguttula biguttula**  
(C) **Tetranychus spp**  
(D) **Heliothis armigera**

50. Cluster bean contains mucilaginous substance is :  
 (A) Mannogalacton  
 (B) Asparagine  
 (C) Glutamine  
 (D) Galacturonic acid
51. Roses are commonly propagated by :  
 (A) 'T' or shield budding  
 (B) Grafting  
 (C) Stem cutting  
 (D) Seeds
52. Gladiolus belongs to :  
 (A) Rosaceae  
 (B) Compositae  
 (C) Solanaceae  
 (D) Iridaceae
53. Gladiolus is generally propagated by :  
 (A) Tuber  
 (B) Corm  
 (C) Rhizome  
 (D) Roots
54. Optimum seed rate for marigold is (kg / ha) :  
 (A) 0.5  
 (B) 1.5  
 (C) 2.5  
 (D) 3.5
55. Which of the statement given below is / are correct ?  
 (A) Marigold flower last longer if the field is irrigated before plucking of flower.  
 (B) Carnation flowers should always be transported pre – cooled.  
 (C) Both (A) and (B)  
 (D) Neither (A) nor (B)
56. The Downey mildew of bajra is caused by :  
 (A) **Sclerospora sorghi**  
 (B) **Sclerospora sacchari**  
 (C) **S. graminicola**  
 (D) **Perenospora parasitica**
57. Loose smut of wheat is :  
 (A) Internally seed borne  
 (B) Externally seed borne  
 (C) Both (A) and (B)  
 (D) Not clearly defined



58. The Karnal bunt of wheat first time reported in Karnal by Mitra in :
- (A) 1929
  - (B) 1931
  - (C) 1941
  - (D) 1951
59. In rust cycle the cereal host is infected by :
- (A) Uredospores
  - (B) Aeciospores
  - (C) Teliospores
  - (D) Basidiospores
60. The rust of linseed and flax can be completely controlled by spray of :
- (A) Borax
  - (B) Dithane M-45
  - (C) Vitavax
  - (D) Agrosan GN
61. Wilt of pigeon pea is caused by :
- (A) **Fusarium udum**
  - (B) **Gibberella indica**
  - (C) **Rhizopus nigricans**
  - (D) **Aspergillus flavus**
62. Bunchy top of Banana was first observed in :
- (A) Pune
  - (B) Rome
  - (C) Fiji
  - (D) None of these
63. Mango malformation can be reduced by spraying of :
- (A) GA
  - (B) IBA
  - (C) NAA
  - (D) ABA
64. The first identified bacterial disease of plant 'fire blight of apple' was discovered by :
- (A) Adolf Mayer
  - (B) E. F. Smith
  - (C) M. K. Patel
  - (D) T. J. Burill
65. Panama disease of banana is prevented by :
- (A) Spraying zinc carrier
  - (B) Spraying copper fungicide
  - (C) Application of lime to the soil
  - (D) Providing an adequate irrigation

66. Pink bollworm is serious pest of :
- (A) Mustard  
(B) Cotton  
(C) Gram  
(D) Ladies finger
67. Following is an example of Bt transgenic cotton :
- (A) Jayadhar  
(B) Varalaxmi  
(C) NH – 44  
(D) Bollguard
68. IPM relies heavily on :
- (A) Economic threshold level  
(B) Total loss of crops  
(C) Resistant pest  
(D) Susceptible pest
69. The noctuid borer on ragi is :
- (A) **Sesamia inferens**  
(B) **Chilo partellus**  
(C) **Chilo suppressalis**  
(D) **Scirpophaga nivella**
70. The pest which attach both in field and storage of pulses is :
- (A) Pulse beetle  
(B) Gram pod borer  
(C) Red gram pod fly  
(D) Pod borer
71. Grubs which feeds on the inner content of seed in pulses belongs to :
- (A) **Aphis craccivora**  
(B) **Callosobrunchus chinesis**  
(C) **Agrotis ipsilon**  
(D) **Aceria cajani**
72. Eriophid mite (**Aceria cajani**) belongs to family :
- (A) Bruchidae  
(B) Aphididae  
(C) Eriophyidae  
(D) Noctuidae
73. Bt cabbage is developed against :
- (A) Diamond black moth  
(B) Cabbage butterflies  
(C) Aphid  
(D) Painted bug

74. **Bacillus thuringiensis** was discovered by :
- (A) S. Isiwata  
(B) Berliner  
(C) Flacher  
(D) Frisch
75. Juvenile Hormone (JH) is a trepene secreted by :
- (A) *Carpora cardiaca*  
(B) *Carpora allata*  
(C) Cuticle  
(D) Accessory glands
76. The term "third generation pesticides" is given for :
- (A) Juvenile hormone  
(B) Moulting hormone  
(C) Brain hormone  
(D) Anti juvenile hormone
77. Silk gland is a modified part of labial gland and \_\_\_\_\_ in origin.
- (A) Ectodermal  
(B) Mesodermal  
(C) Epidermal  
(D) Endodermal
78. The process of killing pupa without changing the cocoon shell layer is known as :
- (A) Stiffling  
(B) Denier  
(C) Dupion  
(D) Hatching
79. In honey bees, the queen substance is secreted by :
- (A) Mandibular glands  
(B) Acid glands  
(C) Pharyngeal glands  
(D) Wax glands
80. Spreading decline of citrus is caused by :
- (A) ***Tylenchulus semipeneterans***  
(B) ***Radopholus citrophilus***  
(C) ***Criconemoides citri***  
(D) ***Criconema civellae***
81. Cauliflower disease of strawberry is caused by :
- (A) Nematode  
(B) Bacteria  
(C) Both (A) and (B)  
(D) Abiotic factor

82. Infection of banana plants by burrowing nematode **Radopholus similis** predisposes the plants to infection of:
- (A) **Pentalonia nigronervosa**  
 (B) **Fusarium oxysporum f. sp. cubense**  
 (C) **Cercospora musae**  
 (D) **Banana Bunchy top virus**
83. Trap crop for **Meloidogyne spp.** is :
- (A) Cereals  
 (B) Millets  
 (C) Marigold  
 (D) All of these
84. Which one of the following nematodes attack above-ground plant parts ?
- (A) **Anguina**  
 (B) **Aphelenchoides**  
 (C) **Ditylenchus**  
 (D) All of these
85. Which one of the following nematodes is an ectoparasite ?
- (A) **Radopholus**  
 (B) **Xiphinema**  
 (C) **Globodera**  
 (D) **Meloidogyne**
86. Major pest of silkworm :
- (A) Wasps  
 (B) Uzi fly  
 (C) Nysolyns  
 (D) All of these
87. The silk of silkworm is a :
- (A) Separate filament  
 (B) Continuous filament  
 (C) Several filament  
 (D) Discrete filament
88. Which is correct ?
- (A) Tassar silkworm : **Antheraea mylitta**  
 (B) Oak tassar silkworm : **Antheraea**  
 (C) Muga resham : **Philosamia ricini**  
 (D) Eri resham : **Antheraea proylei**
89. Rainfall intensity is generally higher on :
- (A) Northern hemisphere  
 (B) Southern hemisphere  
 (C) Near the equator  
 (D) None of these

90. Stevenson screen is related to :
- (A) Bacteriology
  - (B) Biotechnology
  - (C) Agrometeorology
  - (D) Remote Sensing
91. How many agroclimatic zones are categorized in India ?
- (A) 20
  - (B) 18
  - (C) 14
  - (D) 15
92. Who is related with the classification of climate ?
- (A) De Condole
  - (B) Koppen
  - (C) Troll
  - (D) All of these
93. The National Remote Sensing Agency is situated at :
- (A) Bangalore
  - (B) Hyderabad
  - (C) Jaisalmer
  - (D) Patna
94. For ripening of rice, temperature should lie between :
- (A) 21 – 37°C
  - (B) 26.5 – 29.5°C
  - (C) 20 – 25°C
  - (D) 15 – 20°C
95. Temperature required for proper grain filling of wheat is :
- (A) 20 – 25°C
  - (B) 20 – 23°C
  - (C) 23 – 25°C
  - (D) 16 – 20°C
96. Sapwood is rich in :
- (A) Starch
  - (B) Cellulose
  - (C) Resins
  - (D) Gums
97. Protected Forest declared under Forest Act of :
- (A) 1927
  - (B) 1928
  - (C) 1925
  - (D) 2001

98. Tyloses are present only :

- (A) Hard wood
- (B) Soft wood
- (C) Semi-hard wood
- (D) All of these

99. Red rust in Eucalyptus is caused by :

- (A) Bacteria

(B) Algae

(C) Virus

(D) MLO

100. Felling cycle of Bamboo is :

(A) 3 – 4 years

(B) 4 – 5 years

(C) 5 – 6 years

(D) 5 – 10 years



SPACE FOR ROUGH WORK

HM - 1A/12

(15)

AAO - 1/22

SEAL