राष्ट्रीय प्रौद्योगिकी संस्थान वरंगल
वरंगल – 506004, तेलंगाना, भारत
NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
WARANGAL – 506004, Telangana, INDIA

QUESTION BOOKLET – ADVANCED TEST FOR RECRUITMENT TO TECHNICAL CADRE POSTS

Post:	Technical Assistant
Department	Horticulture
Advt.:	01/2026 dated 09.01.2026
Date of Exam:	14-08-2026
Duration:	2 Hours
Total Marks:	200 (100 Q X 2 M each)
No. of Questions:	100 (MCQs)
Negative Marking:	1/4th mark for every wrong answer

INSTRUCTIONS TO THE CANDIDATES

1. This is an Advanced Test comprising 100 Multiple Choice Questions (MCQs), to be conducted in MCQ mode only.
2. The duration of the test is 2 hours.
3. Answers must be marked on the OMR Answer Sheet using a blue or black ballpoint pen only. Use of pencils is not permitted.
4. Candidates must write/mark their Roll Number, Post applied for, and other required details in the designated space on the OMR Answer Sheet.
5. Answers marked on the Question Booklet or on any sheet other than the OMR Answer Sheet will not be evaluated.
6. For each question, darken the circle corresponding to the correct answer completely and clearly on the OMR Answer Sheet.
7. Each question carries equal marks. There will be a negative marking of ¼ th mark for every wrong answer. No marks will be deducted for questions not attempted.
8. Mark only one answer for each question. Marking more than one circle for a question will be treated as a wrong answer.
9. Overwriting, cutting, or erasing that leaves the OMR Answer Sheet unclear may result in the answer not being evaluated.
10. No candidate shall leave the examination hall during the test.
11. Any attempt to copy, use unfair means, or communicate with others will result in immediate disqualification.
12. The use of electronic gadgets, calculators, mobile phones, smart watches, or any written/printed material is strictly prohibited.
13. Rough work, if any, should be done only on the separate sheet provided for the purpose.
14. Ensure that the OMR Answer Sheet is duly filled and handed over to the Invigilator before leaving the examination hall.
15. Failure to submit the OMR Answer Sheet will result in cancellation of candidature.
16. All material provided, including rough sheets, must be returned before leaving the examination hall.

1. Growing vegetables, flowers, fruits and decorative plants for commercial use is known as
a) Viticulture b) Horticulture c) Sericulture d) Pisciculture

2. Which of the following classes of pesticides are responsible for most acute cases of pesticide poisoning and are considered to be most dangerous to humans because of their effects as potent human neurotoxins?
a) Organophosphates b) Carbamates c) Chlorinated Hydrocarbons d) Pyrethrins

3. From the list, which state in India has the greatest variety of flowers
a) Kerala b) Assam c) Sikkim d) Uttar Pradesh and Uttarakhand

4. Consider the statements -
Assertion (A) : Among various types of soils, clay retains highest amount of water.
Reason (R) : Clay has pore spaces of large size.
Select the correct answer using the codes given below :
a) Both (A) and (R) are true and (R) is the correct explanation of (A).
b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
c) (A) is true, but (R) is false.
d) (A) is false, but (R) is true

5. Which one of the following substances is a herbicide
a) Chlorpyrifos b) Carbendazim c) Quinalphos d) Butachlor

6. Which one of the following pairs is not correctly matched?
a) Cuscuta-Stem parasite b) Sandal-Root Parasite c) Orchids - Epiphyte d) Nepenthus - Hydrophyte

7. The water holding capacity of different types of soils decreases in the order -
a) Clay > Silt > Sand b) Clay > Sand > Silt c) Sand > Silt > Clay d) Silt > Sand > Clay

8. Ground water mining in coastal areas can result into -
a) Increase in the salinity of ground water b) decrease in the toxicity of ground water c) decrease in the salinity of ground water d) increase in the water table

9. The three primary soil macronutrients are -
a) carbon, oxygen and water b) copper, cadmium and carbon c) potassium, phosphorus and nitrogen d) boron, zinc and manganese

10. Which of the following is negative effects on the soil and water due to conventional, mechanized farming practices?
a) Reduction in soil organic matter b) Soil erosion c) Leaching of pesticides and fertilisers into the ground water d) All the above

11. Crop logging is a method of -

a) Soil fertility evaluation | b) Plant analysis for assessing the requirement of nutrients for crop production | c) Assessing crop damage | d) Testing suitability of fertilisers

12. Seed that is changed every plant cycle is known as -

a) Breeder seed | b) Certified seed | c) Foundation seed | d) Hybrid seed

13. The soils which have supported agriculture for centuries without much manuring or fallowing are -

a) alluvial and laterite soils | b) red and laterite soils | c) black and alluvial soils | d) laterite and black soils

14. Generally standards in 'Organic farming' are designed to encourage the use of -

a) Manmade substances | b) Natural substances | c) Genetically modified substances | d) Artificial substances

15. Which of the following is not a nitrogenous fertilizer

a) Ammonium sulphate | b) Urea | c) Super phosphate | d) Ammonium Nitrate

16. Which of the following green manure crops contains highest amount of nitrogen?

a) Dhaincha | b) Sunnhemp | c) Cowpea | d) Guar

17. Soil factors are otherwise known as -

a) Climatic factors | b) Edaphic factors | c) Biotic factors | d) Physiographic factors

18. Crop rotation helps to

a) lessen use of pesticides | b) yield more crops | c) produce a greater choice of plant products | d) eliminate parasites which have selective hosts

19. Botanically pineapple is a -

a) Pome | b) Sorosis | c) Berry | d) Baluster

20. Iron is an important component of -

a) Siroheme | b) Ferredoxin | c) Cytochromes | d) All of these

21.The chemical, which is used for controlling the mites, is known as -

a) Acaricides | b) Insecticides | c) Mematicides | d) Fungicides

22. WP abbreviates as -

a) Wettable Paste | b) Wettable Powder | c) Water Paste | d) None of these

23. Which of the following elements is not essential element of plants but proves to be beneficial for some plants?
a) Boron b) Sodium c) Iodine d) Copper

24. Parthenocarpy occurs in -
a) Peach b) Mango c) Jackfruit d) Banana

25. Water use efficiency is the highest in case of -
a) Border irrigation b) Drip irrigation c) Sprinkler irrigation d) Flood irrigation

26. Citrus tristeza virus is transmitted through -
a) Aphid b) Thrips c) Nematode d) Plant hopper

27. Which one of the pathogens is monocylic?
a) Ustilago b) Alternaria c) Phytophthora d) Puccinia

28. Pencillin acts on -
a) RNA b) Cell wall c) Cell Membrane d) All of these

29. The chemical, which attracts opposite sex insects of a species, is known as -
a) Hormones b) Allomones c) Kairomones d) Pheromones

30. Micro-organism, which can grow at higher temperature, is called
a) Thermophils b) Mesophils c) Phycrophils d) None of these

31. White colour of soil is due to the presence of -
a) Silica b) Iron c) Manganese oxide d) All of these

32. The ratio between marketable crop yield and water used in evapotranspiration is known as -
a) Field water use efficiency b) Economic irrigation efficiency c) Consumptive use efficiency d) Water use efficiency

33. Sulphur, containing amino acid is -
a) Valine b) Isolucine c) Cystine d) None of these

34. Glycolysis occurs only in the -
a) Absence of O_2 b) Presence of O_2 c) Both (a) and (b) d) None of these

35. Photorespiration is inhibited by -
a) 2, 4-Dinitrophenol b) CMU and DCMU c) α- hydroly sulphonates d) None of these

36. Biofertilisers are -
a) Organic manures b) Green manure c) Culture of micro-organism d) None of these

37. The number of essential mineral elements of plant is -
a) 16 b) 21 c) 13 d) 20

38. Anemometer measures -
a) Wind direction b) Relative humidity c) Net radiation d) Wind velocity

39. Damping-off disease in nurseries can be controlled by -
a) Solarization b) Mixing of fungicides in soil c) Seed treatment d) All of these

40. Aseual reproduction includes -
a) Amphimixis b) Apomixis c) Allogamy d) Autogamy

41. The number of agro-climatic and ecological zones classified by ICAR respectively are-
a) 15, 131 b) 131, 8 c) 8, 131 d) 21, 15

42. Guttation occurs in plants through -
a) Stomata b) Hydathodes c) Both (a) and (b) d) None of these

43. Stomata open at night in -
a) C4 plants b) C3 plants c) CAM plants d) None of these

44. Living cells are not essential for -
a) Transpiration b) Evaporation c) Guttation d) All of these

45. Which group of plant nutrients involves in N2 fixation?
a) P, S, Mo b) P, S, Co c) P, Co, Mo d) All of these

46. Which is the most widely distributed and commercially reared honeybee species in the world?
a) Apis florea b) Apis dorsata c) Apis cerana d) Apis mellifera

47. At present, which of the following chemical fertilisers is not produced in India and is being imported?
a) Triple Superphosphate b) Potassium sulphate c) Ammonium sulphate d) All of these

48. Which herbicide resides for the longest period in the soil?
a) Chlorropham b) Linuron c) Propachlor d) Simazine

49. Which of the following is not a method of knowing seed life?
a) Respiration test b) Embryo culture method c) Seed dormancy method d) Indigocarmine method

50. Which of the following is not a variety of seeds?
a) Hybrid seed b) Mutant seed c) Composite seed d) Breeder seed

51. Opening and closing of stomata depends on -
a) Sunlight b) Water pressure c) Transpiration d) Temperature

52. Evaporation is measured by which instrument?
a) Barometer b) Psychrometer c) Lysimeter d) Hygrometer

53. Pheramone Trap attracts -
a) male moths b) female moths c) caterpillar d) female bugs

54. Inarching method is used for culture of which fruits?
a) Mango and Guava b) Mango and Grapes c) Guava and Litchi d) Phalsa and Guava

55. How does the moisture stress affect the cell?
a) Affect cell division b) Affect cell expansion c) Cell mortality rate is affected d) No effect on cell

56. Most commonly used vegetative propagation method in Rose?
a) Layering b) Grafting c) Budding d) Tissue culture

57. The most suitable medium for Orchid cultivation -
a) Soil + Sand b) Wooden chips + Broken Chips c) Broken chips + Coir pith d) Soil + Broken chips

58. To control damage by earthworms and termites in lawn which method of the following can be used?
a) Manuring b) Rolling c) Weeding d) Replanting

59. Which is not a garden style?
a) American b) English c) French d) Moghul

60. Japanese method of flower arrangement is known as?
a) Ikenobo b) Moribana c) Ikebana d) Morimono

61. Yellowing of lawn grass indicates deficiency of which nutrients
a) Nitrogen b) Phosphorus c) Potassium d) Oxygen

62. Which of the following green house styles is recommended for hilly areas?
a) Lean to b) Ridge and furrow c) Even span d) Uneven span

63. Which irrigation method is most suitable for lawns/turfs?
a) Furrow b) Drip c) Sprinkler d) Basin

64. Zen garden are also known as
a) Italian garden b) Mughal garden c) English garden d) Japanese garden

65. Which chemical is used for de-greening of fruits
a) Ethylene b) IBA c) Cytokinin d) Gibberalic Acid

66. The most abundant and basic auxin is _____
a) NAA b) IAA c) IBA d) 2-4 D

67. Protray are related to _____
a) Post harvest b) Nursery c) Processing d) Transport

68. India is known as home of _____
a) Vegetables b) Fruits c) Spices and medicinal d) Flowers

69. Detrimental effect of host plant on the biology of insect is known as _____
a) Non preference b) Tolerance c) Antibiosis d) Resistance

70. Disease free plants in micro propagation can be obtained through _____
a) Meristem culture b) Anther culture c) Embryo culture d) Cell culture

71. Making an incision below a bud to retard its growth
a) Nicking b) Ringing c) Notching d) Thinning

72. Germination of seed while it still remains attached with the parent source is called as
a) Ovipary b) Apomixis c) Vivipary d) Asepsis

73. Angle formed by attachment of a branches to the trunk is called
a) Crown b) Corona c) Crotch d) Conn

74. Queen of Fruits refers to _____
a) Avocado b) Mangosteen c) Mango d) Ber

75. Fruit of the 21st Century refers to _____
a) Jamun b) Ber c) Bael d) Amla

76. The fruit of banana is botanically a/an _____
a) Pepo b) Berry c) Pome d) Drupe

77. Which one of the following is a climacteric fruit?
a) Fig b) Citrus c) Grape d) Ber

78. Tongue grafting is a modified form of _____
a) Saddle grafting b) Whip grafting c) Inarching d) None of the above

79. International Institute of Horticulture is situated at _____
a) Brazil b) Italy c) USA d) None of the above

80. Tissue culture is a good technique to
a) Cross two varieties b) Rapidly increase the size of trees c) Eliminate virus d) Improve yield of crops

81. A variety or strain produced by horticultural or agricultural techniques and not normally found in natural population is called
a) Hybrid b) Tissue culture c) Cultivar d) GMO

82. Root suckers are
a) Insects that suck nutrients from the roots of plants
b) Shoots that arise from roots to form new plant
c) New plant parts that arise from the branches of fruit trees.
d) Roots of neighbouring plants that share water with the another plant

83. The following is not a plant growth regulator
a) Acetic acid b) Auxins c) Gibberellins d) Ethylene

84. Mycorrhizae is associated with the following
a) Formation of root nodules b) Hyphae penetrating the soil c) Found mostly in lower plants d) Soil erosion

85. The pH in soils can be raised by adding:
a) Sand b) Lime c) Sulphur d) Nitrogen

86. In cutting method of vegetative propagation, cuttings are mainly taken from
a) Leaves of parent plant b) Roots or stems of parent plant c) Shoots of parent plant d) Buds of parent plant

87. Example of plant in which vegetative propogation occurs by leaves.
a) Cannabis b) Chrysanthemum c) Bryophyllum d) Brassica

88. Spot the odd one
a) Borders b) Hedges c) Edges d) Bonsai

89. Which one of the following is natural insecticide
a) Pyrethrum b) Nicotine c) both (a) and (b) d) None of these

90. The process by which nutrient chemicals or contaminants are dissolved and carried away by water, or are moved into a lower layer of soil
a) Mulching b) Desertification c) Incineration d) Leaching

91. The main function of biofertilizer is
a) To increase chemical process b) To increase physiological process c) To increase biological process d) To increase photosynthesis process

92. Seed treatment is done to control
a) Soil borne diseases b) Air borne diseases c) seed borne diseases d) Water borne diseases

93. Ozone layer is found in
a) Stratosphere b) Thermosphere c) Mesosphere d) Lithosphere

94. Chief air pollutant which is likely to deplete ozone layer is
a) Sulphur dioxide b) Carbon dioxide c) Carbon monoxide d) Nitrogen oxides and Fluorocarbons

95. Lichens indicate pollution by
a) Ozone b) Sulphur di oxide c) Nitrous oxide d) Carbon monoxide

96. BOD is connected with
a) Organic matter b) Microbes c) Both (a) and (b) d) None of the above

97. Air pollution effects are usually found on
a) Flowers b) Leaves c) Stems d) Roots

98. Eutrophication results in reduction of
a) Dissolved Nitrate b) Dissolved Oxygen c) Mineral salts d) Parasitic protozoa

99. Water blooms are formed by
a) Lemna b) Hydrilla c) Water hyacinth d) Planktonic algae

100. Linnaeus is credited with introducing
a) The concept of inheritance b) Law of limiting factor c) Theory of heredity d) Binomial nomenclature

***