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Question Booklet Alpha Code

A

Question Booklet Sl. No.

Total Number of Questions : 100

Time : 90 Minutes

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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1. Which of the following statements is/are correct about Agriculture's definition ?
  - i. 'Agriculture' term is derived from Greek language.
  - ii. Agriculture is an art because it involves performing operations in a skillful manner.
  - iii. It is a science as it utilises modern technologies developed on scientific principles.
  - iv. Agriculture as a business always does not aim at maximum net returns.

A) Only i and iii      B) Only ii and iv      C) Only ii and iii      D) Only i and ii
2. Which of the following branches of Agriculture can be best categorized under crop protection group ?
  - A) Agronomy, Agricultural Entomology, Plant Pathology
  - B) Nematology, Plant Pathology, Agricultural Entomology
  - C) Agronomy, Agricultural Meteorology, Agricultural Entomology
  - D) Plant Pathology, Agricultural Meteorology, Agricultural Entomology
3. Which pair of the following poultry diseases, does originate from bacterial pathogen ?
  - A) Fowl plague and Coccidiosis
  - B) Brooder pneumonia and Infectious Bursal Disease
  - C) New Castle Disease and Marek's disease
  - D) Pasteurellosis and Pullorum disease
4. Which one of the following varieties of Mango is not a hybrid ?
  - A) Ratna                      B) Swarnarekha      C) Amrapalli              D) Mallika
5. Name the botanical family name of the ornamental flowering shrub Crossandra.
  - A) Acanthaceae                                      B) Amaryllidaceae
  - C) Apocynaceae                                      D) Asclepiadaceae
6. The red yellow colour of Onions, is due to the presence of pigments anthocyanin and
  - A) Xanthophyll              B) Beta carotene      C) Capsanthin              D) Quercetin
7. Which one of the following statements is not correct about formal/Moghul style gardening ?
  - A) Straight and central axis
  - B) Symmetric outlay with squares and rectangles
  - C) Natural and holistic style with curvaceous outlines
  - D) Features like pools and cascades

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8. Which one of the following sets of indoor-plants belongs to succulents category ?
- A) Adiantum – Nephrolepis
  - B) Bryophyllum – Crassula
  - C) Asparagus – Philodendron
  - D) Crocus – Amaryllis
9. Analyse the following statements about lawn grasses planting and choose the correct answer
- i. Turfs are pieces of earth with compact grasses on them.
  - ii. Turfs are placed on prepared site and beaten down with a turf beater in turving.
  - iii. Chopped grass pieces are mixed with soil-cowdung paste before turving.
  - iv. The Cheapest method of lawn making is dibbling.
- A) i, ii, iii are true, iv is wrong
  - B) ii, iii, iv are true, i is wrong
  - C) i, iii, iv are true, ii is wrong
  - D) i, ii, iv are true, iii is wrong
10. In the care and maintenance of terrarium plants, which one of the following statements, is false ?
- A) Irrigate sufficiently always
  - B) Give indirect or diffused sunlight
  - C) Pinch and prune whenever necessary
  - D) Keep shorter plants and thin soil to front
11. The starting months of Mundakan, Virippu and Punja are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ respectively.
- A) April-May, September-October and December-January
  - B) September-October, April-May and December-January
  - C) December-January, April-May and September-October
  - D) September-October, December-January and March-April
12. Analyse the statements on Agrometeorology
- i. 'Meteoro' means 'above the earth's surface'
  - ii. Agrometeorology helps in planning cropping patterns
  - iii. It saves agriculture from ill effects of floods, cyclones etc.
  - iv. It helps in providing judicious irrigation.
- Which one of the above statements is correct ?
- A) i and ii only are correct
  - B) ii and iii only are correct
  - C) iii and iv only are correct
  - D) None
13. The Greek word 'Klima' from which the term 'Climate' originated, means \_\_\_\_\_ of earth.
- A) Slope
  - B) Height
  - C) Range
  - D) Time

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14. Read the statements and choose the correct answer
- Polar climate has very low temperature through out the year.
  - Subtropical climate has low temperature through out the year.
  - Tropical climate has high temperature through out the year.
  - Temperate climate has high temperature alternating with low temperature in winter.
- A) i and ii wrong – iii and iv correct                      B) ii and iii wrong – i and iv correct  
C) ii and iv wrong – i and iii correct                      D) iii and iv wrong – i and ii correct
15. Management of floods can be done by measures like
- Increase capacity of channels to carry excess water direct to water bodies
  - Conserve water in soil where it falls by increasing porosity of soil
  - Both
  - None
16. Which one of the following is a weather forecasting tool ?
- Agroclimatic zonation
  - Synoptic chart
  - Remote sensing
  - Crop model
17. Medium range weather forecasting type has a validity period of
- Upto 72 hours
  - Beyond 3 days and upto 10 days
  - Beyond 10 days, upto a month and a season
  - 0 – 12 hours
18. Which one of the following is not a Rabi Crop ?
- Peas
  - Grams
  - Mustard
  - Cotton
19. In Kerala Black soil is found in
- Chittoor taluk of Palakkad district
  - Southern part of Thiruvananthapuram district
  - Kuttanad
  - Karunagappally, Karthikappally and Mavelikkara Taluks of Kollam and Alappuzha district
20. Which one of the following is not a reason for soil acidity ?
- Heavy rainfall with high relative humidity
  - Continuous application of ammoniacal fertilizer
  - Excessive irrigation containing Sodium salts with poor drainage
  - Application of elemental sulphur

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21. In the erosion process the soil particles move in a series of short bounces along the surface of the ground is  
A) Surface creep    B) Saltation    C) Suspension    D) Sheet erosion
22. Which of the following is not a concentrated organic manure ?  
A) Blood meal    B) Fish meal  
C) Oil cakes    D) Farmyard manure
23. An example for symbiotic nitrogen fixing bacteria  
A) Azotobacter    B) Rhizobium    C) Clostridium    D) Trichoderma
24. Plant suitable for green manuring in-situ  
A) Sunnhemp    B) Subabul    C) Gliricidia    D) Cassia
25. Soil sampling depth for rice  
A) 5 cm  
B) 15 cm  
C) 22 cm  
D) Three soil samples at 30, 60 and 90 cm
26. Agronomic measure of soil and water conservation is  
A) Contour bunding    B) Basin Listing  
C) Contour trenching    D) Contour farming
27. Which nutrient form the core constituent of the ring structure of chlorophyll ?  
A) Calcium    B) Phosphorous    C) Magnesium    D) Potassium
28. Which of the following is a straight fertilizer ?  
A) Diammonium phosphate    B) Nitrophosphate  
C) Ammonium phosphate    D) Ammonium sulphate
29. Which one of the following is a natural phosphatic fertilizer ?  
A) Rock phosphate    B) Single super phosphate  
C) Triple super phosphate    D) Urea
30. Coimbatore method of composting is  
A) Aerobic  
B) Anaerobic  
C) Initial anaerobic decomposition followed by aerobic  
D) Aerobic followed by anaerobic

A

31. Soil sampling tool is  
 A) Soil tube                      B) Soil auger                      C) Spade                      D) All the above
32. Which statement is correct with regard to coir pith composting ?  
 i. Mushroom belonging to genus *Pleurotus* degrade cellulose and lignin present in coir pith.  
 ii. After composting reduce wider C:N ratio to narrow one.  
 A) i only                      B) ii only                      C) i and ii                      D) None
33. Which statement is incorrect with regard to soil texture ?  
 A) Degree of fineness and coarseness of the soil  
 B) Arrangement of soil particles  
 C) Express percentage of sand, silt and clay  
 D) Influence water and nutrient supply potential for plants
34. Which of the following is an example for secondary tillage implement ?  
 i. Disc plough  
 ii. Disc harrow  
 iii. Mould board plough  
 iv. Cultivator  
 A) i and ii                      B) iii and iv                      C) ii only                      D) ii and iv
35. Which plough can work well when soil is too hard and sticky ?  
 A) Disc plough                      B) Disc harrow  
 C) Country plough                      D) Mould board plough
36. Which component of the nozzle breaks the fluid into fine droplets ?  
 A) Swirl plate                      B) Nozzle disc  
 C) Strainer                      D) None of the above
37. Which of the following is not an advantage of puddling ?  
 A) Reduce deep percolation losses of water  
 B) Control weeds  
 C) Soil becomes soft and muddy  
 D) Destroys soil structure
38. Which of the following is not a conservation tillage ?  
 A) No tillage                      B) Minimum tillage  
 C) Clean tillage                      D) Stubble mulch tillage

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39. Objective of tillage
- Improving soil aeration.
  - Minimize resistance to root penetration.
  - Incorporate and mix fertilizers and soil amendments.
  - Incorporate crop stubbles.
- A) i and ii                                      B) ii and iv  
C) iii Only                                      D) i, ii, iii and iv
40. Plough that cuts soil and make 'V' shaped furrow and opens the soil but there is no inversion
- A) Indigenous plough                                      B) Mould board plough  
C) Disc plough                                      D) Chisel plough
41. Which of the following is not a safety precaution while using sprayer ?
- A) Wear appropriate clothing  
B) Avoid spraying during wind  
C) Smoke while mixing or applying pesticide  
D) Never empty the tank into irrigation canal
42. Knapsack sprayer is an example for
- A) High volume sprayer                                      B) Low volume sprayer  
C) Ultra low volume sprayer                                      D) None
43. Which statement is incorrect with regard to preparatory tillage ?
- A) Deep opening and loosening of the soil to bring about a desirable tilth  
B) Uproot and incorporate weeds and crop stubbles  
C) Tillage operations carried out in the standing crop after planting  
D) Tillage operations that are done to prepare field for raising crops
44. Field is divided into different strips separated by levees and water is given to each strip is called
- A) Furrow irrigation    B) Basin irrigation    C) Border irrigation    D) Flooding
45. Among the following statements, select the true one with respect to drip irrigation
- A suitable pump is not necessary in family drip irrigation.
  - Inline drip irrigation is suitable for row crops.
  - Pressure compensating dripper changes discharge with pressure.
- A) Statements i and ii are correct  
B) Statements ii and iii are correct  
C) Statements i and iii are correct  
D) All are correct

A



46. Water comes out as fountain like or umbrella like pattern in  
A) Micro sprinkler                                      B) Bubbler  
C) Pop up sprinkler                                      D) Overhead sprinkler
47. Which among the following is considered as the most ancient water lifting equipment ?  
A) The Chadas            B) The Araghatta            C) The Noria            D) The Shaduf
48. The process in which water moves downward through the soil under gravitational force is called  
A) Percolation            B) Runoff            C) Infiltration            D) Leaching
49. Select the correct statement with respect to Field Capacity  
i. At field capacity, both micropores and macropores of soil are filled with water.  
ii. Plants can absorb water at field capacity.  
iii. Field capacity is the water left in the soil after saturated water is drained off.  
A) Statements i and ii are correct            B) Statements ii and iii are correct  
C) Statements i and iii are correct            D) All are correct
50. Which of the following statement/statements are correct ?  
i. Centrifugal pump has high efficiency.  
ii. It has low maintenance requirement.  
iii. It can handle viscous liquids.  
A) Statements i and ii are correct            B) Statements ii and iii are correct  
C) Statements i and iii are correct            D) All are correct
51. The concentration of fertilizer reduces with time when we are using \_\_\_\_\_ for fertigation.  
A) Fertilizer Injection Pump            B) Ventury Injector  
C) Fertilizer Tank            D) None of these
52. Which is the most suitable pump for lifting water from borewell  
A) Jet Pump            B) Vertical Turbine Pump  
C) Propeller Pump            D) Submersible Pump
53. Electrical conductivity is a measure of  
A) Acidity            B) Alkalinity            C) Salinity            D) Sodicity

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54. The tag colour used to identify registered class of seed is  
A) Blue                      B) Purple                      C) Golden Yellow      D) White
55. The minimum germination percentage for rice for seed certification is  
A) 70                      B) 75                      C) 80                      D) 85
56. Among the following plants given below, select the plant propagated by semi hard wood cuttings  
A) Croton                      B) Rose                      C) Jasmine                      D) Pomegranate
57. Average number of cuttings that can be produced from each mother plant through Serpentine Layering in Black Pepper is  
A) 30                      B) 40                      C) 50                      D) 60
58. Among the following statements, select the correct statement/statements  
i. The age of rootstock in approach grafting is 1-1.5 month.  
ii. Rootstocks are taken to mother plant for grafting.  
iii. For separating grafted plants, cut is made on scion just above graft union and cut is made on rootstock just below graft union.  
A) Only statement i is correct                      B) Only statement ii is correct  
C) Only statement iii is correct                      D) All are correct
59. The following budding method is preferred in plants where it is difficult to slip off the bark.  
A) T budding                      B) Patch budding      C) Chip budding      D) Ring budding
60. Select the pair of chemicals most commonly used as surface disinfectants in tissue culture.  
A) Sodium hypochlorite and Calcium hypochlorite  
B) Sodium hypochlorite and Mercuric chloride  
C) Calcium hypochlorite and Chlorine  
D) Sodium hypochlorite and Chlorine
61. Most popular method in grafting tomato is  
A) Splice grafting                      B) Side grafting  
C) Wedge grafting                      D) Softwood grafting

**A**

62. Plant growth hormone that is not used for producing male sterility in plants  
 A) Naphthalene Acetic acid                      B) Tri Iodo Benzoic acid  
 C) Maleic Hydrazide                                D) Kinetin
63. Which hormone induces apical dominance in plants ?  
 A) Cytokinin                  B) Gibberellins            C) Ethylene                D) Auxin
64. Select the true Statement from the following :  
 i. Emasculation is removal of stamens from male parent.  
 ii. Emasculation is removal of stamens from female parent.  
 iii. Emasculation is necessary in bisexual flowers.  
 A) Statements i and ii are correct              B) Statements ii and iii are correct  
 C) Statements i and iii are correct              D) All are correct
65. Bacterial wilt resistant rootstock used for grafting in Brinjal  
 A) *Solanum nigrum*                                  B) *Solanum melongena*  
 C) *Solanum tuberosum*                              D) *Solanum torvum*
66. For the control of burrowing nematode in black pepper, Which of the following measures is correct ?  
 i. Use Nematode free rooted cuttings for raising new plantation.  
 ii. Apply talc based formulation of *Bacillus macerans* @ 10gm/vine in basins at the time of planting of vines.  
 iii. Apply talc based formulation of *Bacillus macerans* @ 100gm/vine in basins at the time of planting of vines.  
 A) Only i and ii                                      B) Only i and iii  
 C) All of the above (i, ii and iii)              D) Only ii and iii
67. In brinjal when infestation of sucking pests like mite, jassids and Whitefly are severe, Which of the following control measures are to be taken ?  
 i. Spray Thiamethoxam 25 WG @ 50 gm ai/hectare.  
 ii. Cultivate resistant varieties like Surya, Swetha and Haritha.  
 iii. Nursery treatment with *Bacillus macerans*.  
 A) Only i and ii                                      B) Only i  
 C) Only ii and iii                                    D) All of the above (i, ii and iii)

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68. Damping off disease in nursery beds of Cauliflower can be controlled by applying
- A) Dimethoate 0.05%
  - B) Malathion 0.05%
  - C) Copper oxychloride 2g/l
  - D) Diafenthiuron 50wp @ 300 gai/hect
69. Which of the following are example for Egg parasitoids ?
- i. *Trichogramma japonicum and Tetrastychus sp.*
  - ii. *Trichogramma japonicum and cotesia sp.*
  - iii. *Telenomus chilonis and Tetrastychus sp.*
- A) Only i and ii
  - B) Only ii and iii
  - C) Only i and iii
  - D) All of the above (i, ii and iii)
70. For controlling Downey mildew in bitter gourd, which of the following foliar spraying combination fungicide is effective ?
- i. Caboxin 17.5% + Thiram 37.5% wp
  - ii. Metalaxyl 8% + Mancozeb 64% wp
  - iii. Cymoxanil + Mancozeb 2g/l
- A) Only i and ii
  - B) Only iii
  - C) Only ii and iii
  - D) None of the above (i, ii and iii)
71. Which of the following pesticides banned for manufacture, import and use in India ?
- i. Aldrin and Chlordane
  - ii. Cypermethrin and cartap
  - iii. Nitrofen and Endrin
- A) Only i and ii
  - B) Only i and iii
  - C) Only ii and iii
  - D) All of the above (i, ii and iii)
72. An example of Systemic fungicide
- A) Fluzilazole 40 EC
  - B) Mancozeb 75 wp
  - C) Thiophanate 50 wp
  - D) Propineb 50 wp
73. The appearance of rectangular linear reddish brown lesions mainly on the lower surface of leaves in cardamom is a characteristic symptom of
- A) Stem rot
  - B) Katte
  - C) Azhukal
  - D) Chenthal disease
74. Klass is the trade name of which herbicide ?
- A) Glyphosate
  - B) Diuron
  - C) Oxyfluorofen
  - D) Pretilachlor

A

75. The bio fertiliser which improves the uptake of available P by the inoculated plants.  
 A) VAM/AMF                      B) BGA                      C) Azosprillum                      D) Rhizobium
76. The generally used planting materials in Rubber are  
 i. Poly bag plants, budded stumps  
 ii. Budded stumps, bud wood  
 iii. Seedling stumps, Root trainer plants  
 A) Only ii and iii                      B) Only i and iii  
 C) Only i                      D) All of the above (i, ii and iii)
77. Mauritius variety of pineapple is recommended for commercial cultivation for table purpose and distant marketing due to its  
 i. Long duration and bigger size of fruit.  
 ii. Short duration and keeping quality.  
 iii. Better fruit quality and transportability.  
 A) Only i and iii                      B) Only ii  
 C) Only ii and iii                      D) None of the above
78. A day neutral cultivar of strawberry which has the capacity to produce off season fruits.  
 A) Tioga                      B) Torrey                      C) Selva                      D) Belrubi
79. The Mango variety susceptible to spongy tissue.  
 A) Alphonso                      B) Banganapalli  
 C) Chausa                      D) Bombay green
80. A major disorder in carnation flower  
 A) Leaf scorching                      B) Disbudding                      C) Flower shower                      D) Calyx splitting
81. The essential element which plays important role in flowering, fruiting, photosynthesis, cell division, pollen germination in horticultural crops  
 A) Molybdenum                      B) Copper                      C) Boron                      D) Chlorine
82. A major physiological disorder in Mangosteen  
 A) Gamboge                      B) Black tip                      C) Jhumka                      D) Spongy tissue

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83. 'Cherelle' is the young fruit of  
A) Litchi                      B) Loquat                      C) Rambutan                      D) Cocoa
84. The commonly occurring disorder in radish and turnip due to Boron deficiency  
A) Sun scald                      B) Blotchy ripening                      C) Brown heart                      D) Cat face
85. The coleus variety released by CTCRI Thiruvananthapuram  
A) Sree Dhara                      B) Sree Kala                      C) Sree Dhanya                      D) Sree Latha
86. Spacing of snake gourd  
A) 3m × 3m                      B) 2m × 2m                      C) 3m × 2m                      D) 1m × 1m
87. 'Friendship' is variety of  
A) Tuberose                      B) Orchid                      C) Gladiolus                      D) Anthurium
88. A fungal disease of Cardamom caused by *Phytophthora sp* occurring during rainy season  
A) Azhukal                      B) Katte                      C) Clump rot                      D) Stem rot
89. Seed rate of chilli  
A) 2 kg/ha                      B) 2.5 kg/ha                      C) 0.5 kg/ha                      D) 1 kg/ha
90. The tolerable level of light in the tropical region during summer for better growth of Anthurium  
A) 10%-20%                      B) 30%-40%                      C) 20%-30%                      D) 40%-50%
91. A thing that can be dangerous or cause damage  
A) Harbour                      B) Hardiness                      C) Hazard                      D) Heifer
92. First aid measures for swallowed chemical poisoning  
i. Intake table salt in a glass of warm water to induce vomiting.  
ii. Intake mustard oil in a glass of warm water to induce vomiting.  
iii. Intake castor oil in a glass of warm water to induce vomiting.  
iv. Intake milk in water to induce vomiting.  
A) i only                      B) Both i and ii                      C) i, ii and iii                      D) i, ii and iv
93. The device used to protect eyes and respiratory tract from toxic gases and aerosols  
A) Eye shield                      B) Gas mask                      C) Gloves                      D) Apron

A

94. Which among the following is not suited to protective measures during the operation of machinery ?
- A) Read the label and Safety Data Sheets carefully and follow the instructions
  - B) Train the workers about safe use and its maintenance
  - C) Protect them with safety switch
  - D) Supply them for use after testing and tagging
95. \_\_\_\_\_ gloves are used as protective device while handling chemicals.
- A) Silica
  - B) Cotton
  - C) Rubber
  - D) Leather
96. Agmarknet a portal for dissemination of agriculture marketing information is a joint endeavour of
- A) DMI and NIC
  - B) DMI and Ministry of Agriculture
  - C) NIC and Ministry of Agriculture
  - D) DMI and Directorate of Economics and Statistics
97. The Market in which the produce is either finally dispose off, direct to consumer or processors or assemble for shipment to foreign countries
- A) Terminal market
  - B) Perfect market
  - C) Retail market
  - D) Fairs
98. Transporters act as \_\_\_\_\_ in marketing of agricultural products.
- A) Traders
  - B) Trade planners
  - C) Trade supports
  - D) None of the above
99. FSSAI stands for
- A) Food and Safety Standard Association of India
  - B) Foods and Safety Standard Authority of India
  - C) Food Safety Standard Authorities of India
  - D) Food Safety and Standards Authority of India
100. Which among the following is true about Agriculture Export Zone in India ?
- i. There are 80 such zones spread across 20 states.
  - ii. The concept of AEZ was introduced in 2001 through EXIM policy 1997-2001 to take comprehensive look at a particular product.
  - iii. Specific geographic region in a country demarcated for setting up agriculture based processing industries.
- A) i only
  - B) iii only
  - C) Both ii and iii
  - D) None of the above
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Space for Rough Work