INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

1. Within 30 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.

2. Do not bring any loose paper, written or blank, inside the Examination Hall except the Admit Card.

3. A separate OMR Answer Sheet is given. It should not be folded or mutilated. A second OMR Answer Sheet shall not be provided. Only the OMR Answer Sheet will be evaluated.

4. Write all entries by blue/black pen in the space provided above.

5. On the front page of the OMR Answer Sheet, write by pen your Roll Number in the space provided at the top and by darkening the circles at the bottom. Also, write the Question Booklet Number, Centre code Number and the Set Number wherever applicable in appropriate places.

6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR Answer Sheet and Roll No. and OMR Answer Sheet No. on the Question Booklet.

7. Any change in the aforesaid entries is to be verified by the Invigilator, otherwise it will be taken as unfair means.

8. Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the OMR Answer Sheet by darkening the appropriate circle in the corresponding row of the OMR Answer Sheet, by pen as mentioned in the guidelines given on the first page of the OMR Answer Sheet.

9. For each question, darken only one circle on the OMR Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.

10. Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).

11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.

12. On completion of the Test, the candidate must handover the OMR Answer Sheet to the Invigilator in the examination room/hall. However, candidates are allowed to take away Test Booklet and copy of OMR Answer Sheet with them.

13. Candidates are not permitted to leave the Examination Hall until the end of the Test.

14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.
ROUGH WORK
एफ कार्य
18P/300/24(i)
No. of Questions : 120
प्रश्नों की संख्या : 120

Time : 2 Hours                     Full Marks : 360
समय : 2 घण्टे                        पूर्णांक : 360

Note : (1) Attempt as many questions as you can. Each question carries 3 (Three) marks. One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

01. Forest is derived from latin word :

(1) Foris  (2) Mensura
(3) Sere   (4) Silvics

02. Father of forestry :

(1) D. Brandis  (2) Molish
(3) Watson     (4) A.P. Dwivedi
03. An area set aside for the production of timber and other forest products is:
   (1) Forestry
   (2) Forest
   (3) Agroforestry
   (4) Farm forestry

04. The smallest permanent working plan unit in India is:
   (1) Coupe
   (2) Felling series
   (3) Compartment
   (4) Circle

05. On sloping land, the diameter at Breast Height should be measured on the:
   (1) Low land side
   (2) Leaning side
   (3) Up hill side
   (4) Forking side

06. For tree increment measurement which instrument is used:
   (1) Swedish Bark gauge
   (2) Hypsometer
   (3) Calliper
   (4) Prehlers Increment borer

07. The art of growing and reproducing a forest:
   (1) Silviculture
   (2) Ecology
   (3) Mensuration
   (4) Social forestry

08. Identification of trees according to species is called:
   (1) Forestry
   (2) Silvics
   (3) Ecology
   (4) Dendrology
09. A mixed stand is one in which less than ......% of the tree are same species :1
   (1) 80       (2) 60       (3) 50       (4) 20 - 30

10. In India plantation forestry was started in :
   (1) 1942       (2) 1942       (3) 1842       (4) 1847

11. The natural forest uninfluenced by human activity which may or may
    not be a climax forest is known as :
    (1) Product forest        (2) Virgin forest
    (3) Evergreen forest      (4) Climax forest

12. The renew of a forest crop by self sown seed or by coppice or root
    suckers is .......
    (1) Artificial regeneration        (2) Natural regeneration
    (3) Regeneration                  (4) Afforestation

13. A species which is native to specified area or region is called ------
    (1) Indigenous            (2) Plus tree
    (3) Exotic               (4) Candidate tree

14. The practices of forestry on farm land is called........
    (1) Social forestry       (2) Urban forestry
    (3) Agro forestry         (4) Farm forestry
15. A shrub is usually not more than .......Meters in height:
   (1) 2    (2) 1    (3) 6    (4) 4

16. The irregular involutions and swellings on the bole of tree is ....
   (1) Pollarding       (2) Girdling
   (3) Fluting          (4) Coppicing

17. Lignotubers commonly present in ....
   (1) Neem             (2) Popular
   (3) Eucalyptus       (4) Teak

18. The mutual relationship between microorganisms is termed as :
   (1) Symbiosis        (2) Silviculture
   (3) Competition      (4) Antagonism

19. The tree which produces male and female flowers separately on different parts is called :
   (1) Dioecious        (2) Polygamous
   (3) Monoecious       (4) Monogamous

20. The plants which have naked seed belong to :
   (1) Angiosperm       (2) Bryophytes
   (3) Gymnosperm       (4) Pteridophytes
21. The study of plants or animals in relation to their environment is known as:
   (1) Ecology  (2) Climate
   (3) Environment  (4) Microlimate

22. The forests which are regenerated from seed are called:
   (1) High forest  (2) Even aged forest
   (3) Coppice forest  (4) Pure forest

23. An area constituted under the Indian Forest Act is known as:
   (1) Production forest  (2) Reserved forest
   (3) Protection forest  (4) Village forest

24. Trees, which receive full light from upper canopy and little from the sides:
   (1) Dominant tree  (2) Co-dominant tree
   (3) Suppressed tree  (4) Wolf

25. The estimated light is used in photosynthesis is less than:
   (1) 8%  (2) 15%  (3) 6%  (4) 2%

26. Taungyas is a .............. word:
   (1) Spanish  (2) Burmese
   (3) Indian  (4) Japanese
27. Stump planting is commonly practiced in:
   (1) Teak   (2) Sissoo
   (3) Sal    (4) Popular

28. Advanced thinning is developed by:
   (1) Heck   (2) Reineke
   (3) Craib  (4) Gupta

29. Crown thinning is also called as:
   (1) French thinning   (2) German thinning
   (3) Elite Thinning    (4) Ordinary Thinning

30. Based on method of regeneration, forests are classified as:
   (1) Evenaged and unevenaged   (2) Regular and irregular
   (3) High and coppice          (4) Pure and mixed

31. Champion and Seth classified the Indian Forests into the major groups:
   (1) 23  (2) 16  (3) 12  (4) 5

32. Indian butter tree is:
   (1) *Terminalia chebula*   (2) *Eucalyptus spp.*
   (3) *Cedrus deodara*       (4) *Madhuca latifolia*

33. Cutch is obtained from:
   (1) *Acacia catechu*       (2) *Prosopis juliflora*
   (3) *Acacia nilotica*      (4) *Albezia lebbek*
34. World Forestry Day is celebrated on ....
   (1) 21st June  (2) 15th July
   (3) 21st March  (4) 7th March

35. Nitrogen fixing non leguminous tree is:
   (1) Khair  (2) Siris
   (3) Sissoo  (4) Casuarina

36. Flame of forest is:
   (1) Butea monosperma  (2) Pinus roxburghii
   (3) Tectona grandis  (4) Shorea robusta

37. Origin of Mangifera indica is:
   (1) Pakistan  (2) India
   (3) Nepal  (4) Australia

38. Karanj oil is extracted from:
   (1) Jatropha curcus  (2) D. Sissoo
   (3) Pongamia pinnata  (4) Hardwickia binnata

39. Total geographical area in India is:
   (1) 328.7 m. hac.  (2) 127 m. hac.
   (3) 327 m. hac.  (4) 429 m. hac.
40. CAPRI is located at:
   (1) Dehradun    (2) Delhi
   (3) Hisar       (4) Jhansi

41. Vanmahotsava started in the year of:
   (1) 1950        (2) 1952   (3) 1892   (4) 2012

42. First National Park in India is:
   (1) Corbett     (2) Panna
   (3) Gir         (4) Nilgiri

43. The origin of teak is:
   (1) India       (2) Nepal
   (3) Pakistan    (4) Burma

44. In India Breast Height is measured at:
   (1) 1.37m       (2) 1.33m
   (3) 1.3m        (4) 1.23m

45. Decrease in diameter of a stem of tree from the base to upwards is called:
   (1) Form        (2) Form factor
   (3) Taper       (4) Form Quotient

46. Artificial form factor is also called:
   (1) Normal form factor (2) Breast height form factor
   (3) Absolute form factor (4) Waist height form factor
47. Joint Forest Management was first introduced in:
   (1) West Bengal          (2) Tamil Nadu
   (3) Odisha              (4) Uttarakhand

48. Quarter girth formula is used for:
   (1) Calculation of felled logs (2) Bark thickness
   (3) Standing tree volume    (4) Standing tree height

49. Portion of tree stem which is unmerchantable is called:
   (1) Forked                (2) Crown height
   (3) Cull                 (4) Crown length

50. Yield table is not applicable to:
   (1) Even aged forest      
   (2) Both even and uneven aged forests
   (3) Un even aged forest   
   (4) High forest

51. Day length or .......... influences diameter growth in trees.
   (1) Photoperiod           (2) Perspiration
   (3) Photosynthesis        (4) Photochemical

52. The First Conservator of Forest:
   (1) Trevor               (2) Watson
   (3) Troupe               (4) Hartig
53. Indian Grassland and Fodder Research Institute located at:
   (1) Dehradun         (2) Jodhpur
   (3) Jabalpur         (4) Jhansi

54. *Shorea robusta* is:
   (1) Susceptible to drought       (2) Drought hardy
   (3) Moderately drought hardy     (4) Susceptible to frost

55. The dying back is a common disease in:
   (1) Teak            (2) Deodar
   (3) Sal             (4) Khair

56. Arrangement of individual soil particles into aggregates is called:
   (1) Soil class               (2) Soil structure
   (3) Soil texture            (4) Humus

57. Nilgiris Biosphere Reserve is found in:
   (1) Tamil Nadu          (2) Kerala
   (3) Karnataka           (4) Andhra Pradesh

58. .......... is a tending operation in which individuals of favored species also removed:
   (1) Weeding                (2) Pruning
   (3) Cleaning               (4) Thinning
59. Scion is a part of:
   (1) Graft of shoot  (2) Graft of root
   (3) A bud  (4) Clone

60. The sustainable land use systems involving tree combined with crops and/or animals on the same unit of land:
   (1) Agroforestry  (2) Farm forestry
   (3) Social forestry  (4) Urban forestry

61. 'Social forestry' was first coined by:
   (1) Westoby  (2) Seth
   (3) Brandis  (4) Nair

62. Taungya means:
   (1) Cultivation of crop  (2) Hill Cultivation
   (3) Cultivation of grass  (4) Plane Cultivation

63. The practices of managing rows of closely planted woody plants with annual crops planted in alleys in between hedges is called:
   (1) Hedgerow intercropping  (2) Woody hedgerows
   (3) Soil conservation hedges  (4) Home garden

64. The most suitable species for reclamation of sandy soil is:
   (1) *Casuarina equisetifolia*  (2) *Melia dubia*
   (3) *Acacia spp.*  (4) *Azadirachta indica*
65. Complete removal of a strip of bark from around the entire circumference of tree trunk:
   (1) Lopping  (2) Pollarding
   (3) Girdling  (4) Pruning

66. Jhuming is other name for:
   (1) Taungya  (2) Shifting cultivation
   (3) Home garden (4) Alley cropping

67. Wood is the common name of:
   (1) Secondary xylem (2) Phloem
   (3) Vascular bundles (4) Cambium

68. The last forest policy was formulated during the year:
   (1) 1998  (2) 1972  (3) 1988  (4) 1952

69. Global warming is caused by:
   (1) GHGs (2) NO₂ (3) MIC (4) CH₄

70. Nitrogen fixing ability of casuarinas is attributable to:
   (1) Azotobactor (2) Frankia
   (3) Rhizobium (4) Azospirillum

71. Shifting cultivation is most prevalent in:
   (1) North East India (2) Eastern Part of India
   (3) Northern Part of India (4) Southern Part of India
72. Central Arid Zone Research Institute is located at:
   (1) Jabalpur  (2) Jhansi
   (3) Jodhpur  (4) Dehradun

73. ICFRE is located at:
   (1) New Delhi  (2) Dehradun
   (3) Jhansi  (4) Ibadan

74. Green gold is:
   (1) Bamboo  (2) Sandal
   (3) Sal  (4) Teak

75. Home garden is highly suitable for:
   (1) Humid/sub humid region  (2) Hilly region
   (3) Arid./ semi arid region  (4) High lands

76. Generally shelter belt assumes the shape of:
   (1) Quadrangle  (2) Rectangle
   (3) Triangle  (4) Trapezoidal

77. The combination of wheat and popular is common in:
   (1) Punjab  (2) Rajasthan
   (3) Karnataka  (4) Odisha
78. The queen of timber is:
   (1) Rose wood  (2) Sal
   (3) Teak        (4) Eucalyptus

79. Silvipasture means:
   (1) Growing trees with grass
   (2) Growing trees with fruit crops
   (3) Growing tree with annual crops
   (4) Growing trees with medicinal plants

80. Green house effect is caused by:
   (1) Increasing $CO_2$  (2) Increasing $O_2$
   (3) Decreasing $CO_2$  (4) Increasing Animals

81. Which of these is a non coppicers:
   (1) *Dalbergia sissoo*  (2) *Cedrus deodara*
   (3) *Albezia lebbeck*  (4) *Salix alba*

82. Official date of Earth Day is on:
   (1) April 22  (2) May 22
   (3) March 21  (4) June 05

83. Where is the ICRAF Centre?
   (1) Nairobi  (2) Rome
   (3) Bangladesh  (4) Nepal
84. Khus oil is extracted from which species:
   (1) *Vetiveria zizanioides*  (2) *Saccharum spontaneum*
   (3) *Dactyloriza hagegeria*  (4) *Azadirachta indica*

85. Forest Conservation Act was enacted during the year:
   (1) 1880  (2) 1980  
   (3) 1988  (4) 1998

86. As per the National Forest Policy, at least .........% of land area of the country should be under forest cover:
   (1) 21  (2) 28  (3) 33  (4) 65

87. First Agroforestry Policy was issued in the year of:
   (1) 2015  (2) 2014  (3) 2002  (4) 2012

88. World water Day is celebrated on:
   (1) May 22  (2) March 22
   (3) June 05  (4) May 11

89. A tree which is greatly superior to the average tree of the same species:
   (1) Candidate tree  (2) Comparison tree
   (3) Elite tree  (4) Superior tree

90. The oldest known agroforestry systems is:
   (1) Shifting Cultivation  (2) Alley cropping
   (3) Taungya  (4) Home Garden
91. *Lycopersicon esculentum* L. is botanical name of:
   (1) Tomato  (2) Brinjal
   (3) Chilli  (4) Potato

92. Which vegetable crop is also known as 'lady's finger'?
   (1) Beans  (2) Okra
   (3) Brinjal  (4) Pea

93. Ashgourd belongs to the family:
   (1) Solanaceae  (2) Leguminaceae
   (3) Cucurbitaceae  (4) Malvaceae

94. Pusa Sawani is the variety of:
   (1) Tomato  (2) Garlic
   (3) Chilli  (4) Okra

95. ICAR-Indian Institute of Vegetable Research is located at:
   (1) Varanasi  (2) Patna
   (3) Ranchi  (4) Kanpur

96. The seed rate of rainy season okra is:
   (1) 10-12 kg/ha  (2) 15-16 kg/ha
   (3) 18-20 kg/ha  (4) 22-24 kg/ha
97. Black or hollow heart physiological disorder is related to:
   (1) Brinjal  (2) Tomato
   (3) Pea  (4) Potato

98. The red colour of tomato is due to the presence of pigment:
   (1) Carotene  (2) Lycopene
   (3) Quercetin  (4) Anthocyanin

99. The pungency in onion is due to the presence of:
   (1) Allyl propyl disulphide  (2) Anthocyanin
   (3) Cucurbitacin  (4) Isothiocyanates

100. *Citrullus lanatus* is the botanical name of:
   (1) Muskmelon  (2) Watermelon
   (3) Longmelon  (4) Roundmelon

101. Agrifound Light Red is the variety of:
   (1) Garlic  (2) Amaranthus
   (3) Onion  (4) Cauliflower

102. ICAR-Central Institute for Subtropical Horticulture (CISH) is located at:
   (1) Delhi  (2) Varanasi
   (3) Bhopal  (4) Lucknow
103. Garlic is propagated by:
   (1) Clove   (2) Seeds
   (3) Root    (4) Corm

104. Blanching is related to which vegetable crop:
   (1) Cauliflower   (2) Brinjal
   (3) Potato        (4) Bitter gourd

105. Browning is the physiological disorder of cauliflower, which is due to the deficiency of:
   (1) Nitrogen   (2) Calcium
   (3) Boron      (4) Molybdenum

106. Whiptail is the physiological disorder of cauliflower, which is due to the deficiency of:
   (1) Nitrogen   (2) Calcium
   (3) Boron      (4) Molybdenum

107. The word horticulture is derived from:
   (1) Latin      (2) Greek
   (3) Persian    (4) English

108. Hen and Chicken disorder is found in:
   (1) Mango   (2) Avocado
   (3) Grape   (4) Litchi
109. Pomegranate is originated from:
   (1) India  (2) Iran
   (3) China  (4) Iraq

110. Arka Mridula is the variety of:
   (1) Mango  (2) Banana
   (3) Citrus  (4) Guava

111. Kinnow mandarin was developed by:
   (1) H.B. Frost  (2) Swingle
   (3) Spiegel Rey  (4) Tanaka

112. Hexagonal system of planting accommodates more (%) plants than square system of planting:
   (1) 15  (2) 10  (3) 20  (4) 25

113. Phalsa belongs to the family:
   (1) Euphorbiaceae  (2) Tiliaceae
   (3) Rosaceae  (4) Rutaceae

114. Granulation is a physiological disorder of:
   (1) Apple  (2) Mango
   (3) Guava  (4) Citrus
115. Sahi and Swarna Rupa are the varieties of:
   (1) Guava   (2) Litchi
   (3) Mango   (4) Papaya

116. Super dwarfing rootstock of apple is:
   (1) M-27   (2) M-9
   (3) M-11   (4) M-25

117. The best time of pruning roses in North Indian plains is:
   (1) October-November   (2) June-July
   (3) November-December  (4) September-October

118. Sleepiness is associated with flower of:
   (1) Gladiolus   (2) Tulip
   (3) Carnation   (4) Chrysanthemum

119. Rashtrapati Bhavan garden at New Delhi was laid out by:
   (1) Sir Edwin Lutyens   (2) Lord Curzon
   (3) Lady Hardings        (4) Shah Jahan

120. Scooping is a practice that facilitates bolting in:
   (1) Cabbage   (2) Brussels sprout
   (3) Cauliflower  (4) Broccoli
अभ्यासियों के लिए निदेश

(इस पुस्तिका के प्रथम आवरण पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर
केवल नीली/काली बाल-व्हाइट पेंस से ही लिखें)

1. प्रश्न पुस्तिका मिलने के ३० मिनट के अंतर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषपूर्ण पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दृष्टि पुस्तिका अटक कर लें।

2. परीक्षा भवन में प्रवेश-पत्र के अंतरिक्ष, लिखा या सादा कोई भी खुला कागज साथ में न लाएं।

3. ओ.एम.आर. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़े और न ही विकृत करें। दूसरा ओ.एम.आर. उत्तर-पत्र नहीं दिया जाएगा। केवल ओ.एम.आर. उत्तर-पत्र का ही मूल्यांकन किया जायेगा।

4. सभी प्रश्नों का प्रथम आवरण-पृष्ठ पर नीली/काली पेंस से निर्धारित स्थान पर लिखें।

5. ओ.एम.आर. उत्तर-पत्र के प्रथम पृष्ठ पर यदि आपने अनुक्रमणिक संख्या व भूताना की मार्गदर्शन-पुस्तिका के क्रमांक, केंद्र कोड नंबर और भुताना का नवनिर्धारित स्थान पर लिखिए।

6. ओ.एम.आर. उत्तर पत्र पर अनुक्रमणिक संख्या, प्रश्न-पुस्तिका का संख्या व भूताना यदि वाली कोई हो तथा प्रश्न-पुस्तिका का अनुक्रमणिक संख्या और ओ.एम.आर. उत्तर पत्र का प्रश्न-पुस्तिका को प्रश्न में उपार्थित करने की अनुमति नहीं है।

7. उपर्युक्त प्रश्नों में कोई भी परिवर्तन कक्ष-निरीक्षक द्वारा प्रामाणित होना चाहिए जबकि यह एक अनुमित साधन का प्रयोग नहीं किया जाये।

8. प्रश्न-पुस्तिका में प्रश्न के चार वृत्तिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वृत्तिक उत्तर के लिए आपको ओ.एम.आर. उत्तर-पत्र की सम्यक संपत्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पृष्ठ पर ग्रहण करना है।

9. प्रत्येक प्रश्न के उत्तर के लिए केवल एक ही वृत्त को ग्रहण करें। एक से अधिक वृत्तों को ग्रहण करने पर अथवा एक वृत्त को अनुपूर्ण ग्रहण पर कोई उपर्युक्त ध्रुव का प्रयोग नहीं किया जाये।

10. व्याख्या दें कि एक दृष्टि स्थायी अंकित उत्तर बदला नहीं जा सकता है। यदि सभी उत्तर नहीं देना चाहते है, तो संबंधित प्रश्नों के सामने दिये गये सभी वृत्तों को खाली होड़े दें। ऐसे प्रश्नों पर निर्देश अंक दिये जायेंगे।

11. एक कार्य के लिए प्रश्न-पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा उत्तर-पुस्तिका के अंतिम पृष्ठ का प्रयोग करें।

12. परीक्षा की समाप्ति के बाद अभ्यर्थी अपना ओ.एम.आर. उत्तर-पत्र परीक्षा कक्ष/हाल में कक्ष-निरीक्षक की सूचना पर अपने नाम पर पुस्तिका तथा ओ.एम.आर. उत्तर-पत्र को प्रति पत्र दे जा सकते हैं।

13. अभ्यर्थी की परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।

14. यदि कोई अभ्यर्थी पत्र पृष्ठों में अनुमित साधन का प्रयोग करता है, तो वह विरोधवाल द्वारा निर्धारित दंड का/की, भागी होगी/होगा।