A	C	F	F	Y

Register No.									
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Max. Marks: 300

2018

### FORESTRY

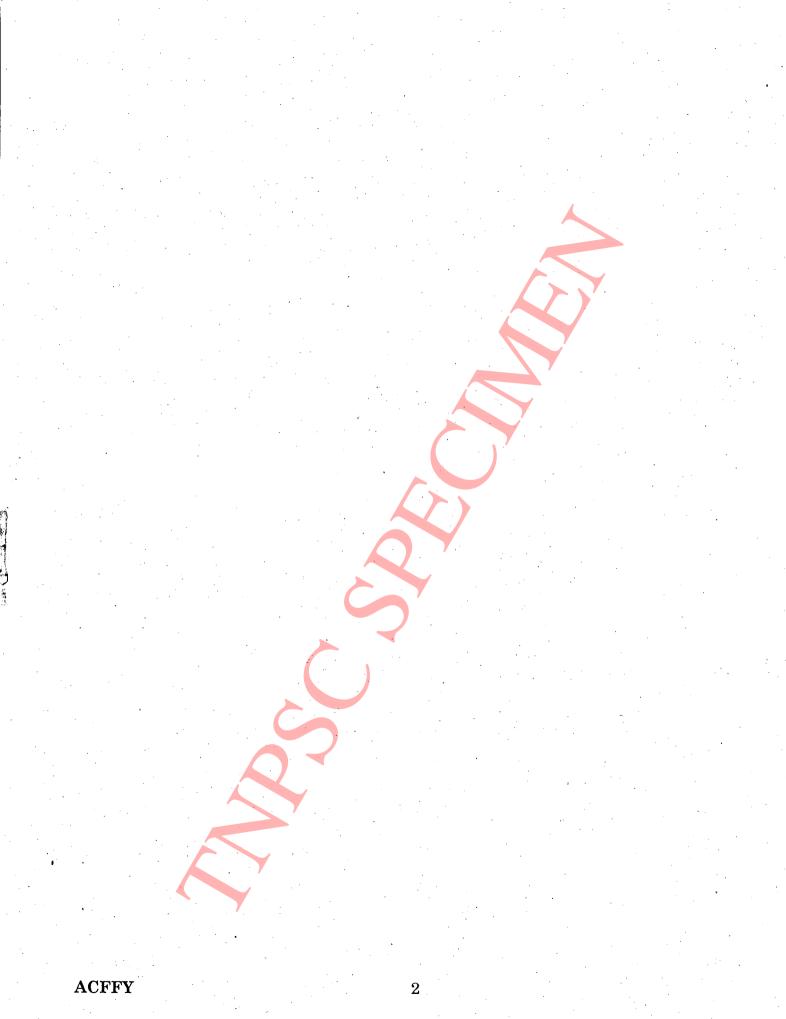
Duration: 3 Hours

General Instructions to the Applicants :

i) This Question Paper is descriptive type in Degree Standard.

ii) There is no reservation of marks for neatness of execution and correctness of spelling in respect of this paper.





## FORESTRY

# PART — A

### Note: i) Answer not exceeding 50 words each.

- ii) Each question carries three marks.
- iii) Answer any thirty questions only out of thirty five Questions.

1. Define forestry.

2. Define regeneration.

3. List three invasive alien plant/tree species and write their botanical name.

- 4. Write the role of forests.
- 5. Define sustained yield.
- 6. Define Bole height.
- 7. Define working circle.
- 8. Give examples of any six cane yielding species.
- 9. Define girdling and its significance in logging.



 $(30 \times 3 = 90)$ 

10. Provide the species that yields the following gums.

- (a) Gum Kino
- (b) Bengal Kino
- (c) Jingan Gum
- (d) Salai Gum
- (e) Dhaura Gum
- (f) Khair Gum
- 11. Define reaction wood.

12. Write a note on Open Brass Cross Staff.

13. What is back bearings?

14. How to test the accuracy of planimeter?

15. What is bed joint in building?

16. Write the salient features of shelterbelts.

17. Write a short note on bio-inoculants?

18. Give a note on mulching and its types.

19. Write about the various stages of water erosion.

20. What are the strategies involved in wasteland management?

21. Write about option value.

### ACFFY

- 22. What is forest economics? List two major categories of forest economics.
- 23. What is heritability? Write its types.
- 24. Define seed certification.
- 25. What is Tree Breeding? Indicate the concept of tree breeding.
- 26. What is global warming? List out atleast three effects of global warming.
- 27. What is ecological equivalents?
- 28. Describe the fossorial adaptations.
- 29. Describe the main objectives of biosphere reserves.
- 30. Differentiate between interpersion and juxtaposition.
- 31. What are the harmful effects of heavy uncontrolled grazing?
- 32. List out the adverse effects of shifting cultivation.
- 33. Name the important pests of teak with scientific name.
- 34. List out any six tree species suitable for urban forestry.
- 35. Define JFM. How is it different from the Traditional Forest Management?

ACFFY [Turn over

## PART — B

*Note*: i) Answer not exceeding 100 words each.

- ii) Each question carries eight marks.
- iii) Answer any fifteen questions only out of eighteen Questions.

 $(15 \times 8 = 120)$ 

36. Define Nursery. List the types of nursery and brief the importance of nursery.

37. Write the steps involved in containerised seedling production of tree crops in nursery.

- 38. Write an essay on selection system.
- 39. How the volume of felled trees is being calculated?
- 40. Discuss about the scope of forest management.
- 41. Define wood specific gravity. Discuss about various factors of wood that influences wood specific gravity.
- 42. What are the prerequisites of reduced impact logging?
- 43. Give a detailed account on tans and dyes from forests.
- 44. What are all the practical utility of prismatic compass in forest survey.
- 45. How to improve the bearing capacity of soft soils?

#### ACFFY

- 46. What are all the factors influency the wear and tear of roads and how it can be reduced?
- 47. How a watershed is treated? Write in detail the various process of treatment.
- 48. Give a note on reclamation of waterlogged lands.
- 49. What are the factors affecting forest policies? Discuss.
- 50. Discuss the major objectives of a tree breeding and improvement.
- 51. Write a essay on functions of Modern Zoo.
- 52. Indicate the causal organism for the following pests and diseases.
  - (a) Teak defoliator
  - (b) Casuarina wilt
  - (c) Sal bores
  - (d) Eucalyptus Gallwarp
  - (e) Tea mosquito bag in neem
  - (f) Leaf spot in Dalbergia sissoo
  - (g) Rust in teak
  - (h) Stem canker in Eucalyptus.
- 53. Write in detail about the classification of agroforestry systems based on temporal arrangement.

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ACFFY [Turn over

# PART — C

#### Note: i) Answer not exceeding 200 words each.

- ii) Each question carries fifteen marks.
- iii) Answer any six questions only out of nine questions.

 $(6 \times 15 = 90)$ 

- 54. Write an essay on Man and Biosphere (MAB) program.
- 55. Write in detail about above ground and below ground competition in agroforestry by citing a few examples.
- 56. Define seed dormancy. Write its types and methods to resolve dormancy.
- 57. Describe objectives and methods of valuation of goods and services.

58. Discuss in detail about ground water recharge techniques.

- 59. Describe the different types of culverts in forest areas.
- 60. Discuss in detail about the gross structure of wood.
- 61. Discuss in detail about the various kinds of sampling used in forest inventories.

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62. Write an essay on site factors.

#### ACFFY