



2024

APPSC FOREST RANGE OFFICER TOOLKIT

The Ultimate Guide to Success

MCQs

Module - 1

General Forestry

State Forest

Silviculture

Mangroves

Forest Management

JFM

Agroforestry

Wood Science

Forest Legislation

Forest Protection

NTFP

Forest Mensuration

Volume - 1



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CHAPTER 1

Chapter outline

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GENERAL FORESTRY

1.1 HISTORICAL BACKGROUND (UPTO 1947)

1. In *Vishnu Purana* Forest were classified as [\[Nagaland PSC CTSE 2016\]](#)
 - (a) Reserved and Protected forests
 - (b) Kunjar and Kankar van
 - (c) Arany and Jungle
 - (d) Van Sthali and van Vatika
2. In ancient India, the only king who took an effort to look after the forest of his kingdom was [\[BHU \(M.Sc.\) Agroforestry 2015\]](#)
 - (a) Dharmapala
 - (b) Paru
 - (c) Chandragupt Maurya
 - (d) Dasharatha
3. The First Conservator of the forest [\[BHU \(M.Sc.\) Agroforestry 2018; Nagaland PSC CTSE 2017\]](#)
 - (a) Trevor
 - (b) Watson
 - (c) Troupe
 - (d) Hartig
4. In India, the first teak plantation was established at [\[ICAR \(JRF\) 2020\]](#)
 - (a) Sakrebail, Karnataka
 - (b) Nilambur, Kerala
 - (c) Allapalli, Maharashtra
 - (d) Haldwani, Uttarakhand
5. In India the first teak plantation was established at Nilambur, Kerala during the year [\[ICAR \(JRF\) 2022\]](#)
 - (a) 1942
 - (b) 1842
 - (c) 1947
 - (d) 1893
6. The **oldest teak plantations** in India are located in [\[WII \(M.Sc.\) Entrance Exam 1999\]](#)
 - (a) Maharashtra
 - (b) Tamil Nadu
 - (c) Madhya Pradesh
 - (d) Kerala
7. The oldest teak plantation in the world is located in which state of India? [\[APPSC \(RFO\) 2018\]](#)
 - (a) Tamil Nadu
 - (b) Andhra Pradesh
 - (c) Karnataka
 - (d) Kerala
8. India has the distinction of having the best managed and productive forests among the developing nations. Some of the plantations on timber yielding species are the oldest in Asia. Name the correct species from following is the oldest in Asia [\[Odisha Civil \(Pre\) 2011\]](#)
 - (a) Deodar in Himachal Pradesh
 - (b) Teak in Kerala
 - (c) Mulberry in Pakistan
 - (d) Sal in Jharkhand
9. In India, **plantation forestry** was started in [\[BHU \(M.Sc.\) Agroforestry 2016, 2018\]](#)
 - (a) 1942
 - (b) 1842
 - (c) 1947
 - (d) 1847
10. The **first regular conservator** of the forest was appointed in [\[Nagaland PSC CTSE 2016\]](#)
 - (a) 1888
 - (b) 1842
 - (c) 1873
 - (d) 1890

11. **First Inspector General of forests of India** was [MPPSC (ACF) 2011; BHU (M.Sc.) Agroforestry 2016; Nagaland PSC CTSE 2021; Assam PSC (ASCO) 2022]
- (a) K.E.S King
(b) H.G champion
(c) R.S Troup
(d) Dietrich Brandis
12. Dietrich Brandis was [Assam (RFO) 2019]
- (a) First Governor of Assam
(b) First Inspector General of Forests of Assam
(c) First Inspector General of Forests of India
(d) None of the above
13. Which year was the first Inspector General of Forests appointed in India? [WII (M.Sc.) Entrance Examination 1999]
- (a) 1800
(b) 1864
(c) 1927
(d) 1952
14. Scientific forestry started in India from [Nagaland PSC Combined Technical Exam 2021]
- (a) 1864
(b) 1865
(c) 1868
(d) 1869
15. Indian forest service was started in the year [ICAR (SRF) 2014]
- (a) 1893
(b) 1948
(c) 1966
(d) 1983
16. The foundation of the present-day Forestry Administration in India was laid by [BHU (M.Sc.) Agroforestry 2015]
- (a) Gibson
(b) Conolly
(c) Mc Clelland
(d) Brandis
17. The Head Quarters of Inspector General of Forest is at [BHU (M.Sc.) Agroforestry 2016; Nagaland PSC CTSE 2021]
- (a) Dehra Dun
(b) Missouri
(c) Delhi
(d) Mumbai
18. Forest School at Dehradun was established during [BHU (M.Sc.) Agroforestry – 2017, 2020]
- (a) 1878
(b) 1902
(c) 1835
(d) 1947
19. The first issue of the journal 'The Indian Forester' was published in which year? [ICAR (SRF) 2022]
- (a) December 1863
(b) July 1875
(c) January 1906
(d) October 1827
- The Indian Forester, started its career as the outcome of a resolution of the forestry conference held at Allahabad in January 1874. And first time published a report in 1975.
20. **National Forest policy** 1894 was formulated based on the recommendations given by [TNPSC (ACF) 2014; Maharashtra PSC (ACF) 2019]
- (a) Mc. Clelland
(b) Dietrich Brandis
(c) J.A Voelker
(d) Herbert Howard
21. The first forest policy of India was *adopted / enunciated / formulated* in the year? [ICAR (SRF) 2014; Assam PSC (ACF) 2014; Nagaland PSC CTSE 2016, 2018, 2021; CGPSC Assistant professor 2019]
- (a) 1890
(b) 1894
(c) 1927
(d) 1955
22. The first Indian National Forest Policy of 1894 enacted under the pre-independent era came into existence on the basis of a report submitted by Dr. Voelker. The title of the report was [ICAR (SRF) 2021]
- (a) "Improvement of Indian forest"
(b) "Improvement of Indian agriculture"
(c) "Improvement of Indian forest and agriculture"
(d) "Improvement of Indian forest and wildlife"
23. The first *Taungya* plantations were raised in North Bengal in the year [APPSC (FRO) 2018]
- (a) 1896
(b) 1897
(c) 1899
(d) 1898
24. **Forest research institute** is located at [Uttarakhand PSC (Prelim) 2006, 2007, 2008, 2010; UPRO/ARO (Re-exam) Prelim 2016; CGPSC Assistant Professor 2019; Maharashtra PSC (ACF/RFO) 2021]
- (a) Jodhpur
(b) Jhansi
(c) Dehradun
(d) New Delhi
25. Forest research institute (FRI) started in the year of [ICAR (JRF) 2014, 2015; Nagaland PSC CTSE 2021]
- (a) 1882
(b) 1898
(c) 1905
(d) 1906
26. Forest Research Institute (FRI) Dehradun has its roots in the erstwhile Imperial Forest Research Institute established in the year [ICAR (SRF) 2022]
- (a) 1894
(b) 1906
(c) 1927
(d) 1947
27. In 1878, Imperial Forest school was established by the British which was later in 1906 renamed as [Assam PSC (ACF) 2014]
- (a) Indian forest college, Dehradun
(b) Forest Research institute, Dehradun
(c) Central Academy for State Forest officers, Dehradun
(d) Indira Gandhi national forest academy, Dehradun

- (b) 92.81 million ha
 (c) 97.85 million ha
 (d) 90.65 million ha
683. The National Bank of Agriculture and Rural Development (NABARD) came into existence on? [[Nagaland PSC CTSE 2015](#); [BHU \(M.Sc.\) Agroforestry 2014](#)]
- (a) 1979
 (b) 1981
 (c) 1982
 (d) 1983
684. UN Climate Change Conference COP-26, 2021 was held in [[Assam \(ASCO\) 2022 Environmental Science](#)]
- (a) Geneva
 (b) Glasgow
 (c) Copenhagen
 (d) Paris
685. Match List I with List II [[ICAR \(SRF\) 2022](#)]

List - I (International Day of Forests)	List - II (Theme)
(A) 2022	1. Forests and Biodiversity: Too precious to loose

(B) 2021	2. Forests and Education
(C) 2020	3. Forest restoration: a path to recovery and well being
(D) 2019	4. Forests and sustainable production and consumption

Choose the correct answer from the options given below

	(A)	(B)	(C)	(D)
(a)	1	2	3	4
(b)	4	3	1	2
(c)	3	1	2	4
(d)	2	4	3	1

686. Match List - I with List - II and select the correct answer using the codes given below the lists [[Assam \(ASCO\) 2022 Environmental 2022](#)]

List - I	List - II
(A) Montreal Convention	1. Ozone depletion

(B) Rio Summit	2. Greenhouse gases
(C) Ramsar Convention	3. Convention on biodiversity
(D) Kyoto Protocol	4. Wetland convention

Codes

	(A)	(B)	(C)	(D)
(a)	3	2	1	4
(b)	4	3	1	2
(c)	1	3	4	2
(d)	1	2	4	3

687. In which year was the National Agricultural Co-operative Marketing Federation (NAFED) established? [[APPSC \(RFO\) 2018](#)]
- (a) 1958
 (b) 1948
 (c) 1959
 (d) 1960

National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) was established on the auspicious day of Gandhi Jayanti on 2nd October 1958.

FOREST, FORESTRY & SILVICULTURE

3.1 FOREST

- Foris* is a [ICAR (JRF) 2011, 2012, 2014, 2016; BHU (M.Sc.) Agroforestry Entrance Examination 2014, 2018; Mizoram RFO 2019]
 - Greek word
 - Latin word
 - English word
 - Sanskrit word
- The term forest is derived from a *Latin* word _____ [TN (ACF) 2018; BHU (M.Sc.) Agroforestry Entrance Examination 2014, 2018, 2020]
 - Fores
 - Floris
 - Forees
 - Foris
- The word forest is derived from the *Latin* word *Foris* meaning [BHU (M.Sc.) Agroforestry Entrance Examination 2017, Karnataka (RFO) 2008]
 - Firewood
 - Wood
 - Timber
 - Outside
- Forest is defined as a plant community comprising mainly of trees and associated woody vegetation, usually with a close canopy, according to [Karnataka (ACF) 2009]
 - Legal definition
 - General definition
 - Ecological definition
 - Dictionary
- An area set aside for the production of timber and other forest product is [BHU (M.Sc.) Agroforestry Entrance Examination 2018]
 - forestry
 - forest
 - Agroforestry

- Farm Forestry
- Forests means [Sikkim PSC Sub-Inspector 2018]
 - To the society of American forests (SAF) is an ecosystem characterized by a more or less dense and extensive tree cover
 - A plant community with predominance of trees and other woody vegetation growing more or less closely together
 - Both a & b
 - None of these

3.2 FOREST TYPES

- In case of natural *uneven-aged forests* difference up to _____ % of the rotation is usually allowed where the forest is not harvested for 100 or more [BHU (M.Sc.) Agroforestry Entrance Examination 2014]
 - 20
 - 30
 - 25
 - 35
- In the high forest, the regeneration is obtained by [Odisha Civil (Pre) 2011; BHU (M.Sc.) Agroforestry Entrance Examination 2014]
 - Cutting
 - Grafting
 - Seeds
 - Budding
- What is a low forest? [Odisha Civil (Pre) 2006]
 - Regenerated from seed sown artificially
 - Regenerated from advance growth
 - Regenerated from coppice shoots

Chapter Outline

- 3.1 Forest
- 3.2 Forest Types
- 3.3 Forest types in India
- 3.4 Forestry
- 3.5 Silviculture
- 3.6 Role of Forest

LOCALITY FACTORS

4.1 LOCALITY FACTORS

- The effective climatic, edaphic, topographic and biotic conditions of a site, which influence the vegetation of the locality is known as [Nagaland PSC Combined Technical Exams 2018]
 - Site quality
 - Ecosystem
 - Locality factors
 - Edaphic factors
- The relative measure of productive capacity of a site for a particular species is [ICAR (JRF) 2015; Nagaland PSC Combined Technical Exams 2016]
 - Site index
 - Fractional quality
 - Site quality
 - Fractional index
- A measure of the relative productive capacity of a site for a particular species is [ICAR (JRF) 2019]
 - Site factor
 - Site quality
 - Vegetative characteristics
 - Tree characteristic
- Site index* is the relation between [Nagaland PSC Combined Technical Exams 2016, 2021; BHU (M.Sc.) Agroforestry Entrance Examination 2021]
 - Age and site
 - Age and diameter
 - Age and height
 - Age and volume
- Site index* is the best indicator of site quality because [ICAR (SRF) 2020]
 - It represents the actual volume of trees in the stand
 - It gives the best estimate of basal area per Hectare
 - It represents the height of dominant trees which is independent of density
 - It is applicable for different species
- Which one the following is the most important criteria for determining the site quality of an area ? [APPSC Forest Section officer 2020]
 - Crop height
 - Crop diameter
 - Canopy density
 - Top height of the crop
- Tree height is an indicator of [Odisha Civil (Pre) 2011]
 - Site quality
 - Species
 - Rainfall
 - All of the above
- Most consistent indicator of site quality is [ASRB (ARS/NET) 2017; ICAR (SRF) 2021]
 - Tree height
 - Tree diameter
 - Tree volume
 - Crown diameter
- Tree height is related to [TN (ACF) 2014]
 - Site quality
 - Volume
 - Number of trees
 - Age of the tree
- Definition of productivity is [WII (M.Sc.) Entrance Examination 2003]
 - Biomass produced in one ha
 - Biomass produced in one acre
 - Biomass produced in one ha per year
 - Biomass produced after one ratoon
- In forestry, site index for measuring for site quality is primarily determined on the basis of [WII (M.Sc.) Entrance Examination 2013]

Chapter Outline

4.1 Locality Factors

4.2 Climatic Factors

- ✿ Solar radiation
- ✿ Temperature
- ✿ Moisture
- ✿ Wind
- ✿ Instruments

4.3 Edaphic Factors

- ✿ Mycorrhiza
- ✿ Biofertilizers
- ✿ N-fixation by trees
- ✿ Essential Nutrients

4.4 Physiographic Factors

- ✿ Configuration of Land
- ✿ Altitude
- ✿ Slopes
- ✿ Aspects & Exposure

4.5 Biotic factors

- ✿ Epiphytes
- ✿ Parasitism
- ✿ Weed
- ✿ Other remaining things

INFLUENCE OF FOREST ON THEIR ENVIRONMENT

- Which of the statements are correct pertaining to forest influences [TNPSC (ACF) 2018]
 - forests increase rainfall
 - forests reduce humidity
 - forests reduce wind speed
 - forests increase number of rainy days
 Chose the correct option
 - all are correct
 - (i), (ii) and (iii) are correct
 - (ii), (iii) and (iv) are correct
 - (i), (iii) and (iv) are correct
- The crown and other woody vegetation intercept what per cent of the total precipitation? [ICAR (JRF) 2020]
 - 35-40%
 - 40-50%
 - 15-30%
 - 5-10%
- Which of this component decreases when site is deforested? [Karnataka PSC (ACF/RFO) 2011]
 - Soil erosion
 - Run off
 - Soil humus
 - Light intensity
- Organic matter is found highest in [HPSC (RFO) 2021]
 - Forest ecosystem
 - Pond ecosystem
 - River ecosystem
 - Grasslands
- When dense forests are clear cut, which of the following changes to water cycle would most likely occur [Karnataka (RFO) 2015]
 - Surface water runoff decreases and evapotranspiration increases
 - Evapotranspiration and precipitation increase
 - Evapotranspiration decreases and surface water runoff increases
 - Precipitation and annual stream flow decreases
- Entering of water into soil is called [ICAR (SRF) 2015]
 - Infiltration
 - Interflow
 - Runoff
 - Percolation
- The driving force for infiltration of water into the soil is [Odisha Civil (Pre) 2011]
 - Gravitational and solute potential
 - Infiltration capacity
 - Capillary and gravitational
 - None of the above
- Soils having infiltration rate of 6 cm per day, are called [ICAR (SRF) 2019]
 - Slow permeable soil
 - Fast permeable
 - Hard pan
 - Fluffy soils
- The vertical movement of water inside the soil is called [TNPSC (ACF) 2014]
 - Infiltration
 - Seepage
 - Drainage
 - percolation
- Downward movement of water through saturated or nearly saturated soil in response to the gravity [Nagaland PSC Combined Technical Exams 2018]
 - Infiltration
 - Percolation
 - Leaching
 - Seepage

Chapter Outline

Basics

Forest Hydrology

Microclimate

AGRO-FORESTRY & SOCIAL FORESTRY

5.1 INTRODUCTION

- The sustainable land use systems involving trees combined with crops and/or animals on the same unit of land is termed as [BHU (M.Sc.) Agroforestry 2014, 2016, 2018; APPSC Forest Section officer 2019; APPSC (ACF) 2022; Assam PSC (RFO) 2022]
 - Agroforestry
 - Sustainable forest management
 - Social forestry
 - Farm forestry
- The sustainable land use system involving trees combined with agriculture crops on the same unit of land is termed as [Assam PSC (RFO) 2022]
 - Agroforestry
 - Sustainable forest management
 - Social forestry
 - Farm forestry
- Deliberate integration of woody perennials when herbaceous crops and/or animals in space or time on the same land management unit is known as [BHU (M.Sc.) Agroforestry 2015; ASRB (ARS/NET) 2021]
 - TIMFIB system
 - Silvi-pasture
 - Agroforestry
 - Ley farming
- Method of growing trees along with agricultural crops is known as [TN (ACF) 2014; CGPSC (Assistant Professor) 2019]
 - Horticulture
 - Agroforestry
 - Silviculture
 - Social forestry
- Agroforestry is the planting of [BHU (M.Sc.) Agroforestry 2017]
 - Trees in a forest
 - Legume fodders and field crops
 - Woody perennial plants with agricultural crops
 - Two or more crops as intercropping
- Definition of agroforestry as a land use system that integrates trees, crops and animal in a way that is scientifically sound, ecologically desirable, practically feasible and socially acceptable to the farmers. The said definition is proposed by [MPSC (ACF) 2018]
 - Nair (1979)
 - Bene *et.al.* (1977)
 - King and chandler (1978)
 - Young (1989)
- Components of agroforestry is / are [ICAR (JRF) 2012]
 - Trees
 - Crops
 - Pasture
 - All
- In agroforestry system more than one crop are grown on the same piece of land among which one plant species must be [BHU (M.Sc.) Agroforestry 2017]
 - Herb
 - Shrub
 - Fodder
 - Woody perennial
- Agroforestry means the planting of [BHU (M.Sc.) Agroforestry 2020]
 - Intercropping of two or more crops
 - Woody perennial plants with agricultural crops
 - Legume fodders with field crops
 - Trees in a forest

Chapter Outline

- 10.1 Introduction
- 10.2 Deforestation
- 10.3 Shifting cultivation
- 10.4 Taungya
- 10.5 Forest Fire
 - 🌿 Causes
 - 🌿 Types
 - 🌿 Effect
 - 🌿 Control measures
- 10.6 Mining
- 10.7 Encroachment
- 10.8 Illicit felling
- 10.9 Lopping
- 10.10 Grazing & Grasslands
 - 🌿 Grasslands (World)
 - 🌿 Indian grasslands
 - 🌿 Types of Grasses
 - 🌿 Grazing damages
 - 🌿 Grazing management
- 10.11 Other injuries caused by Animals
- 10.12 Protection against harsh weather
- 10.13 Protection against injurious plants
- 10.14 Forest Entomology
 - 🌿 Polyphagous insects
 - 🌿 Teak
 - 🌿 Sal
 - 🌿 Other species
 - 🌿 Control measures
- 10.15 Forest Pathology

10. System of production which tends to harmonize and maximize the production of different components per unit area is known as [Nagaland PSC CTSE 2016]
- Social forestry
 - Forestry
 - Agroforestry
 - Extension forestry
11. Which of the following combinations describes Agroforestry as the ideal one? [ICAR (JRF) 2022]
- Annual herbaceous crop + Animal component
 - Annual herbaceous crop + Animal component + Timber yielding trees
 - Animal component + Timber yielding trees
 - Annual herbaceous crop + Timber yielding trees
12. Given below are two statements [ICAR (SRF) 2022]
- Statement I :** Agroforestry system consists of one or more agroforestry practices that are practiced extensively in a given locality or area
- Statement II :** The system is usually described according to its biological composition and arrangement level of technical management or socio-economic features
- In light of the above statements choose the *most appropriate* answer from the options given below
- Both Statement I and Statement II are correct
 - Both Statement I and Statement II are incorrect
 - Statement I is correct but Statement II is incorrect
 - Statement I is incorrect but Statement II is correct
13. Consider following statement [Maharashtra PSC (ACF/RFO) 2021]
- Agroforestry system is a specific local example of an agroforestry practice
 - Agroforestry practice is a specific local example of an agroforestry practice
- In this context, which of the following option is correct
- Both true
 - Only A true
 - Only B true
 - None true
14. The basic attributes which all Agroforestry system possess are [Odisha Civil (Pre) 2006; ASRB (ARS/NET) 2018]
- Productivity
 - Sustainability
 - Adaptability
 - All of the above
15. Which of the following are the basic attributes of all agroforestry systems that form the basis for evaluation of various agroforestry systems? [MPSC (ACF) 2018; APPSC (ACF) 2022]
- Potentiality, Productivity and Adoptability
 - Sustainability, Profitability and Productivity
 - Productivity, Sustainability and Adoptability
 - Productivity, Suitability and Adoptability
16. The corner stone of agroforestry is [BHU (M.Sc.) Agroforestry 2016]
- Productivity
 - Profitability
 - Adoptability
 - Sustainability
17. Why agroforestry preferred in comparison to other systems [ASRB (ARS/NET) 2018]
- Productivity
 - Sustainability
 - Economic viability
 - All of above
18. Criteria of good agroforestry design are [Nagaland PSC CTSE 2016]
- Productivity
 - Sustainability
 - Adoptability
 - All of these
19. The cycle of an agroforestry system is always [BHU (M.Sc.) Agroforestry 2017]
- One year
 - Less than one year
 - More than one year
 - More than 10 years
20. Three-dimensional forest means [BHU (M.Sc.) Agroforestry 2017]
- Forestry, Horticulture and Agriculture
 - Forestry, Agriculture and Animal Husbandry
 - Forestry, Agriculture and Sericulture
 - Forestry, Horticulture and Sericulture
21. Agroforestry differs from natural forests because it has [ASRB (ARS/NET) 2018]
- More biomass
 - Nutrient cycle is closed
 - More diversity
 - All of these
22. Which of the concepts of agroforestry is false [TN (ACF) 2014]
- Production of multiple outputs
 - Uses multiple indigenous trees and shrubs
 - Structurally and functionally easy to manage
 - Involves the interplay of socio-cultural values
23. The agroforestry systems are worked with which law [ARS (NET) 2017]
- Law of diminishing rate of returns
 - Law of self-thinning
 - Liebig's Law of minimum
 - Shelford law of tolerance
24. The resource allocation in an agroforestry system is decided based on [BHU (M.Sc.) Agroforestry 2019]
- Principle of equimarginality
 - Law of diminishing return
 - Adaptability to site
 - Management considerations

6.1 INTRODUCTION

1. The practical application of the scientific, technical and economic principles of forestry is called [MPPSC (ACF) 2011; Assam (RFO) 2014; Nagaland PSC CTSE 2018]
 - (a) Silviculture
 - (b) Forests mensuration
 - (c) Forest utilization
 - (d) Forest management
2. Which of the following is defined as the practical application of scientific, technical and economic principles of forestry? [Assam PSC (RFO) 2013]
 - (a) Forest economy
 - (b) Forest management
 - (c) Forest utilization
 - (d) All of the above
3. Forest management is practical application of [ICAR (JRF) 2017]
 - (a) Scientific principle
 - (b) Technical principle
 - (c) Economic principle
 - (d) All
4. Which of the following does not come in forest management definition [ASRB (ARS/NET) 2021]
 - (a) Scientific
 - (b) Economical
 - (c) Social
 - (d) Technical
5. Forest management means [Sikkim PSC 2018]
 - (a) The practical application of scientific, economic, and technical principles
 - (b) Social principles to the administration
 - (c) Working of a forest estate for specific objectives
 - (d) All of the above
6. The application of economic principles to forestry's managerial and decision-making problems is known as _____ [HPPSC (ACF) 2021]
 - (a) Forest management
 - (b) Forest economics
 - (c) Forest legislation
 - (d) Forest protection
7. Application of principles of silviculture systems in the managements of forests of India are mostly based on [MPPSC (ACF/RFO) 2020]
 - (a) Nature of crop
 - (b) Improvement of crop composition
 - (c) Mode of regeneration
 - (d) Objectives of management
8. The objectives of forest management can be met with [Odisha PSC Civil 2006]
 - (a) by a scientifically managed forests and adopting sound silvicultural practices.
 - (b) By social forestry activities.
 - (c) By soil conservation measures.
 - (d) Thorough irrigation and fertilizers treatment of the area
9. The traditional management of forest is based on silvicultural principle with change in perceptions and conditions in recent time with respect to the preparation of working plan. Several forest and forestry related cross cutting issues have emerged for the integrated approach on the management through conventions and frameworks answer the correct one from the following in this regard [Odisha PSC Civil 2011]
 - (a) UNCLS
 - (b) UNFCCC
 - (c) CCAMLR

Chapter Outline

- 6.1 Introduction
- 6.2 Forest Organization
- 6.3 Sustainable & Progressive Yield
- 6.4 Rotation Period
- 6.5 Increment
- 6.6 Growing Stock
- 6.7 Age class & Age gradation
- 6.8 Normal Forest
- 6.9 Yield Regulation
- 6.10 Working Plan
- 6.11 JFM
- 6.12 SFM

- (d) UNIDO
10. Back bone of forest management is [Nagaland PSC CTSE 2021]
- Sustained yield
 - Yield table
 - Silviculture
 - Forest mensuration
11. Which of the following has bearing on forest management with respect to production forestry soil conservation, Inter-state trade and commerce reclamation and development of inter-state river valleys [Odisha PSC Civil 2011]
- National Commission on agriculture report (1976)
 - Sixth five-year plan document (1980-85)
 - Fuelwood study committee report (1982)
 - Plan development programmes in forestry sector (1981)
12. The principles of forest management are based on [Odisha PSC Civil 2006]
- Thorough afforestation of wasteland and degraded land
 - Nation's forest policy and state forest policy
 - Protection of forests from biotic activities / interferences
 - By developing village forests
13. The book entitled "Forest Management" IBD Publisher, Dehradun in the year 2006 is authored by [Nagaland PSC CTSE 2018]
- Ram Prakash
 - L.S. Khanna
 - A.P. Dwivedi
 - A.N. Chaturvedi

6.2 FOREST ORGANIZATION

➤ TERRITORIAL CLASSIFICATION

14. A block is divided into [Nagaland PSC CTSE 2021]
- Felling series
 - Compartment
 - Sub-compartment
 - Coupe
15. The part or parts of forest set aside to be regenerated or otherwise treated

during a specified period is called as [Nagaland PSC CTSE 2018]

- Sub-Division
 - Compartment
 - Periodic block
 - Division
16. The *smallest permanent working plant unit* of management is [Nagaland PSC CTSE 2017, 2018; BHU (M.Sc.) Agroforestry 2018; Assam PSC (RFO) 2022]
- Block
 - Compartment
 - Annual coupe
 - Periodic block
17. A *territorial unit of a forest* permanently defined for *purposes of administration & record* and is the smallest permanent unit of management in working plan [Rajasthan PSC (ACF/RFO) 2018]
- Coupes
 - Compartment
 - Working circle
 - Block
18. Territorial unit of forest is [Nagaland PSC CTSE 2021]
- Compartment
 - Block
 - Sub-compartment
 - Coupe
19. Very important unit in the management and administration of forest [Nagaland PSC CTSE 2021]
- Ranges
 - Block
 - Compartment
 - Coupe
20. Forests are divided into compartments and blocks for proper management and working which of the following statements is correct? [Assam (RFO) 2013]
- Compartments are divided out of blocks with boundary pillars in a forest
 - Blocks are the largest units in a forest with well-defined boundaries
 - Sub compartments are the smallest units in a forest
 - Both (b) and (c)

➤ ADMINISTRATIVE CLASSIFICATION

21. The head of the State Forest department is designated as [Nagaland PSC CTSE 2021]
- CCF
 - IGF
 - DIG
 - AIG
22. All the govt owned forests in union territories are under the control of govt of India and are administered on their behalf by [Nagaland PSC CTSE 2017]
- Principle chief conservator of forests
 - Chief conservator of forests
 - Inspector general of forests
 - Additional inspector general of forests
23. Principal Chief Conservator of Forest (HoFF), signifies [Nagaland PSC CTSE 2018]
- Head of Forest Force
 - Head of Fam Forestry
 - Head of Fam Forest
 - Head of Forestry Force
24. Who is the head of forest division? [Assam PSC (ASCO) 2022]
- Ranger
 - DFO
 - CF
 - WPO
25. An executive territorial unit, which is the charge of a forest ranger is called [MPPSC (ACF) 2011]
- Forest Right
 - Forest Settlement
 - Forest Range
 - Forest Village
26. *Smallest functional territorial unit* which is the foundation of Indian Forest Administration [ICAR (JRF) 2012; Nagaland PSC CTSE 2016, 2018; BHU (M.Sc.) Agroforestry 2020; Assam PSC (RFO) 2022]
- PCCF
 - ACF
 - Beat
 - Ranger
27. The smallest functional territorial unit in forest management is [Nagaland PSC CTSE 2017]

WOOD SCIENCE & TECNOLOGY

7.1 INTRODUCTION

- Branch of forestry concerned with harvesting, conversion, disposal and use of forest production is termed as [TN Forest Apprentice 2018]
 - Forest protection
 - Extension forestry
 - Forest utilization
 - Forest management
- The process of harvesting, converting and dispersing of forest produce is termed as [Nagaland PSC Combined Technical Exams 2018]
 - Forest Mensuration
 - Forest protection
 - Forest utilization
 - Forest management
- Ergonomics is a science which deals with [Nagaland PSC Combined Technical Exams 2016]
 - Economics
 - Energy
 - Society
 - Work and worker
- In the Forest Research Institute, Dehradun, Logging branch was established on the recommendation of [Nagaland PSC Combined Technical Exams 2018]
 - Dr. H.G. Champion and Dr. S.K. Seth
 - Dr.L.S. Khanna and Dr. A.N. Chaturvedi
 - Dr. A. Huber and Dr. A. Koroleff
 - Dr. D. Brandis and Dr. D.N. Tewari
- Logging training centre at Batote started in the year 1958-59 under the supervision of ____ [ICAR (JRF) 2021]
 - A. Huber
 - H.G. Winkleman
 - A. Koroleff
 - R.S. Troup
- The cost of felling, conversion and transportation is approximately ____ percent of the total cost of delivery of timber in the market [TN Forest Apprentice 2018; Nagaland PSC Combined Technical Exams 2018]
 - 35
 - 40
 - 45
 - 50
- The usable volume of rough timber from average tree is ____ [ICAR (JRF) 2021; Nagaland PSC Combined Technical Exams 202; Assam PSC (SCR) 2022 Forestry]
 - 10-15%
 - 20-25%
 - 37-52%
 - 41-60%
- Most of the global industrial timber comes from which forest? [CGPSC Assistant Professor 2019]
 - Deciduous forest
 - Conifer forest
 - Tropical forest
 - None of these

Chapter Outline

- Introduction
- Felling & Conversion
- Timber transportation
- Forest Depot
- Timber defects & Grading
- Gross structural properties of wood
- Minute structural properties of wood
- Gross physical properties of wood
- Mechanical properties of wood
- Chemical properties of wood
- Uses of wood
- Sawing of timber
- Wood Seasoning
 - ✿ Seasoning defects
 - ✿ Refractory behaviour of wood
 - ✿ Air seasoning
 - ✿ Kiln seasoning
- Wood Preservation
- Composite & Improved wood

NON TIMER FOREST PRODUCE

8.1 INTRODUCTION

- MFP means [BHU (M.Sc.) Entrance Examination (2017) Agroforestry]
 - Minor field produce
 - Minor fruit produce
 - Minor forest produce
 - Minor fish produce
- The acronym for 'Non-Wood Forest Products' can be [Nagaland PSC Combined Technical Exams 2015]
 - NFWP
 - NWFP
 - FNWP
 - PNWF
- NTFP stands for [Assam ACF (2014) Forestry]
 - Non timber forest produce
 - Non timber fuel products
 - Non timber forest permits
 - Non timber fuel produce
- Which of the following is NTFP [ICAR (JRF) 2015]
 - Bamboo
 - Timber
 - Oxygen
 - All
- Which one of the following is not an NTFP? [Assam ACF (2014) Forestry]
 - Lac
 - Rosin
 - Plywood
 - Medicinal plant
- Which one of the following is not a timber yielding tree species? [BHU (M.Sc.) Entrance Examination - Agroforestry 2017, 2020]
 - Mahogani
 - Subabul
 - Teak
 - Sissoo
- Non wood forest produce and wood substitute is [BHU M.Sc. (2019) Agroforestry]
 - Resin
 - Gums
 - Bamboos
 - Fibre
- 5 F comprises of [ASRB (NET) 2013-14]
 - Fuel
 - Fodder
 - Fibre
 - All
- Teak, Sal and Sissoo mainly used for [ICAR (JRF) 2015]
 - NWFP
 - Windbreaks
 - Timber
 - Shelterbelt
- Which of the commercially valuable species have damaged the natural forests in south India [Sikkim PSC 2018]
 - Chir pine
 - Teak monoculture
 - Himalaya oak
 - None of them
- Which of the following tree is not a forestry species [Tripura PSC (ACF) 2013]
 - Sal
 - Sundi
 - Eucalyptus
 - Rubber

Chapter Outline

- 8.1 Introduction
- 8.2 Fibres
- 8.3 Flosses
- 8.4 Grasses
- 8.5 Gum Yielding plants
- 8.6 Resin Production
- 8.7 Tannins
- 8.8 Dyes
- 8.9 Oils
- 8.10 Bamboo & Canes
- 8.11 Bidi Leaves
- 8.12 Lac cultivation
- 8.13 Sericulture
- 8.14 Apiculture
- 8.15 Rayon Production
- 8.16 Energy / Biodiesel plants
- 8.17 Other Important Minor Forest produce
- 8.18 Cork Production
- 8.19 Charcoal making
- 8.20 Wood distillation
- 8.21 Ethnobotany
- 8.22 Medicinal Plants
- 8.23 Pulp & Paper
- 8.24 Unnecessary Questions
(Only for ICAR Aspirants)

FOREST MENSURATION

► INTRODUCTION

1. Mensuration is derived from the language Latin word [Nagaland PSC Combined Technical Exams 2018]
 - (a) Mensu
 - (b) Men
 - (c) Mens
 - (d) Mensura
2. Mensuration is derived from the word mensura meaning measure [ICAR (JRF) 2011; APPSC Section Officer 2020]
 - (a) German
 - (b) Greek
 - (c) British
 - (d) Latin
3. The branch of forestry which deals with the determination of dimension, form age and increment of single trees, stands or whole woods either standing or after felling is called [BHU M.Sc. Agroforestry Entrance Examination (2016) Agroforestry]
 - (a) Dendrology
 - (b) Forest management
 - (c) Dendrometry
 - (d) Forest protection
4. The science to determine the dimensions form volume age and increment of individual trees and forest crop is called [WII M.Sc. Entrance Examination (2003) Forestry]
 - (a) Forest Silviculture
 - (b) Forest Mensuration
 - (c) Forest Economics
 - (d) Forest Utilization
5. Branch of forestry deals with measurement of trees is [ICAR (JRF) 2012; Tripura PSC (ACF) 2013]
 - (a) Trigonometry
 - (b) Silviculture
 - (c) Mensuration
 - (d) Measurometry
6. Forest mensuration aims at [TN (ACF) 2014; Nagaland PSC Combined Technical Exams 2018]
 - (a) Exact estimation
 - (b) Appropriate estimation
 - (c) Relative accuracy
 - (d) Absolute accuracy
7. The error caused by the instrument, the user and the weather condition is called [TN (ACF) 2012]
 - (a) Instrumental error
 - (b) Personal error
 - (c) Error due to observation
 - (d) Error due to leaning of trees
 Official Answer : (a)
8. In the British system, the unit of Girth measurement is [TN (ACF) 2018]
 - (a) Feet
 - (b) Centimetre
 - (c) Meters
 - (d) Millimetres
9. In India, the CGS of measurement was adopted in the year [ICAR ((SRF)) 2021]
 - (a) August, 1947
 - (b) January, 1950
 - (c) October, 1962