# I.F.S. EXAM-(M)2017

# वियोज्य DETACHABLE

## **FORESTRY**

#### Paper II

Time Allowed: Three Hours

Maximum Marks: 200

#### QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions.

There are EIGHT questions in all, out of which FIVE are to be attempted.

Question Nos. 1 and 5 are compulsory. Out of the remaining SIX questions, THREE are to be attempted selecting at least ONE question from each of the two Sections A and B.

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

All questions carry equal marks. The number of marks carried by a question/part is indicated against it.

Answers must be written in **ENGLISH** only.

**2.**(b)

**2.**(c)

**3.**(a)

Neat sketches may be drawn, wherever necessary.

base? Give thematic presentation.

percent in diameter and volume.

Describe the effect of thinning on volume increment.

## **SECTION 'A'**

1.	Answer each of the following questions:
1.(a)	Why site specific planning is essential for forest management? Explain different components of site-specific management.
<b>1.</b> (b)	How the forest cover was measured prior to and post 1980's in India? Define the various categories of forest cover.
1.(c)	What are the objectives of working plan? How it is helpful for conservation o biodiversity and natural resource conservation of forests?
<b>1.</b> (d)	What are the applications of remote sensing and GIS in the field of forestry and wildlife?
1.(e)	How volume tables are classified on the basis of kind of outturn? Describe briefly
<b>2.</b> (a)	How a selection forest is managed under the felling series? Describe with suitable examples/diagrams.

How the geometrical measurements for calculating volume yield are made in (i) Buttressed tree, (ii) Leaning tree on a slope, and (iii) a tree forked at the

Describe the different formulae used in forest trees for determining increment

15

10

15

<b>3.</b> (b)	Describe the various kinds of maps prepared by the Working Plan Officer. What is their utility and purpose?	
<b>3.</b> (c)	Describe the dead and live loads and how they are calculated on the roof trusses over buildings?	
<b>4.</b> (a)	Write about the concept of normal forest and kind of abnormalities which affect the normal growing stock.	
<b>4.</b> (b)	Write in detail as to why Joint Forest Management Policy was initiated and what are its constraints in implementation?	
<b>4.</b> (c)	Write a note on kinds of enumeration and explain in brief different random sampling techniques used in forest inventories.	
SECTION 'B'		
<b>5.</b> (a)	Define herbarium and write its significance. What are the steps in establishing herbarium and which method of plant classification is followed in herbarium arrangement?	
<b>5.</b> (b)	Briefly write about the natural defects observed in wood.	
<b>5.</b> (c)	What are the major grazing systems and grazing regions in India? Describe briefly, methods to prevent pressure from grazing in forests.	
<b>5.</b> (d)	Narrate the background and objectives of implementation of national forest policies of India.	
<b>5.</b> (e)	What is ethnobotany and describe the role of ethnobotany in the Indian systems of medicine.	
<b>6.</b> (a)	Define succession. Explain different types of succession in detail, citing suitable examples. Discuss various theories of succession.	
<b>6.</b> (b)	What is wood seasoning? Write in detail the aims of wood seasoning and explain salient steps in manufacturing of plywood.	
<b>6.</b> (c)	Discuss briefly the impacts of humans on forest health. Explain different measures to check forest encroachment.	
7.(a)	What is logging? What are the objects of felling? Briefly write the general rules of felling and basic cuts of tree felling.	
7.(b)	Explain the discounting measures in forest business management with different formulae used in forest economics.	
7.(c)	Explain the classification of forest types in India by Champion and Seth. Enlist major forest types and their group.	
<b>8.</b> (a)	Describe types of forest fires, their ill-effects and preventive measures. Briefly discuss the role of forest fire on forest ecosystems.	
<b>8.</b> (b)	Discuss in detail the roles and interventions of Government and Private agencies in marketing of forest produce.	
<b>8.</b> (c)	What are the differences between gums and resins? How are gums and resins classified? Enlist different methods of tapping resins.	