

I.F.S. EXAM-2015

C-GEQ-O-GPSB**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.

Questions no. 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.

Neat sketches may be drawn, wherever necessary.

SECTION A**Q1. Answer each of the following questions :****8×5=40**

- (a) Can you differentiate between the terms mixed plantations in forestry and mixed cropping in agriculture ? Justify the differences between them. 8
- (b) Topographic surveys are found useful in forest management. Discuss. 8
- (c) Which of the instruments has Wheeler's pentaprism replaced and why ? 8
- (d) How important are the increment borers in forest health and growth analysis ? Does Pressler's borer have any adverse effects on the tree sampled ? Elaborate on the issue. 8
- (e) Which are the basic factors you have to look for before running out a survey line in chain surveying ? 8

- Q2.** (a) Progressive yield concept differs from sustained yield. Under the present situation, which would you suggest and why ? 15
- (b) Show by your interpretation, either graphically or theoretically, how the forest yield depends upon the growing stock. 15
- (c) Discuss how the rotation of minimum volume production differs from the silvicultural rotation. 10
- Q3.** (a) How will you find the reduced levels of the given points by height of collimation method and rise and fall method and then check arithmetically ? 15
- (b) Maps are an integral part of forest management. Give your perceptions about the kind of maps you consider important for managing a forest circle. 15
- (c) In a forest survey, you are provided a prismatic compass. How will you accomplish the bearings of line AB ? 10
- Q4.** (a) How far do taper tables help in measuring the volume of a tree ? Discuss their types and methods of preparation. 15
- (b) Why are sample plots laid out in different forest species ? What is their utility and how are they enumerated ? 15
- (c) Discuss how the microwave remote sensing has been found to be more useful in forestry than other satellite imageries. 10

SECTION B**Q5. Answer each of the following questions :****8×5=40**

- (a) There are various processes involved in the expression and extraction of oilseeds available in forests. Elaborate on the processes involved and their utilization. **8**
- (b) Timber encounters many different problems during the process of drying. What are those problems and how are they overcome? **8**
- (c) To protect the wild animals venturing out from their core areas, some administrative and management arrangements are made. What are those? Discuss. **8**
- (d) There are measures which are taken to protect the forests from fire damage. Which are those and how effective have they been? **8**
- (e) Give the scientific names of at least five drug yielding plants with their use in pharmaceutical industry. **8**
- Q6.** (a) Why is carbon recycling important? What are its influences on climate? Discuss your points for or against. **10**
- (b) Indian forests are found to be rich in different kinds of non-timber forest products (NTFPs). Can you list at least 10 NTFPs? **10**
- (c) Does rotational grazing have an advantage over controlled grazing in the smooth management of forest ecosystems? Give your reasons for and against, both. **10**
- (d) Growth and productivity of forest plants are affected by different types of air pollutants. What are those? Suggest suitable remedies. **10**
- Q7.** (a) Give a comparative and appropriate statement on the Natural Forest Policy of 1988 with that of 1952. **15**
- (b) Narrate how sustainable forestry accounts for the ecological, economic, social and cultural values of forests. Give your opinion. **15**
- (c) Enumerate the role and importance of the Forest Survey of India (FSI) in forest management systems. **10**

- Q8.** (a) Discuss the important role of The Wildlife Protection Act, 1972 in forest management. Give salient points only. 10
- (b) Describe the role of Permanent Forest Policy after its enactment for regulation of forestry management in India. 10
- (c) Enumerate and discuss the factors responsible for restricting tribal population in the National Parks. 10
- (d) What are the major fibres and flosses which are obtained from forests in India ? Citing at least ten species, discuss their commercial importance. 10