

Government of Karnataka
Forest Department

Recruitment Examination (main) for Range Forest Officer Training 2007

Optional Paper : FORESTRY-II

05 November-2007 (2.30 pm to 5.30 pm)

Max. Marks: 100

Time : 3 Hours

Indicate the correct question number in the answer book. Please indicate the question number and the pages on which they have been attempted (in the answer sheet) on the front sheet of the answer sheet without fail. The examiner will not be responsible for not evaluating an answer if the correct question number is not indicated at the appropriate places.

Part A : Objective type questions.

1 marks X 20 = 20 Marks

1. State true or False

- a. *Hapalia machaeralis* is popularly known as teak defoliator. (*True/False*)
- b. Wild dog or Dhole is not a scheduled animal. (*True/False*)
- c. The period between seeding felling and final felling on a particular area in shelter wood systems is felling cycle. (*True/False*)
- d. The Environment (Protection) Act 1986 enforces checks on the indiscriminate diversion of forest land for non-forest purpose.
- e. Von Mantel's formula is used for the regulation of yield based on the total biomass. (*True/False*)

2. Fill in the blanks

- a. The percentage reduction in the stem number from one diameter class to the next is constant in a fully stocked forest. This is referred as _____ law.
- b. _____ is a relatively localized necrotic lesion primarily of the bark and cambium.
- c. Maximum fine for an offence under Wildlife (Protection) Act 1972 is Rs. _____.
- d. In a regular shelter wood system _____ is fixed for the whole working circle, as a unit, as the average length of time between the establishment of crops and their harvesting.
- e. _____ is a measure of the value of an angle expressed as its sine.

3. Match the following

- | | |
|--|---------------|
| a. Indian Forest Act | i. 1981 () |
| b. Karnataka Forest Act | ii. 1980 () |
| c. The Air (Prevention & Control of Pollution) Act | iii. 1963 () |
| d. The Biological Diversity Act | iv. 2002 () |
| e. Forest (Conservation) Act | v. 1927 () |

4. Multiple choice

- a. Which of the following is not a Tiger Reserve?
 - i. Bannerghatta National Park
 - ii. Bandipur National Park
 - iii. Bhadra Wildlife Sanctuary
 - iv. Anshi National Park

- b. Following species is the only wood found suitable for croquet balls and mallets.
- | | |
|--------------------------------|--------------------------|
| i. <i>Tectona grandis</i> | ii. <i>Jyglans regia</i> |
| iii. <i>Buxus sempervirens</i> | iv. <i>Fraxinus spp.</i> |
- c. The rotation that helps in controlling the supply of certain services is.
- | | |
|-------------------------------|-------------------------|
| i. Technical Rotation. | ii. Financial Rotation. |
| iii. Maximum Volume Rotation. | iv. Physical Rotation. |
- d. The instruments used in horizontal point sampling.
- | | |
|--------------------------|-----------------------|
| i. Wedge Prism. | ii. Spiegel Relaskop. |
| iii. Simple Angle Gauge. | iv. All the above. |
- e. *Fomes annosus* a root inhabiting fungi is biologically controlled by:
- | | |
|-------------------------------|----------------------------------|
| i. <i>Armillaria mellea</i> . | ii. <i>Peniophora gigantea</i> . |
| iii. <i>Fusarium solani</i> . | iv. <i>Ganoderma lucidum</i> . |

Part B : Descriptive type questions.

Section – 1. Short notes.

5. Answer any five of the following. **4 marks X 5 = 20 Marks**
- Hoppu's Rule.
 - Post suppression operations in fire management.
 - Forest Valuation.
 - Salient features of 2006 amendments to the Wildlife (Protection) Act 1972.
 - What is progressive yield? How does progressive yield differs from sustained yield.
 - What are biodiversity hot spots? Explain with two examples from India.
 - Tiger Task Force.
 - Fibers and Flosses.

Section – 2. Descriptive Answers

6. Answer any five of the following. **12 marks X 5 = 60 Marks**

- What is a local volume table? Describe different methods used in preparation of local volume table.
- Describe the importance of forests to humankind.
- Define ecotourism. Describe using various methods the valuation of outdoor recreation.
- Describe with examples the anatomical structure of wood.
- What is EIA? Explain the procedural aspects of EIA with a particular reference to an irrigation project.
- Describe stump analysis.
- Compare and analyze the shift in thinking across the 1894, 1952 and 1988 National Forest Polices of India.
- Give the salient features of the recent JFPM policy of Karnataka and brief on how peoples participation is helpful in protecting the forests.