

Time: 3 hours

Full Marks: 300

The figures in the right-hand margin indicate marks.

Candidates should attempt Q. No. 1 from
Section – A and Q. No. 5 from Section – B
which are compulsory and three of the remaining
questions, selecting at least one from each Section.

Section - A

- 1. Answer any three of the following: $20 \times 3 = 60$
 - (a) Write the Orissa Forest (Grazing of Cattle) Grazing Rules (1980).
 - (b) What is Global Tiger Forum (GTF) ? Describe the purpose of Global Tiger Forum. Highlight the achievements of Simlipal Tiger Research Project.
 - (c) Describe the status of Joint Forest Management (JFM) in India.

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(Turn over)

- (d) Discuss the statement "Social Forestry is an aid to environmental conservation".
- (a) Discuss the important agro-foresty systems/ practices existing in different agro-climatic zones of the country with suitable examples.

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- (b) Why the prescribed fire is recommended for effective forest resource management in many forests?
- (c) Describe the basic objectives and salient features of National Forest Policy, 1988 and highlight the changes in current policy over 1952 policy.
- (a) Mining leads to environmental problems.
 Discuss briefly the different environmental hazards that are created by mining along with corrective measures.
 - (b) What are the multipurpose trees? How different benefits are derived from such trees? Write the characteristics and management practices of multipurpose trees suitable for agro-foresty.

- (c) What do you mean by the term market structure? Explain briefly the components of market structure which determine the conduct and performance of the market. 20
- 4. (a) How National Park differs from a Sanctuary? Why there is a need to establish more National Parks and Sanctuaries? Give a brief description two National Parks and two Sanctuaries located in your state.
 - (b) Write the present status of wildlife management in India with special reference to Odisha.
 - (c) Describe the constitution, objectives and activities of National Wasteland Development Board. Also mention the different categories of wastelands occurring in India.

Section - B

- 5. Answer any three of the following $20 \times 3 = 60$
 - (a) Define Non-wood forest products. Give brief notes on major essential oil yielding plants.
 - (b) Write a short note on distribution and uses of common species of caves found in India.

- (c) Explain, with examples, the classification and categories of Gums and Resins.
- (d) Explain, in brief, different types of defects of wood.
- (a) Critically discuss importance of genetic resources conservation and preservation of Biodiversity.
 - (b) Write a short note on the role of Polyploidy and Mutation breeding in tree improvement.
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- 7. (a) Explain standard rules governing breast height measurement. Also enlist instruments used for measurement of height and diameter/girth.
 - (b) Define yield table and write the procedure of its preparation.
 - (c) Explain Horizontal Point Sampling and enlist the instruments used in this process. 20
- 8. (a) Define plane-table survey and explain its advantages and disadvantages. 30
 - (b) Define maps and their types. Explain contour representation of various types of slopes. 30