

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Fifth Semester)

Branch - BOTANY

MAJOR ELECTIVE COURSE – I : SILVICULTURE & AGRO FORESTRY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

$$(10 \times 1 = 10)$$

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 1 | Name a branch of forestry deals with timber production. (i) Pisciculture (ii) Floriculture (iii) Silviculture (iv) Olericulture | K1 | CO1 |
| | 2 | Show the shading effect of trees can be overcome by (i) Fertilizer (ii) Canopy (iii) Root (iv) Water | K2 | CO1 |
| 2 | 3 | Which of the following is a primary method of natural forest regeneration? (i) Nursery-raised seedlings (ii) Controlled grazing (iii) Seed dispersal (iv) Mechanized timber harvesting | K1 | CO2 |
| | 4 | Relate a creating new forests on land that previously had no forest cover? (i) Reforestation (ii) Deforestation (iii) Desertification (iv) Afforestation | K2 | CO2 |
| 3 | 5 | Select the method of propagation in <i>Acacia catechu</i> . (i) Seeds (ii) Bulb (iii) Grafting (iv) Layering | K1 | CO3 |
| | 6 | Interpret the ideal soil condition for the growth of <i>Azadirachta indica</i> ? (i) Waterlogged soils (ii) Sodic soils (iii) Clayey soils (iv) Deep dry sand | K2 | CO3 |
| 4 | 7 | Choose the technique can convert agricultural waste, such as rice husk, into a fuel source? (i) Composting (ii) Vacuum packaging (iii) Tillage (iv) Converting waste to biochar | K1 | CO4 |
| | 8 | Infer trees or shrubs are grown around or among field crops is known as (i) Agroforestry (ii) Silviculture (iii) Mixed Cropping (iv) Horticulture | K2 | CO4 |
| 5 | 9 | Recall the main source of natural rubber latex is derived from (i) Shorea robusta (ii) Tectona grandis (iii) Hevea brasiliensis (iv) Mangifera indica | K1 | CO5 |
| | 10 | Extend a sticky substances, often collected from trees, is a non-timber forest product used in adhesives? (i) Gum (ii) Kerosene (iii) Plywood (iv) coal | K2 | CO5 |

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|---|---------|-----|
| 1 | 11.a. | Outline the Objectives and scope of silviculture. (OR) | K2 | CO1 |
| | 11.b. | Explain the history of forestry development in India. | | |
| | 12.a. | Organize the Coppice system. (OR) | | CO2 |
| 2 | 12.b. | Solve the Clear felling system. | K3 | |
| | 13.a. | Apply the rotation age, spacing, tending operations and yield in <i>Emblica officinalis</i> . (OR) | CO3 | |
| | 13.b. | Choose the economic importance of <i>Eucalyptus</i> . | | |
| 3 | 14.a. | List the objectives of social forestry. (OR) | K4 | CO4 |
| | 14.b. | Inspect the role of multipurpose trees. | | |
| | 15.a. | Compare resins and gums. (OR) | | CO5 |
| 5 | 15.b. | Categorize the collection, processing and disposal of oilseed nuts. | K4 | |

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 16 | Simplify the forest & forestry Classification. | K4 | CO1 |
| 2 | 17 | Compare the natural & artificial regeneration of forests. | K4 | CO2 |
| 3 | 18 | Examine the silvicultural techniques for <i>Dalbergia sisoo</i> . | K4 | CO3 |
| 4 | 19 | Categorize the objectives, methodology, scope and benefits of joint forest management. | K4 | CO4 |
| 5 | 20 | Inference any two non timber forest products studied by you. | K4 | CO5 |