

Enrollment No.....



Faculty of Agriculture
End Sem (Odd) Examination Dec-2019
AG3CO04 Introduction to Forestry

Programme: B.Sc. (Ag.) Branch/Specialisation: Agriculture

Duration: 3 Hrs.

Maximum Marks: 50

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. What is coppice system? 1
(a) A system where the crop originates from coppice and where the rotation of coppice is short
(b) A system where the crop originates from coppice and where the rotation of coppice is long
(c) Both (a) and (b)
(d) None of these
- ii. Who among the following was the first Inspector General of Forests in India- 1
(a) Dietrich Brandis (b) John Dawson
(c) Nagurunderi (d) None of these
- iii. Regeneration method include- 1
(a) Clear cutting method (b) Shelter method
(c) Seed tree method (d) All of these
- iv. Weeding is a term- 1
(a) That denotes the removal of all plants competing with the crop species in seedling stages regardless of whether their crowns are above, beside
(b) Or below those of the desirable trees
(c) Both (a) and (b)
(d) None of these
- v. Measurement of timber (round) in forest mensuration is/ are: 1
(a) Xylometer Method (b) Mathematical formulae
(c) Both (a) and (b) (d) None of these

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vi.	Factors affecting wood measurement is/are: (a) Saw Thickness (kerf) (b) Thickness of timber (c) The minimum length of sawn pieces, the more conservation and less wastage (d) All of these	1
vii.	Which instrument is used in measurement of height of tree? (a) Altimeter (b) Caliper (c) Tapes (d) Xylometer	1
viii.	Dendrology means- (a) Study of vegetables (b) Study of trees (c) Study of fruits (d) Study of flowers	1
ix.	Family of Subabul (a) Leguminosae (b) Myrtaceae (c) Malvaceae (d) Gramineae	1
x.	Native of Eucalyptus- (a) America (b) India (c) Australia (d) China	1
Q.2	i. Define forest.	1
	ii. Write down scope of silviculture.	2
	iii. Discuss the salient features of Indian Forest Policies.	5
OR	iv. Explain the different methods of natural forest regeneration.	5
Q.3	i. Write the disadvantages of crown thinning.	1
	ii. What is the difference between natural and artificial regeneration?	3
	iii. Explain tending operation in detail.	4
OR	iv. Summarize the objective and advantages of artificial regeneration.	4
Q.4	i. Write the objectives of forest mensuration.	2
	ii. Which instruments used in diameter measurement for forest tree.	6
OR	iii. Explain the non-instrumental methods of height measurement of forest tree.	6
Q.5	i. How can we calculate the age of tree?	2
	ii. What is form factor of tree?	2

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iii.	Define geometric and trigonometric principle of hypsometer for height measurement of tree.	4
OR	iv. Write different methods of estimation of volume of standing trees.	4
Q.6	Attempt any two:	
i.	What is agroforestry? Write down the importance of agroforestry.	4
ii.	Describe the criteria of selection of trees in agroforestry.	4
iii.	Write down the cultivation practices of any one important fast-growing tree species of the region.	4

Marking Scheme
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Q.1	i.	What is coppice system?	1
	(a)	A system where the crop originates from coppice and where the rotation of coppice is short	
	ii.	Who among the following was the first Inspector General of Forests in India-	1
	(a)	Dietrich Brandis	
	iii.	Regeneration method include-	1
	(d)	All of these	
	iv.	Weeding is a term-	1
	(c)	Both (a) and (b)	
	v.	Measurement of timber (round) in forest mensuration is/ are:	1
	(c)	Both (a) and (b)	
	vi.	Factors affecting wood measurement is/are:	1
	(d)	All of these	
	vii.	Which instrument is used in measurement of height of tree?	1
	(a)	Altimeter	
	viii.	Dendrology means-	1
	(b)	Study of trees	
	ix.	Family of Subabul	1
	(a)	Leguminosae	
	x.	Native of Eucalyptus-	1
	(c)	Australia	

Q.2	i.	Define forest. (As per answer)	1 mark	1
	ii.	Scope of silviculture.(At least 4 points)	(0.5 mark*4)	2
	iii.	Salient features of Indian Forest Policies.(At least 5 features)	(1 mark*5)	5

OR	iv.	Methods of natural forest regeneration with description (At least method)	(1 mark*5)	5
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Q.3	i.	Disadvantages of crown thinning (At least 2 disadvantages)	(0.5 mark*2)	1
	ii.	Natural regeneration	1 mark	3
		Natural regeneration Example	0.5 mark	
		Artificial regeneration	1 mark	
		Artificial regeneration Example	0.5 mark	
OR	iii.	Tending operation(At least 4)	(1 mark*4)	4
	iv.	Objectives (At least 4 objectives)	(0.5 mark*4)	4
		Advantages (At least 4 Advantages)	(0.5 mark*4)	

Q.4	i.	Objectives of forest mensuration.	(0.5 mark*4)	2
	ii.	(Per instrumental methods with description 3 marks)		6
		(At least 2 instrumental methods)	(3 marks*2)	
OR	iii.	(Per Non-instrumental methods with description 2 marks)		6
		(At least 3 Non-instrumental methods)	(3 marks*2)	
Q.5	i.	Method of calculating the age of tree with description		2
			2 marks	
	ii.	Form factor of tree (Describe)	2 marks	2
	iii.	Define geometric principle of hypsometer for height measurement of tree.	2 marks	4
		Trigonometric principle of hypsometer for height measurement of tree.	2 marks	
			2 marks	
OR	iv.	Per methods with description	2 marks	4
		At least 2 methods with description	2 marks	
Q.6		Attempt any two:		
	i.	Agroforestry	2 marks	4
		Importance of agroforestry. (At least 4 points)	2 marks	
	ii.	Criteria of selection of trees in agroforestry.(At least 4 points)	(1 mark*4)	4
	iii.	Must include all the cultivation practices (As per answer)	4 marks	4
