P P SAVANI UNIVERSITY

Second Semester of B.Sc. (Hons.) Agriculture End Semester Examination December - 2022

SGAG1100-Introductory Soil and Water Conservation Engineering

Time: 10:00 a.m. to 12:00 p.m. Maximum Marks: 50 16.12.2022, Friday

Instruction:

- Draw a neat and labeled diagram whenever it is required.
 Start new questions from new page.

0.4				(4.5)	00	Day
Q.1	Multiple choice questions (01mark each) What is the process of loosening of soil particles from the top of soil layer?			(15)		BTL
1.1					2	2
	a. Detachment	C.				
4.0	b. Transportation	d.	None of above			
1.2	Splash erosion is also known as?		aut .		2	2
	a. Raindrop erosion	C.	Rill erosion			
	b. Sheet erosion	d.				
1.3	Transportation of soil particle is done				2	1
	a. Floating	C.	Dragging		1	
	b. Rolling	d.	All of above			
1.4	Area Affected by wind and water erosic				1	1
	a. 144.12 MH	C.	138.14 MH			
	b. 148.21 MH	d.	69 MH			
1.5	Soil particles are also known as?				2	2
	a. Sediment	C.	Organic matter			
	b. Fragment	d.	None of above			
1.6	What is the geographical area of India?				2	1
	a. 435MH	C.	345MH			
	b. 328 MH	d.	228MH			
1.7	The word erosion derived from?				2	1
	a. Greek	C.	French			
	b. German	d.	Latin			
1.8	What is the major cause of Gully erosio	n?			2	1
	a. Steepness of landslope	C.	Land mismanagement			
	b. Rainfall intensity	d.	All of above			
1.9	Area affected by gully erosion				3	1
	a. 4 M ha	C.	9 M ha			
	b. 6 M ha	d.	7 M ha			
1.10	An area estimated to be affected by wa	ter lo	gging		3	1
	a. 8.53 M-ha	C.	8.51 M-ha			
	b. 8.52 M-ha	d.	None of above			
1.11	An area affected by water or wind eros	ion			3	1
	a. 150 M-ha	c.	152 M-ha			
	b. 151 M-ha	d.	154 M-ha			
1.12	Water erosion includes				2	2
	a. Sheet erosion	C.	Gully erosion			
	b. Rill Erosion	d.	All of above			
1.13	What is the size of soil particles in salta	ation			1	1
	a. 0.10-0.15 mm diameter	C.	0.10-0.30 mm diameter			
	b. 0.10-0.35 mm diameter	d.	0.10-0.20 mm diameter			
1.14	Rolling or sliding is known as				2	2
	a. Soil creep	C.	Suspension			
	b. Saltation	d.	None of above			
1.15	Shifting cultivation is observe in which state				1	1
1.13	a. Andhra Pradesh c. Rajasthan					-
	b. Madhya Pradesh	d.	Tamil Nadu			
	o. Mauriya i raucon	u.	I dillil I ladu			

Q.2 2.1 2.2 2.3 2.4 2.5	Define/ Explain (Attempt any six- 01 marks each) Deposition wind erosion Soil conservation Detachment Sheet erosion	(06) 1 3 1 1	1 1 1
2.6	Gully erosion	3	1
Q.3 3.1 3.2 3.3 3.4 3.5	True/False or Fill in the blank (01 mark each) To prevent soil erosion, it is important to maintain vegetative cover Jhuming is also known as the shifting cultivation Transportation of soil particle is the process of soil erosion Glacial erosion is common in cold regions at high altitudes Sea-shore Erosion is also called coastal erosion	(05) 1 1 1 2 2	1 1 1
Q.4 4.1 4.2 4.3 4.4 4.5 4.6 4.7	Short notes (Attempt any six- 02 marks each) Classification of Gullies Describe the factors affecting water erosion Explain the importance of soil conservation? Describe the mechanics of water erosion with diagram? Explain the agents of soil erosion? Enlist the types of mulching material? Contour Cropping Explain the gully Control Measures	(12) 2 2 2 / 1 1 1 3 1 2	2 2 2 2 2 1 2
Q.5 5.1 5.2 5.3 5.4 5.5	Answer the following questions in detail (Attempt any three- 04 marks each) Describe the water harvesting techniques? Explain the wind erosion control measures? Describe in brief the types of water erosion? Discuss in brief the factors affecting soil erosion? Explain the types of soil erosion?	(12) 4 3 2 1 1	2 2 2

CO: Course Outcome Number BTL: Blooms Taxonomy Level Level of Bloom's Revised Taxonomy in Assessment:

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create