PARUL UNIVERSITY **COLLEGE OF AGRICULTURE**

B.Sc. (Hons.) Agriculture Summer 2018 – 19 Examination

Semester: 2 Date: 03/04/2019

Subject Code: 20103151 Time:2:00 PM to 4:30 PM

Subject Name: Soil and Water Conservation Engineering Total Marks: 50

Instructions

- 1. All questions are compulsory.
- 2. Figures to the right indicate full marks.
- 3. Make suitable assumptions wherever necessary.
- 4. Start new question on new page.

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1.1 Do as Directed.A. Fill in the blanks. (Each of 0.5 marks)		(05)
	vation is known as cropping pattern.	(00)
•	ethod of soil conservation in hilly area.	
3. Rotation of crop is essential for		
4. Erosion of very fine particles is see		
5. Large form of Rill Erosion is know		
	are the conservation centres in India.	
	the soil erosion can be prevented by	
8. Sheet erosion is also known as	_ · · · · · · · · · · · · · · · · · · ·	
9. Points of equal elevation is known		
10. Contour bunding is done to check_		
B. Multiple choice type questions. (Each		(10)
1. The factors affecting soil erosions are		
a). Climatic Factor	c). Topographical Factor	
b). Temperature	d). All above said	
2. Rill erosion of soil is occurred due to		
a). Surface runoff	c). Sub-surface runoff	
b). Higher Wind Velocity	d). Rainfall	
3. Evenly spaced contours indicate an a	rea of	
a). Equal slope	c). Uniform slope	
b). Steady slope	d). Variable slope	
4. Splash erosion is also known as	erosion .	
a). Light	c). Impact	
b). Runoff	d). Raindrop	
5 material is used for	mulching to reduce soil erosion.	
a). Cut grasses or foliage	c). Plastics	
b). Straw materials	d). All of above	
6. In splash erosion soil may be splashe	d into the air up to a height ofcm.	
a). 50 cm to 75 cm	c). 75cm to 100cm	
b). 150 cm to 200cm	d). all the above	
	nethod of controlling soilborne pests	
by placing plastic sheets on moist so	il during periods of high ambient	
temperature. a). poly house	c). Green house	
b). Soil solarization		
8. Life of durability of Grassed Waterw	d). Straw burning	
a). slope	c). velocity	
b). Vegetation	d). All the above	
o). Vegetation	a). All the above	

	9. The volume of water that passes a point is	n the stream during a given	
	amount of time is called	Characa D'aslama	
	a). Stream velocity	c). Stream Discharge	
	b). Stream flow	d). Stream tide	
	10. The possible beneficial effect of the graz		
	 a). Addition of their excreta to the soil 	c). Eradication of weeds	
	b). Removal of wild plants	d). Removal of wild animals	
	11. All erosion is powered by a conversion particularly energy.	of the potential energy of gravitation to other forms,	
	a). Kinetic energy	c). Mechanical energy	
	b). Steady-state energy	d). Tidal wave energy	
	12. Which soil erosion centre is located in G	•	
	a). Dhasara	c). Vasad	
	b). Morabi	d). Dantiwada	
	13. The rates of accelerated erosion is	than geological erosion.	
	a). Lower	c). More or less same	
	b). Higher	d). None of above	
	14. The Wind erosion occurs at what velocit	•	
	a). 16 Kmp	c). 26 Kmp	
	b). 56 Kmp	d). 09 Kmp	
	15. Mechanics of soil erosion includes	, 1	
	a). Detachment of soil particles	c). Deposition of soil particle	
	b). Transport of soil particle	d). All of above	
	16. Which of these are the Agents of Erosion	•	
	a). Water	c). Wind	
	b). Glacier	d). All the above	
	17. Soil conservation can best achieve by ha	•	
	a). Wind screens	c). Restricted human activity	
	b). Good plant covers	d). Low rainfall	
	18. Eroded soils are	,	
	a). Rich in plant nutrients	c). Unaltered in plant nutrients	
	b). Devoid of plant nutrients	d). All of these	
	19. Soil conservation means:	·	
	a). Prevention of spread of desert	c) To check soil erosion by afforestation	
	b). To check soil erosion by wind and	d). All of these	
	rains		
	20. Which is the 1^{st} stage of water erosion?		
	a). Splash	c). Rill	
	b). Gully	d). Sheet	
Q.2	Do as Directed.		
A.	Define the following. (Any five)		(05)
	1. Write down factors affecting soil erosion		
	2. Define Bench Terracing practices in soil	erosion.	
	3. Define accelerated erosion.		
	4. Define contouring.		
	5. Define Runoff.		
	6. Describe grassed water ways .		
	7. Define Irrigation.		
В	. Answer the following. (Any Five)		(05)
	1. Define rain water harvesting.		` /
	2 Enlist Mulching practices use by the farm	ners	

	6.	Define Soil Erosion.	
	7.	Define stream bank erosion.	
Q.3 Write short notes. (Any five)		(10)	
	1.	State the advantages of modern irrigation methods.	
	2.	State the different Agronomical Practices to control erosion of soil	

- 3. State the advantages of earthen bunds to reduce the soil erosion.
- 4. Enlist any six Soil Conservation Centres located in India.
- 5. State the benefits of vegetated waterways.
- 6. Define contour farming and its advantages in soil erosion.

Q.4 Attempt any Three/Long Questions/Example

3. Enlist different types of water erosion. 4. State different practices of water harvesting.

5. Define Gully Erosion.

- **(15)**
- 1. Define terrace and explain different types of terraces use to control soil erosion.
- 2. State reclamation and explain reclamation measures.
- 3. Explain various practices adopted by the farmers to control soil erosion.
- 4. State the classifications of different types of gullies in details.