

Model Question Paper (2022 Scheme)
6th Semester B.E. Degree Examination
SOIL AND WATER CONSERVATION ENGINEERING

TIME: 03 Hours

Max. Marks: 100

Note: Answer any **FIVE** full questions choosing at least **ONE** question from each **MODULE**.

Q. No.		Questions	*Bloom's Taxonomy Level	CO	Marks
Module-1					
Q.1	a	Explain the concept of geologic and accelerated erosion	L3	1	8
	b	Explain the causes of soil erosion	L3	1	8
	c	Classify the soil erosion based on erosion intensity	L1	1	4
OR					
Q.2	a	What are the factors affecting gully erosion?	L1	1	10
	b	Explain different types of water erosion	L3	1	10
Module-2					
Q. 3	a	Explain the classification of gullies	L3	2	10
	b	Explain USLE model and their parameters	L3	2	10
OR					
Q.4	a	What are the changes introduced in RUSLE to improve the USLE? Discuss the advantages of the changes introduced.	L1	2	10
	b	How soil loss is measured? Explain briefly.	L3	2	10
Module-3					
Q. 5	a	List out Agronomical and mechanical measure for controlling soil erosion	L1	3	10
	b	Explain briefly Agronomical measure for controlling soil erosion	L3	3	10
OR					
Q. 6	a	Write down the design consideration for contour and graded bunds	L2	3	10
	b	Differentiate between contour bund and graded bund	L2	3	10
Module-4					

Q.7	a	What factors should be considered while designing bench terraces? Discuss briefly.	L1	4	10
	b	Classify bench terraces and illustrate each type with an appropriate diagram	L2	4	10
OR					
Q.8	a	Discuss the various methods used in gully and ravine reclamation.	L3	4	10
	b	What are the key factors to consider when designing a grassed waterway for gully reclamation?	L1	4	10
Module-5					
Q.9	a	Explain the mechanics of wind erosion	L3	5	10
	b	How soil loss is estimated from wind erosion. Explain with necessary equation	L3	5	10
OR					
Q.10	a	Discuss the different classes of land capability classification. What are the main characteristics of each class, and how do they influence land management practices?	L3	5	10
	b	Discuss the methods used to measure the rate of sedimentation in a water body.	L3	5	10