QPC: R262M029 AR 24 Reg. No

GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR

(GIET UNIVERSITY)

Ph.D. (Second Semester-Winter) Examinations, April – 2026

SOIL 606- Soil Resource Management

(Soil Science)

Time: 3 hrs Maximum: 70 Marks

The figures in the right hand margin indicate marks.

	Answer *ANY FIVE* Questions. (14 x 5 = 70 Marks)	**Marks**
1.a.	Define watershed management and explain its objectives and approach.	8
b.	Discuss water harvesting and recycling techniques in watershed management.	6
2. a.	Discuss the principles and components of conservation agriculture.	8
b.	Explain how conservation agriculture improves soil resilience.	6
3.a.	Describe strategies for soil erosion control and conservation.	7
b.	Explain soil conservation practices in hilly and arid regions.	7
4.	Define soil health and differentiate it from soil quality. Discuss indicators used to assess soil health.	14
5.a.	Explain the concept of desertification and its causes in the Indian context.	7
b.	Suggest measures to combat desertification.	7
6.a.	Describe wind erosion and its controlling measures.	7
b.	Explain the role of vegetation in preventing soil erosion.	7
7. a.	Describe contour farming and terracing as soil conservation techniques.	8
b.	Explain strip cropping and shelter belts	6
8.a.	Define watershed, explain its components, and discuss the integrated watershed management approach.	14

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