O.P.Code: 23CE0111	R23	H.T.No.									

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech. II Year II Semester Regular & Supplementary Examinations March/April-2026

ENIGNEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours **Max. Marks: 70**

PART-A

(Answer all the Questions **10 x 2 = 20** Marks)

1	a	Define Weathering.	CO1	L1	2M
	b	Mention any two case histories of failures.	CO1	L2	2M
	c	Define a mineral.	CO2	L1	2M
	d	Write any three examples of igneous rocks.	CO2	L1	2M
	e	Define the terms strike and dip.	CO3	L1	2M
	f	Draw the parts of a Fault.	CO4	L2	2M
	g	What do you understand an earthquake?	CO5	L1	2M
	h	Enumerate any four geophysical methods.	CO5	L2	2M
	i	Name any two geological considerations for selecting a dam site.	CO6	L2	2M
	j	What is tunneling?	CO7	L1	2M

PART-B

(Answer all Five Units **5 x 10 = 50** Marks)

UNIT-I

2	a	Define geology. Explain different branches of geology.	CO1	L2	5M
	b	State importance of geology in civil engineering.	CO1	L2	5M
		OR			
3		What are the main types of geological agents? And explain chemical weathering.	CO1	L2	10M

UNIT-II

4		Define mineral and explain the various physical properties of minerals.	CO2	L2	10M
		OR			
5	a	Describe the various types of Structures associated with Igneous rocks.	CO2	L4	5M
	b	Write short note on megascopic study for the following rocks i)Granite ii)Basalt	CO2	L2	5M

UNIT-III

6	a	Explain the major types of folds with the help of neat sketches?	CO3	L2	5M
	b	Discuss the importance of folds in civil engineering point of view.	CO3	L4	5M
		OR			
7		Explain how unconformities are identified in the field and their importance in geological mapping.	CO4	L2	10M

UNIT-IV

8		Explain the importance of various geological factors which influence the movement of ground water.	CO5	L2	10M
		OR			
9	a	Describe Magnetic method in terms of the principle, physical property, procedures, equipment and uses.	CO5	L3	5M
	b	Describe Radiometric method in terms of the principle, physical property, procedures, equipment and uses.	CO5	L3	5M

UNIT-V

10		Discribe and discuss the following: i)Geological consideration in the successful reservoir ii)Life of reservoir	CO6	L4	10M
		OR			
11		Describe the geological consideration for successful tunneling.	CO6	L3	10M

***** END *****