



ACE-R20

Question Paper Code:

CE302PC

**Semester Supplementary Examination**  
**II B. Tech- I Semester- SEPTEMBER-2022**  
**ENGINEERING GEOLOGY**  
**(CIVIL Engineering )**

Time: 3 Hours

Max. Marks: 70

H. T. No

*Answer any 5 Questions out of 8 Questions from the following*  
M=Marks

Q.No	Question	M
1.a)	Discuss in detail about the process of disintegration and decomposition in Weathering.	8
b)	Describe the various branches of Engineering Geology?	6
2.a)	Define Mineral and specify the properties that are commonly studied for their identification?	4
b)	Describe the classification of metamorphic rocks and their characteristics ?	10
3.	Discuss the topographical expression of different types of folds and faults and their role in civil engineering projects?	14
4.a)	What is meant by "meandering of a river"? Explain the development of a meander with neat sketches.	6
b)	Classify the parts and types of unconformities that are encountered in structural geology? Draw neat sketches ?	8
5.a)	Give a detailed explanation on the following investigations to be carried out in ground water Exploration: <ul style="list-style-type: none"> <li>• Geological Investigations</li> <li>• Hydrological investigations.</li> </ul>	10
b)	Differentiate between Dyke and Sills.	4
6.a)	What are landslides? Enumerate the classification, Effects and causes of landslides?	10
b)	Write the importance of seismic refraction method in Civil Engineering ?	4
7.a)	Explain the necessities and importance of geophysical investigation ?	4
b)	Write about Geological considerations in the selection of a Dam Site and Analyze the dam failures of the past ?	10
8.a)	What is the role of ground water in success of tunneling? Explain the bearing of lithology and structure in this context ?	8
b)	Explain the influencing factors for a successful reservoir ?	6