


Name:			
Enrolment No:			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, December 2022</b>			
<b>Course: Engineering Geology</b> <b>Program: B. Tech (Civil Engineering)</b> <b>Course Code: CIVL 2014</b>		<b>Semester: III</b> <b>Time : 03 hrs</b> <b>Max. Marks: 100</b>	
<b>Instructions:</b> 1) Mention Roll No. at the top of the question paper. 2) Attempt all the parts of a question at one place only 3) All questions are compulsory			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.	Question	Marks	CO
Q 1	Discuss the different seismic waves generated during an earthquake with the help of a suitable diagram.	4	CO3
Q 2	Difference between reservoir and dam.	4	CO4
Q 3	Classify the different faults with the help of a line diagram.	4	CO1
Q 4	Enlist different processes involved in a rock formation.	4	CO2
Q 5	Explain the various indicators of the landslide phenomenon.	4	CO2
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	Discuss the following in brief: a. GIS application in Geological explorations. b. Application of geological exploration in foundation engineering.	10	CO4
Q 7	Define landslides and illustrate the different Earth movements and each in brief with the help of examples.	10	CO2
Q 8	Enlist the different criteria for selecting the dam and reservoir site.	10	CO4
Q 9	Explain the different failures in the hydraulic structure.	10	CO4
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q 10	Discuss the rock cycles and brief classification of rocks and mention the application of each rock from an engineering perspective.	20	CO1
Q 11	Sketch the hydrological cycle and discuss different components. Enlist the different aquifers types with help of diagrams.	20	CO3