

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S4 (S,FE) (FT/WP/S2PT) Examinations May 2026 (2019 Scheme)



Course Code: CET202

Course Name: ENGINEERING GEOLOGY

Max. Marks: 100

Duration: 3 Hours

PART A

(Answer all questions; each question carries 3 marks)

		Marks
1	Describe the important types of physical weathering.	3
2	Describe briefly the classification of soils.	3
3	List out the major seismic zones in India	3
4	Explain the characteristics of primary earthquake waves	3
5	Explain hydraulic conductivity	3
6	Differentiate an aquifer and an aquiclude	3
7	Define thermoluminescence of minerals with one example	3
8	Write down the physical properties and chemical composition of gypsum.	3
9	Differentiate fault and joint.	3
10	Differentiate between dip and hade of a fault.	3

PART B

(Answer one full question from each module, each question carries 14 marks)

Module -1

- | | | |
|----|---|---|
| 11 | a) Illustrate the depositional features generated by the rivers | 8 |
| | b) What are the engineering significances of weathering | 6 |
| 12 | a) Relate crops and cropping systems to soil conservation | 6 |
| | b) What are the various causes of landslides | 8 |

Module -2

- | | | |
|----|---|----|
| 13 | Explain the importance of Magnitude scales in earthquake management | 14 |
| 14 | a) With the help of neat sketch explain the interior of the earth | 8 |
| | b) Explain the different seismic zones in India | 6 |

Module -3

- | | | |
|----|--|---|
| 15 | a) Describe the vertical distribution of groundwater | 6 |
|----|--|---|

- b) Elucidate application of electrical resistivity survey in ground water exploration. 8
- 16 a) Describe the different methods to control groundwater at construction 8
- b) Give an account of the significance of Ghyben-Herzerg relation. 6

Module -4

- 17 a) Give an account on hardness of minerals with Moh's hardness scale 6
- b) Classify the structural features present on sedimentary rocks 8
- 18 a) Elucidate various physical properties of minerals for their identification. 8
- b) Write a note on the important rock types of Kerala. 6

Module -5

- 19 a) Explain the geological considerations to be made for the construction of a dam. 14
- 20 a) Explain any four types of fault. 6
- b) Explain any four types of folds. 8
