

Scheme of Valuation/Answer Key (Scheme of evaluation (marks in brackets) and answers of problems/key)			
APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY THIRD SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018			
Course Code: CE205			
Course Name: ENGINEERING GEOLOGY			
Max. Marks: 100		Duration: 3 Hours	
PART A			
<i>Answer any two full questions, each carries 15 marks.</i>			Marks
1	a)	Relevance of Geology in civil engineering (5 points)	(5)
	b)	Types of weathering (6) Engineering significance (4)	(10)
2	a)	Control of subsurface water (4) sketches (1)	(5)
	b)	(i) Hydraulic conductivity (5) (ii) Artesian aquifer (5)	(10)
3	a)	Classification of weathered rock mass (5)	(5)
	b)	Description of any 5 problems (5x2)	(10)
PART B			
<i>Answer any two full questions, each carries 15 marks.</i>			
4	a)	Each property 2 marks (2x3=6)	(6)
	b)	Properties of : (i) Quartz (3) (ii) Feldspar (3) (iii) Gypsum (3)	(9)
5	a)	Minimum three rock features affecting the strength of rocks. Each 2 marks (2x3=6)	(6)
	b)	Igneous rocks (3) Sedimentary (3) Outcrops in Kerala (3)	(9)
6	a)	Tectonic description of Himalayan region (2.5), Tectonic description of Kerala region (2.5)	(5)
	b)	Properties of (i) Granite (5) (ii) Shale (5)	(10)
PART C			
<i>Answer any two full questions, each carries 20 marks.</i>			
7	a)	Fold (1) three types of fold, 2 marks each (2x3=6)	(7)
	b)	Three geological factors (lithology, structure, groundwater to be considered (2.5x3=7.5); overbreak -2.5 marks	(10)
	c)	Definition-1 mark, Contour diagram \94 circular contour of values 20, 40, 60 & 40 from periphery inward) – 2mark	(3)
8	a)	Damaging coastal processes (4) Coastal protection methods (6)	(10)
	b)	Soil erosion (2) Soil conservation measures (8)	(10)
9	a)	Formation of joints (4) differentiation from fault (4)	(8)
	b)	Causes of landslides (4 marks), preventive measures (4 marks)	(8)
	c)	Structure – fold (2mark), Strike (N60 ⁰ or N240 ⁰) – 2 mark	(4)
