

<b>Scheme of Valuation/Answer Key</b>			
(Scheme of evaluation (marks in brackets) and answers of problems/key)			
<b>APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY</b>			
THIRD SEMESTER B.TECH DEGREE EXAMINATION, MAY2019			
<b>Course Code: CE207</b>			
<b>Course Name: SURVEYING</b>			
Max. Marks: 100		Duration: 3 Hours	
<b>PART A</b>			
<i>Answer any two full questions, each carries 15 marks.</i>			Marks
1	a)	Definition 2 marks : methods – 3 marks	(5)
	b)	Tabulation – 3marks: Reduced level – 4marks : Check – 3 marks	(10)
2	a)	Definition – 2 marks: systems – 2 marks each with figure	(4)
	b)	Dip and Declination 3 marks: isogonic and agonic – 2marks	(5)
	c)	Figure – 2marks : equation – 2 marks : answer – 2 marks	(6)
3	a)	2 methods –3 marks each	(6)
	b)	Contour – 2 marks: direct method – 4 marks: indirect method – 3 marks	(9 )
<b>PART B</b>			
<i>Answer any two full questions, each carries 15 marks.</i>			
4	a)	Figure – 1 marks: Explanation – 4 marks	(5)
	b)	Elevation of LOS – 202 m - 1 marks: h1 – 38 m – 1 marks: D1 -23.76 km – 2 marks : D2 -36.23 km – 1 marks : h2 – 88.23 m- 2 marks: LOS at B – 290.33 m – 1 marks : Ground level – 280 m – 1 marks: height of signal – 10.33 m -1 marks	(10)
5	a)	Mass diagram – 2 marks: uses – 3 marks	(5)
	b)	Steps with explanation – 10 marks	(10)
6	a)	Statement – 2 marks : Equation with fig – 3 marks	(5)
	b)	Equation- 1 marks: Areas – 4 marks: trapezoidal – 6258 m <sup>2</sup> -2.5marks Prismoidal – 6316 m <sup>2</sup> – 2.5 marks	(10)

**PART C**

*Answer any two full questions, each carries 20 marks.*

7	a)	Statement with equation – 5 marks	(5)
	b)	Principle – 3 marks : figure – 2 marks	(5)
	c)	Normal equation – 2 marks each Solution – 4 marks	(10)
8	a)	Each definition – 2 marks	(10)
	b)	Explanation with figure – 10 marks	(10)
9	a)	Any two types of EDM instrument-2.5 mark each. Any two types of Modulation -2.5 mark each	(10)
	b)	Weight – 1 marks $X=46x+29y+32z-147$ $Y=29x+31y+22z-81$ $Z=32x+22y+30z-128$ – 3 marks each	(10)
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