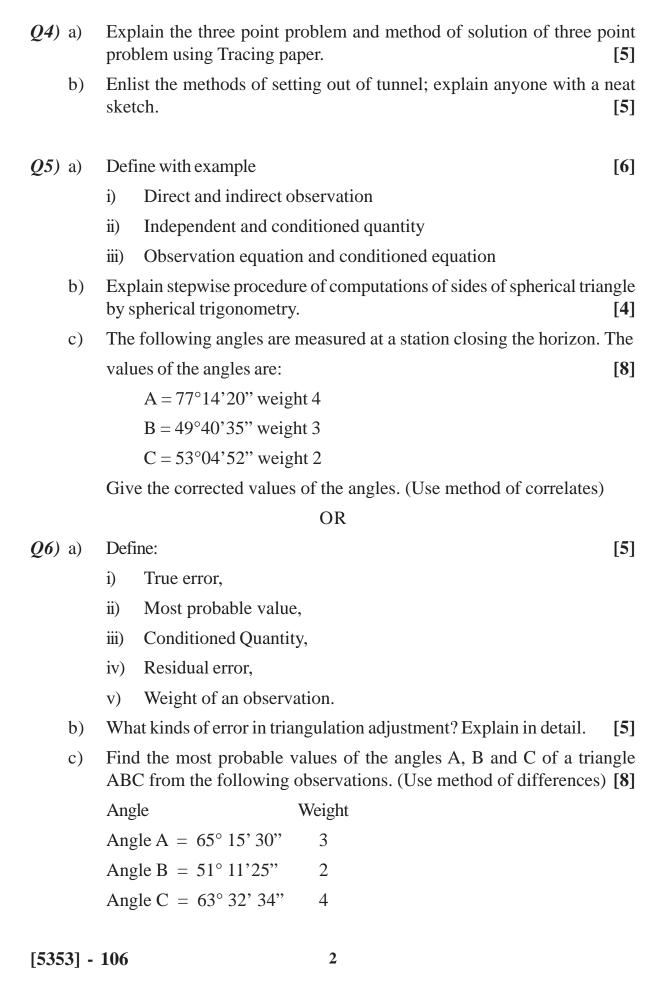
Total No. of Questions: 10]	SEAT No.:
P32//3	[Total No. of Pages : 3

[5353] - 106 T.E. (Civil) **(2012 Pattern)**

ADVANCED SURVEYING *Time* : 2½ *Hours*] [Max. Marks:70 Instructions to the candidates: Answer Q.No.1 or Q.No. 2, Q. No. 3 or Q.No. 4, Q.No. 5 or Q.No. 6, Q.No. 7 or Q.No. 8, Q.No. 9 or Q.No. 10. 2) Neat diagrams must be drawn whenever necessary. 3) Figures to the right indicate full marks. **4**) Assume suitable data, if necessary. State the objects of Geodetic Surveying and Explain Secondary **Q1**) a) Triangulation? [5] What is SBPS? State and explain GAGAN system. [5] b) OR Define, [5] **Q2**) a) Well conditioned triangle i) Strength of a figure ii) Accuracy of Triangulation iii) iv) Indivisibility of stations V) Station marks b) Differentiate between absolute positioning and relative positioning. [5] **Q3**) a) Explain the graphical method of solving three point problem. [5] b) Explain with sketch axis signal correction. [5]

OR



Q 7)	a)	Defi	tch:	[8]					
		i)	Principal point,	ii)	Scale,				
		iii)	Air base distance,	iv)	Digital elevation model.				
	b)	The scale of aerial photograph is 1:10000, effective at an average elevation of terrain of 500 m. The size of aerial photograph is 230mm x 230mm. Focal length of camera lens is 20 cm. Speed of aircraft is 180 kmph, longitudinal overlap is 60% and side overlap is 30%. Determine the number of photographs required to cover an area of 30kmx22.5 km. Also determine exposure interval and flying height. [8]							
(10)	-)	Dani		.1	ro1				
Q 8)			Derive an expression for Relief displacement due to ground. [8						
	b)	A pair of photograph is taken with a camera having focal length 15 cm. The scale of photography is 1:10000 and photo base is 5.65 cm. The measured parallax of a vertical control point having an elevation 140 m is 87.28 mm. Compute the elevation of another point P whose measured parallax is 84.18 mm. [8]							
Q9)	a)	Define remote sensing. State how it differs from Photogrammetry. [4]							
	b)	Give the application of remote sensing with respect to natural hazards.[4]							
	c)		at is GIS? State various (sing and GIS are linked.	oftware's and Explain how rem	ote [8]				
			()R					
Q10)a)		State	nts of GIS.	[5]					
	b)	Differentiate between raster data and vector data.							
	c)	Explain Remote sensing applications in disaster management with suital example.							

