GIET MAIN CAMPUS AUTONOMOUS GUNUPUR – 765022

RN19001863

Registration No: | | | | | | | | | | |

Total Number of Pages : 2 AR-18 B.TECH

B.TECH 3rd SEMESTER EXAMINATIONS, NOV/DEC 2019

BCEPC3030 SURVEYING-I

Civil Engineering

Time : 3 Hours Maximum : 100 Marks

Answer ALL Questions

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions) 10 x 2=20 Mark

Q.1. Answer *All* Questions

a Principle of surveying followed to prevent accumulation of errors is CO1PO1
a) To work from whole to the part b) To work from part to whole
c) None of the above d) both a) and b) above

b The curvature of the earth's surface is taken into account only if the extent of survey is more than a) 80 sq km b) 500 sq km c) 260 sq km d) 1500 sq km CO1PO1

c Geodetic survey is different from plane surveying because of CO1PO1
a) Very large area is covered b) The curvature of the earth is considered
c) The topography is bad d) The large difference of elevation

d A triangle is said to be well conditioned if none of its angles is less than: CO2PO1
a) 20^0 b) 30^0 c) 45^0 d) 60^0

e The tie line is run through the survey to CO2PO1
a) Take off sets for detailed surveying b) Take details of nearby objects
c) Check accuracy of work d) None of the above

f The box of prismatic compass is made of CO2PO1
a) Steel b) Brass c) Iron d) Aluminium

g Magnetic declination at a point CO3PO1
a) Does not change with time b) Never remains constant
c) Varies with time d) b) and c) above

h A prismatic compass is used to determine CO3PO1
a) Dip at a place b) Declination of a line
c) Whole circle bearing of a line d) Quadrangle bearing of a line

i A bearing noted 45^0 NE represents CO4PO1
a) Quadrantal system b) Whole circle system
c) Reduced bearing system d)) None of the above

j The capability of a telescope to produce sharp images is known as its CO4PO1
a) Magnifying power b) Sensitivity c) Aperture d) Resolving power

PART – B: (Short Answer Questions) 10X2=20 Marks

Q.2. Answer *ALL* questions

a Define odometer. CO1PO1

b What is Passometer. CO1PO1

c Define Pedometer CO1PO1

d What is Perambulator CO2PO1

e Define Trough Compass CO2PO1

f What is Mean sea level CO3PO1

g Define Bench mark CO3PO1

h	What is Line of collimation		CO4PO1
i	Define Contour line		CO4PO1
j	What is Contour intervals		CO4PO1

PART – C: (Long Answer Questions) 4X15=60 Marks

Answer *ALL* questions

Q.3			
a	Write down points to be remembered for Selection of survey stations	8	CO1PO2
b	Define Offsets. What are the types of offsets?	7	CO1PO2
	OR		
c	Explain about Compass surveying and its principle	7	CO1PO2
d	Write down the difference between surveyor and prismatic compass	8	CO1PO2
Q.4			
a	What are the various methods of levelling	7	CO2PO2
b	What are the advantages claimed by the use of level	8	CO2PO2
	OR		
c	The following reading were taken with a level and a 4 m staff. Draw up a level book page and reduce the levels by i) Rise and fall method	8	CO2PO2
d	ii) By height of instrument method 0.683 BM(51.362 m), 1.109, 1.838, 3.399, (3.877 and 0451) CP, 1.405,1.896,2.676,3.478,(3.999 and 1.834) CP, 0.649,1.706	7	CO2PO2
Q.5			
a	What are the Characteristics of contours?	8	CO3PO2
b	Note down Characteristics of contours lines	7	CO3PO2
	OR		
c	Explain about direct method of contouring	8	CO3PO2
d	Write down uses of contour maps	7	CO3PO2
Q.6			
a	Explain about the significance of digital theodolite	8	CO4PO2
b	Write short note on total station	7	CO4PO2
	OR		
c	Explain the importance of remote sensing	8	CO4PO2
d	Write short note on GIS	7	CO4PO2

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