

University of Mumbai

Examination 2020

Program: Civil Engineering

Curriculum Scheme: Rev2016

Examination: Second Year Semester IV

Course Code: CE-C402 and Course Name: Surveying-2

Time: 1 hour

Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

Q1.	Surveys which are carried out to depict mountains, rivers, water bodies, wooded areas and other cultural details, are known as _____
Option A:	Cadastral surveys
Option B:	City surveys
Option C:	Topographical surveys
Option D:	Guide map surveys
Q2.	Different grades are joined together by a _____
Option A:	Compound curve
Option B:	Transition curve
Option C:	Reverse curve
Option D:	Vertical curve
Q3.	Hydrographic surveys deal with the mapping of
Option A:	Large water bodies
Option B:	Heavenly bodies
Option C:	Mountainous region
Option D:	Canal system
Q4.	The angle of intersection of the curve is the angle between _____
Option A:	Back tangent and forward tangent
Option B:	Prolongation of back tangent and forward tangent
Option C:	Forward tangent and long chord
Option D:	Back tangent and long chord
Q5.	The radius of a simple circular curve is 300m and length of its specified chord is 30m. The degree of the curve is _____
Option A:	5.73
Option B:	5.37
Option C:	3.57
Option D:	3.75
Q6.	For a curve of radius 100 m and normal chord 10 m, the Rankine's deflection angle, is _____
Option A:	0'25".95
Option B:	0'35".95
Option C:	1'25".53
Option D:	2'51".53
Q7.	If +0.8% grade meets -0.7% grade and the rate of change of grade for 30 m

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	distance is 0.05, the length of the vertical curve will be
Option A:	600 m
Option B:	700 m
Option C:	800 m
Option D:	900 m
Q8.	Which of the following indicates the correct set of the combination of total station?
Option A:	Theodolite, compass
Option B:	Theodolite, EDM
Option C:	Electronic theodolite, EDM
Option D:	EDM, GPS
Q9.	Each point entered in a total station is stored in _____
Option A:	Hard discs
Option B:	Electronic books
Option C:	Data storage
Option D:	Chip
Q10.	Topographic maps are drawn to a scale of _____
Option A:	1 cm = 2.5km to 1cm= 0.25km
Option B:	1:2500 to 1:500
Option C:	1:50000 to 1:250000
Option D:	1:1000
Q11.	One of the limitations of GPS is _____
Option A:	It has to have connectivity with orbital satellite
Option B:	Not speedy
Option C:	Not accurate
Option D:	Difficult to install
Q12.	The station where observation are not made, but the angles at the station are used in triangulation series, is known as _____
Option A:	Satellite station
Option B:	Subsidiary station
Option C:	Pivot station
Option D:	Main station
Q13.	The point on the celestial sphere vertically below the observer's position, is called _____
Option A:	Zenith
Option B:	Celestial point
Option C:	Nadir
Option D:	Pole
Q14.	The Polaris remains below horizon at
Option A:	10 degree N
Option B:	50 degree N latitude

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Option C:	Equator
Option D:	5 degree S latitude
Q15.	To obtain photographs of an area of 1000 m average elevation, on scale 1:30000, with a camera of 30cm focal length, the flying height is _____
Option A:	4000 m
Option B:	5000 m
Option C:	6000 m
Option D:	7000 m
Q16.	The scale of a vertical photograph of focal length 'f' taken from height of 'H' meters above M.S.L., at a point of reduced level 'h', is _____
Option A:	f/H
Option B:	f/(H-h)
Option C:	f(H+h)
Option D:	(H-h)/f
Q17.	Remote sensing techniques make use of the properties of _____ emitted, reflected or diffracted by the sensed objects:
Option A:	Electric waves
Option B:	Sound waves
Option C:	Electromagnetic waves
Option D:	Wind waves
Q18.	The various stages occurring in GPS system are described below: 1. Generation of an output to the user 2. Detection of the GPS signals 3. Processing the data in the built in computer 4. Decoding the GPS signal. The correct sequence of the stages is:
Option A:	1,2,3,4
Option B:	2,3,4,1
Option C:	2,4,3,1
Option D:	3,1,2,4
Q19.	The GPS space segment consists of Navigation Satellite Timing and Ranging whose number is:
Option A:	8
Option B:	12
Option C:	16
Option D:	24
Q20.	The zenith is the point on the celestial sphere
Option A:	East of observer
Option B:	West of observer
Option C:	North of observer
Option D:	South of observer
Q21.	Engineers use _____ maps for planning roads, buildings etc.
Option A:	Topographic

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Option B:	Forest
Option C:	Geological
Option D:	Biogeographic
Q22.	In which direction it is best to place the total station for obtaining the best output?
Option A:	East
Option B:	West
Option C:	South
Option D:	North
Q23.	If 'S' is the length of a sub-chord and 'R' is the radius of simple curve, the angle of deflection between its tangent and sub-chord, in minutes, is equal to
Option A:	573 S/R
Option B:	573 R/S
Option C:	1718.9 R/S
Option D:	1718.9 S/R
Q24.	The circle in which a plane tangent to the earth's surface at the point of observation, intersects the celestial sphere, is called
Option A:	Visible horizon
Option B:	Sensible horizon
Option C:	Celestial horizon
Option D:	True horizon
Q25.	Orbital radius of GPS satellite is approximately...
Option A:	15200 km
Option B:	26600 km
Option C:	18400 km
Option D:	36000 km