

Discipline	Civil Engineering					
Question No	Question	Ans1	Ans2	Ans3	Ans4	Ture Ans in the form of(1,2,3,4)
1	A continuous beam shall be deemed to be a deep beam if the ratio of its effective span to overall depth, is	2	2.5	less than 2	less than 2.5	
2	For construction of structures under water, the type of lime used is	Hydraulic lime	Fat lime	Quick lime	Pure lime	
3	A simply supported beam <i>A</i> carries a point load at its midspan. An other identical beam <i>B</i> carries the same load but uniformly distributed over the entire span. The ratio of the maximum deflections of the beams <i>A</i> and <i>B</i> , will be	2/3	1 1/2	5/8	1 3/5	
4	The minimum percents of silica, alumina and ferric oxide in lime for white washing is	20	15	10	5	
5	For the manufacture of Portland cement, the proportion of raw materials used are	Lime 63% ; silica 22% ;other ingredients 15%	silica 22% ; Lime 63% ; other ingredients 15%	silica 40% ; Lime 40% ; other ingredients 20%	Silica 70% ; Lime 20% ; other ingredients 10%	
6	Initial setting of cement is caused due to	Tri-calcium silicate	Di-calcium silicate	Tri- calcium aluminate	Tetra calcium alumino ferrite	
7	Ultimate strength to cement provided by	Tri-calcium silicate	Di-calcium silicate	Tri- calcium aluminate	Tetra calcium alumino ferrite	
8	Columns are designed for a minimum eccentricity equal to 1/30 (unsupported length of the column), subject to a minimum of	5 mm	10 mm	15 mm	20 mm	

9	Rapid hardening cement attains early strength due to:	Larger proportion of lime grounded finer than normal cement	Lesser proportion of lime grounded coarser than normal cement	Lesser proportion of lime grounded finer than normal cement	Larger proportion of lime grounded coarser than normal cement	
10	Quick setting cement is produced by adding	Less amount of gypsum in very fine powdered form	More amount of gypsum in very fine powdered form	Aluminium sulphate in very fine powdered form	Pozzolana in very fine powdered form	
11	Portland cement manufactured from pure white chalk and clay but free from iron-oxide, is known as	Quick setting cement	Rapid hardening cement	White cement	Low heat Portland cement	
12	The thickness $t$ of a single flat lacing should not be less than	1/30 th length between inner end rivets	1/40 th length between inner end rivets	1/50 th length between inner end rivets	1/60 th length between inner end rivets	
13	Seasoning of timber is essential to	Knots from timber	Sap from timber	Twisted fibre from timber	Roughness of timber	
14	A well seasoned timber may contain moisture up to	4 to 6%	6 to 8%	8 to 10%	10 to 12%	
15	For the manufacture of plywood, veneers are placed so that grains of adjacent veneers	Run at right angles	Parallel	Inclined at 45°	Inclined at 60°	
16	To support a heavy structure in sandy soil the type of foundation generally used is	Combined footing	Raft footing	Peir footing	Strap footing	
17	A pre- stressed concrete pile is	Easy to handle	Lighter in weight	Extremely	Suitable for heavy load	
18	The bearing capacity of a water logged soil may be improved by	Grouting	Chemical action	Drainage	Compaction	

19	The maximum permissible differential settlement in case of foundations in clayey soil is usually limited to	10 mm	20 mm	30 mm	40 mm	
20	The arrangement of supporting an existing structure by providing supports underneath is known as	Shoring	Underpinning	Jacking	Piling	
21	Weep holes are provided in retaining and breast walls	To drain off the water from the filling	To ventilate the stone masonry	To add architectural beauty	To reduce the weight of the earth retained	
22	If the atmospheric pressure on the surface of an oil tank (sp. gr. 0.8) is 0.1 kg/cm <sup>2</sup> , the pressure at a depth of 2.5 m, is	1 metre of water	2 metres of water	3 metres of water	3.5 metres of water	
23	The sound which continues even after its source is cut off is called	Reverberation	Echo	Intensity of sound	Interference	
24	For plastering the exposed brick walls the cement sand mortar should be	1:2	1:3	1:4	1:6	
25	Orientation of a plane table by solving two point problem is only adopted when	Saving of time is a main factor	Better accuracy is a main factor	Given points are inaccessible	None of these	
26	The line of sight is kept as high above ground surface as possible to minimize the error in the observed angles due to	Shimmering	Horizontal refraction	Vertical refraction	Both shimmering and horizontal refraction	
27	If the angular measurements of a traverse are more precise than its linear measurements, balancing of the traverse is done by	Bowditch's rule	Transit rule	Empirical rule	All of the above	
28	With usual notations the expression $V^2/gr$ represents	Centrifugal force	Centrifugal ratio	Super elevation	Radial acceleration	
29	The properties of autogenous curve for an automobile are given by	True spiral	Cubic parabola	Bernoulli's lemniscates	Clothoid spiral	

30	The ratio of length of long chord and the tangent length of a circular curve of radius R deflecting through angle $\theta$ is	$\sin \frac{\theta}{2}$	$\cos \frac{\theta}{2}$	$\tan \frac{\theta}{2}$	$2 \sin \frac{\theta}{2}$	
31	The ratio of the effective length of a column and minimum radius of gyration of its cross-sectional area is known	Buckling factor	Slenderness ratio	Crippling factor	None of these	
32	Invar tapes used for measuring base line is made of nickel- iron alloy containing nickel	24%	36%	40%	60%	
33	The time interval between successive transits of the moon is	24 hours 10 minutes	24 hours 25 minutes	24 hours 50 minutes	23 hours 50 minutes	
34	On a ladder resisting on a smooth ground and against a rough vertical wall the force of friction acts	Toward the wall at its upper end	Away from wall at its upper end	Upwards at its upper end	Downwards at its upper end	
35	If rain is falling in the opposite direction of the movement of pedestrian he has to hold his umbrella	More inclined when moving	b. Less inclined when moving	More inclined when standing	Less incline when standing	
36	The path traced by a projectile in the sky is	Circular	Parabolic	Elliptical	Catenary	
37	A second's pendulum gains 2 minutes a day. To make it to keep correct time its length	Must be decreased	Must be increased	Is not changed but weight of bob is increased	Is not changed but weight of bob is decreased	
38	The materials which have the same elastic properties in all directions are called	Isotropic	Brittle	Homogeneous	Hard	
39	The bending moment is maximum on a section where shearing force	Is maximum	Is minimum	Is equal	Changes sign	
40	For a cantilever with a uniformly distributed load W over its entire length L the maximum bending moment is	WL	$\frac{1}{2}WL$	WL	$\frac{1}{2}W^2L$	

<b>Discipline</b>	<b>Civil Engg.</b>
Question	Ans
1	1
2	1
3	3
4	4
5	1
6	3
7	2
8	4
9	1
10	1
11	3
12	1
13	2
14	4
15	1
16	3
17	4
18	3
19	4
20	2
21	1
22	4
23	1
24	3
25	2
26	4
27	2
28	2
29	4
30	2
31	2
32	2
33	2
34	3
35	3
36	2
37	2
38	1
39	4
40	2