

1	"The staff may not be held vertically" - It is		
	A	Personal error	B Instrumental error
	C	Natural cause	D None of the above
2	Contour lines can not cross one another except in the case of		
	A	a vertical cliff	B depression
	C	An overhanging cliff	D Summit
3	_____ is the property of material to resist loads, chemical action of atmosphere, rain, water, snow etc.		
	A	Weight	B Strength
	C	Durability	D Hardness
4	Sandstone is _____ type of rock		
	A	Igneous	B <input checked="" type="checkbox"/> Sedimentary
	C	Metamorphic	D None of the above
5	Which type of paint is used on the surface exposed to heat, cold and water?		
	A	Oil paint	B Asbestos paint
	C	Aluminium paint	D Cellulose paint
6	_____ means arrangement of getting the maximum advantage from the minimum or limited dimensions of a room.		
	A	Flexibility	B Roominess
	C	Elegance	D Grouping
7	In case of _____, there is common wall on both the sides.		
	A	Detached Building	B Semi - Detached Building
	C	Row house	D High Rise Building
8	The unit weight of cement is _____ Kg / cum		
	A	1000	B <input checked="" type="checkbox"/> 1440
	C	2000	D 7850
9	_____ is the process by which water enters the surface strata of the soil and moves downwards to the join the ground water.		
	A	Evaporation	B Transpiration
	C	Infiltration	D Evapotranspiration
10	_____ is a structure so proportional that its own weight resists the forces exerted upon it.		
	A	<input checked="" type="checkbox"/> Gravity dam	B Earthen dam
	C	Rock fill dam	D Arch dam
11	_____ is a structure constructed at the head of a main canal taking off from a reservoir.		
	A	Canal Head Regulator	B Distributaries Head Regulator
	C	Cross Regulator	D Outlet

12	If the F.S.L. of the canal is sufficiently below the bottom of the natural drainage trough so that canal water flows freely under gravity, the structure is called			
	A	Aqueduct	B	Super passage
	C	Canal syphon	D	Level Crossing
13	The distance between two parallel rail sections for Broad gauge line is			
	A	0.762 m	B	1.00 m
	C	1.20 m	<input checked="" type="checkbox"/> D	1.676 m
14	Which test determines the grade of bitumen?			
	A	Ductility test	B	Softening point test
	C	Viscosity test	<input checked="" type="checkbox"/> D	Penetration test
15	_____ is the instant of time which marks beginning or end of the job or activity.			
	A	Event	B	Arrow
	C	Float	D	Network
16	The average of the speed measurements at one point in space over a period of time is known as			
	A	Space mean speed	B	Time mean speed
	C	Spot speed	D	Design speed
17	The number of vehicles passing a specified point during a stated period of time is known as			
	A	Speed	B	Flow
	C	Concentration	D	Headway
18	_____ is the fall of moisture from the atmosphere to the earth surface in any form.			
	A	Transpiration	B	Evapo- transpiration
	C	Infiltration	<input checked="" type="checkbox"/> D	Precipitation
19	The line on a rainfall map of the basin joining places of equal rainfall readings is called			
	<input checked="" type="checkbox"/> A	Isohyet	B	Contour
	C	Polygon	D	Camber
20	The sub tense bar is used to measure			
	A	vertical distance	B	Inclined distance
	C	Horizontal distance	D	None of the above
21	Horizontal distance obtained by tacheometric observations			
	A	Require slope corrections	B	Require pull corrections
	C	Do not require slope and pull cor	D	Require slope and pull corrections

22	The multiplying constant of the tacheometer is			
	A	$f \times i$	B	$i / f$
	C	$f / i$	D	$d / i$
23	The size of aggregates less than 4.75 mm is called			
	A	Fine Aggregate	B	Coarse Aggregate
	C	Ballast	D	Rubble
24	The specific gravity of the cement is			
	A	2.6	B	2.9
	C	3.0	D	3.15
25	The discharge of the pipe is _____ cum per sec if the diameter of the pipe is 1.2 m and velocity is 2 m/sec.			
	A	2.26	B	3.26
	C	4.26	D	5.26
26	The principle of virtual work can be applied to elastic system by considering the virtual work of			
	A	internal forces only	B	external forces only
	C	internal as well as external forces	D	none of the above
27	Castigliano's first theorem is applicable			
	A	for statically determinate structures only	B	when the system behaves elastically
	C	only when principle of superposition is valid	D	none of the above
28	Principle of superposition is applicable when			
	A	deflections are linear functions of applied forces	B	material obeys Hooke's law
	C	the action of applied forces will be affected by small deformations of the structure	D	none of the above
29	In moment distribution method, the sum of distribution factors of all the members meeting at any joint is always			
	A	zero	B	less than 1
	C	1	D	greater than 1
30	The carryover factor in a prismatic member whose far end is fixed is			
	A	0	B	1/2
	C	3/4	D	1

31	Which of the following is not the displacement method ?			
	A	Equilibrium method	B	Column analogy method
	C	Moment distribution method	D	Kani's method
32	Size of a fillet weld is			
	A	Throat Thickness	B	Longer Side
	C	Shorter side	D	Average of longer and shorter side
33	Which of the following section is not preferred in case of beam design?			
	A	Over-reinforced section	B	Under-reinforced section
	C	Balanced section	D	Curved section
34	As per I.S. 456 - 1978, the pH value of water shall be			
	A	less than 6	B	equal to 6
	C	not less than 6	<input checked="" type="checkbox"/> D	equal to 7
35	The minimum number of main steel bars provided in R.C.C.			
	A	rectangular columns is 4	B	circular columns is 6
	C	octagonal columns is 8	D	all the above
36	The maximum area of tension reinforcement in beams shall not exceed			
	A	0.15%	B	1.5%
	C	4%	D	1%
37	An R.C.C. column is treated as long if its slenderness ratio is greater than			
	A	30	B	35
	C	40	D	50
38	Cantilever retaining walls can safely be used for a height not more than			
	A	3 m	B	4 m
	C	10 m	<input checked="" type="checkbox"/> D	6 m
39	Bending compressive and tensile stresses respectively are calculated based on			
	A	net area and gross area	B	gross area and net area
	C	net area in both cases	D	gross area in both cases
40	If the thickness of thinnest outside plate is 10 mm, then the maximum pitch of rivets in tension will be taken as			
	A	120 mm	B	200 mm
	C	160 mm	D	300 mm
41	Which of the following types of riveted joint is free from bending stresses ?			
	A	lap joint	B	butt joint with single cover plate
	C	butt joint with double cover plates	D	none of the above

42	The difference between gross diameter and nominal diameter for the rivets up to 25 mm diameter is			
	A	1.0 mm	B	1.5 mm
	C	2.0 mm	D	2.5 mm
43	As compared to field rivets, the shop rivets are			
	A	stronger	B	weaker
	C	equally strong	D	any of the above
44	Minimum pitch of the rivets shall not be less than _____ where d is gross diameter of rivet			
	A	1.5 d	B	2.0 d
	C	2.5 d	D	3.0 d
45	Efficiency of a riveted joint, having the minimum pitch as per IS : 800, is			
	A	40%	B	50%
	C	60%	D	70%
46	Diameter of a bolt hole is usually taken as			
	A	gross diameter of bolt	B	nominal diameter + 1.5 mm
	C	nominal diameter + 2.0 mm	D	nominal diameter of bolt
47	The slenderness ratio of lacing bars should not exceed			
	A	100	B	120
	C	145	D	180
48	The external wind pressure acting on a roof depends on			
	A	degree of permeability of roof	B	slope of roof
	C	both (a) and (b)	D	none of the above
49	As per IS : 875, for the purposes of specifying basic wind velocity, the country has been divided into			
	A	4 zones	B	5 zones
	C	6 zones	D	7 zones
50	The number of seismic zones in which the country has been divided are			
	A	3	B	5
	C	6	D	7
51	Concurrent forces are those forces whose lines of action _____			
	A	meet at one point	B	lie on the same line
	C	meet on the same plane	D	none of these

52	If a number of forces are acting at a point, their resultant will be inclined at an angle $\theta$ with the horizontal, such that		
	A	$\tan \theta = \frac{\sum H}{\sum V}$	B $\tan \theta = \frac{\sum V}{\sum H}$
	C	$\tan \theta = \frac{\sum V}{\sum H}$	D $\tan \theta = \frac{\sum H}{\sum V}$
53	The centre of gravity of a semi-circle lies at a distance of _____ from its base measured along the vertical radius.		
	A	$\frac{3r}{4\pi}$	B $\frac{8r}{3}$
	C	$\frac{3r}{8}$	D $\frac{4r}{3\pi}$
54	The minimum force required to slide a body of weight W on a rough horizontal plane is		
	A	none of these	B $W \sin \theta$
	C	$W \cos \theta$	D $W \tan \theta$
55	Which of the following are vector quantities?		
	A	Linear displacement	B Linear acceleration
	C	all of these	D Linear velocity
56	Hook's law holds good up to		
	A	Yield point	B <input checked="" type="checkbox"/> Elastic limit
	C	Plastic limit	D None of the above
57	The ratio of lateral strain to the linear strain is		
	A	Bulk modulus	B Young's modulus
	C	Poisson's ratio	D Modulus of rigidity
58	Euler's formula holds good only for		
	A	short columns	B <input checked="" type="checkbox"/> long columns
	C	both short and long columns	D weak columns
59	Compression members always tend to buckle in the direction of the		
	A	axis of load	B perpendicular to the axis of load
	C	minimum cross section	D least radius of gyration
60	Principle plane is a plane on which the shear stress is		
	A	Zero	B Minimum
	C	Maximum	D None of the above
61	Concrete grows with age. This statement is		
	A	true	B false
	C	debatable	D given by Duff Abrams
62	Separation of the coarse aggregate from mortar is called		
	A	bleeding	B <input checked="" type="checkbox"/> segregation
	C	compaction	D none of the these

63	Bleeding can be prevented by			
	A	controlling water content	B	using finely ground cement
	C	controlling compaction	D	all the above
64	For quality control of Portland cement, the test essentially done is			
	A	setting time	B	tensile strength
	C	Soundness & consistency	D	all the above
65	M10 grade of concrete approximates			
	A	1 : 3 : 6 mix	B	1 : 1 : 2 mix
	C	1 : 2 : 4 mix	D	1 : 1.5 : 3 mix
66	For ensuring quality of concrete, use			
	A	single sized aggregates	B	two sized aggregate
	C	graded aggregates	D	coarse aggregates
67	The mixture of different ingredients of cement, is burnt at			
	A	1000°C	B	1200°C
	C	1400°C	D	1600°C
68	Permissible compressive strength of M 300 concrete grade is			
	A	100 N/mm <sup>2</sup>	B	200 N/mm <sup>2</sup>
	C	150 N/mm <sup>2</sup>	D	300 N/mm <sup>2</sup>
69	While compacting the concrete by a mechanical vibrator, the slump should not exceed			
	A	2.5 cm	B	5.0 cm
	C	7.5 cm	D	10 cm
70	Workability of concrete is measured by			
	A	Vicat apparatus test	B	Slump test
	C	Minimum void method	D	Talbot Richard test.
71	Choose the right one. A fixed beam is			
	A	Determinate Structure	B	Indeterminate Structure
	C	Un-Stable	D	None of the above
72	When we provide a hinge in a structure, the numbers of equations of static equilibrium increase by:			
	A	1	B	2
	C	3	D	4
73	Simplest form of a perfect frame is			
	A	Rectangle	B	Triangle
	C	Square	D	Pentagon

74	If there are $m$ unknown member forces, $r$ unknown reaction components and $j$ number of joints, then the degree of static indeterminacy of a pin-jointed plane frame is given by			
	A	$m + r + 2j$	B	$m - r + 2j$
	C	$m + r - 2j$	D	$m + r - 3j$
75	If in a pin-jointed plane frame $(m + r) > 2j$ , then the frame is _____ where $m$ is number of members, $r$ is reaction components and $j$ is number of joints.			
	A	stable and statically determinate	B	stable and statically indeterminate
	C	unstable	D	none of the above
76	The bricks required for 10 cum of Brick Masonry work is			
	A	50 Nos	B	500 Nos.
	C	5000 Nos	D	50000 Nos
77	The volume of one bag of cement bag is			
	A	0.35 cum	B	0.035 cum
	C	0.0035 cum	D	0.00035 cum
78	The cement consumption in cement plaster of 20 mm thickness having proportion of (1:3) for 100 sq m area is			
	A	15 Bags	B	22 Bags
	C	28 Bags	D	32 Bags
79	The weight of 20 mm steel bar per meter length is			
	A	1.58 Kg	B	2.46 Kg
	C	2.98 Kg	D	3.85 Kg
80	Honey comb brick masonry is measured in			
	A	Cum	B	Meter
	C	Sq m	D	Nos
81	_____ consists of two or more footings of individual columns, connected by a beam.			
	A	Strap footing	B	Raft foundation
	C	Strip footing	D	Grillage foundation
82	A _____ is a full brick laid with its length perpendicular to the face of the wall.			
	A	Header	B	Stretcher
	C	Course	D	Bond
83	_____ is the depression made on the top face of the brick			
	A	Plinth	B	Perpend
	C	Jambs	D	Frog



84	_____ is the highest point of extrados of an arch			
	A	Skew back	B	Haunch
	<input checked="" type="checkbox"/>	Crown	D	Spandril
85	The vertical outside member of the shutter of a door is known as			
	A	Sill	B	Lock rail
	<input checked="" type="checkbox"/>	Style	D	Tanson
86	_____ is the fixed window provided along the sloping surface of a pitched roof to admit light to the room below			
	A	Sky light	B	Bay window
	C	Corner window	D	Lantern window
87	Which of the following is a vehicle in the oil paint?			
	A	Iron oxide	B	Lamp black
	C	Zinc oxide	<input checked="" type="checkbox"/>	D Linseed oil
88	_____ is the upper horizontal portion of a step upon which the foot is placed.			
	<input checked="" type="checkbox"/>	A Tread	B	Scotia
	C	Rise	D	Nosing
89	The height of riser will be _____ cm if the vertical distance between each floor is 4 m and nos of tread are 19.			
	A	18	<input checked="" type="checkbox"/>	B 20
	C	22	D	24
90	The reduced bearing of $230^{\circ}$ is			
	A	S $40^{\circ}$ W	<input checked="" type="checkbox"/>	B S $50^{\circ}$ W
	C	S $50^{\circ}$ E	D	S $40^{\circ}$ E
91	Summation of interior angles of a closed traverse having 5 (five) stations are			
	A	$180^{\circ}$	B	$360^{\circ}$
	C	$540^{\circ}$	D	$720^{\circ}$
92	Fore bearing of any line is $50^{\circ}$ , the back bearing of the line will be			
	A	$180^{\circ}$	<input checked="" type="checkbox"/>	B $230^{\circ}$
	C	$270^{\circ}$	D	$360^{\circ}$
93	The first reading taken after setting up of Leveling instrument is called			
	<input checked="" type="checkbox"/>	A Back sight	B	Fore sight
	C	Intermediate sight	D	Balancing of sight
94	Minimum area of drawing room is			
	A	5.4 Sq m	B	6.8 Sq m
	C	9 Sq m	D	10.5 Sq m

95	_____ is used when two points whose difference of elevation is required are situated quite apart or their difference of elevation is large.		
	A	Fly leveling	B Reciprocal leveling
	C	Check leveling	D Differential leveling
96	The preferable range of pH value for potable water is		
	<input checked="" type="checkbox"/> A	6 to 7.5	B 7 to 8.5
	C	8 to 9.5	D None of the above
97	_____ is the most common type of non automatic rain gauge used in India		
	A	Symon's rain gauge	B Weighing Bucket type rain gauge
	C	Tipping bucket type rain gauge	D Float type rain gauge
98	The amount of total solids should be preferably be less than _____ for potable water		
	A	500 ppm	B 600 ppm
	C	700 ppm	D 800 ppm
99	_____ consists of two circular arcs of same or different radii having their centre to the different sides of the common tangent		
	A	Simple curve	B Compound curve
	C	Reverse curve	D Transition curve
100	_____ is the beginning of the curve where the alignment changes from a tangent to a curve		
	A	Point of Tangency	B Point of Intersection
	C	Point of Curve	D Length of curve

\*\*\*\*\*