Key for LDCE CBT Exam held on 29/03/2025

Question	Correct Option
Q1. Which of the following are not the main compound of Portland cement a) Tricalcium Silicate b) Tricalcium Aluminate c) Dicalcium Silicate d) Tricalcium Di Alumina	D
Q2. The rate of hydration of cement depends on its a) Fineness b) Aggregates c) Water cement ratio d) Amount of gypsum	A
Q3. The property of the aggregate to resist excessive changes in volume as a result of changes in physical conditions is called a) Hardness b) Strength c) Soundness d) Durability	C
Q4. A concrete which can be readily compacted is said to be a) Perfect quality b) Workable c) Dense d) Hydrated	B
Q5. Before the sieve analysis of aggregates to prepare concrete it should be a) Washed b) Air Dried c) Oven dried d) Soaked	B
Q6. In Cold weather concreting when the temperature in minus 1 degree centigrade then the desirable temperature to allow the concrete to set is a) 7 to 14 degree centigrade b) 7 to 21 degree centigrade c) 7 to 28 degree centigrade d) 7 to 35 degree centigrade	B
Q7. Low heat cement is suitable for a) Underwater construction b) Mass concreting c) Pre-fabricated structure d) Seawall construction	B
Q8. The absolute specific gravity considered for design mixes of concrete is excluding …….. in the aggregates a) Moisture b) Pores c) Minerals d) Capillarity	B
Q9. The crushing test conducted on aggregates determines its …….	C

a) Toughness b) Soundness c) Strength d) Specific Gravity	
Q10. The bulking of sand in the site will require …… in water cement ratio a) Increase b) Decrease c) No correction d) Standard amount	B
Q11. The ratio of Direct stress to the Volumetric strain is called a) Young's Modulus b) Bulk Modulus c) Elastic Modulus d) Rigidity Modulus	B
Q12. The ratio of lateral strain to longitudinal strain is known as…….. ratio a) Poisson's b) Rigidity 's c) Elasticity 's d) Young 's	A
Q13. The longitudinal strain condition is when the load acts in the direction of ……. of rectangular bar/beam a) Width b) Axis c) Length d) Diagonal	C
Q14. The beam having end portion extended beyond the support is called …… beam a) Simply supported b) End supported c) Cantilever d) Overhanging	D
Q15. The Shear force between any two vertical load will be a) Unequal b) Constant c) Varying d) Parabolic	B
Q16. In triangular section the Shear Stress is maximum at a) h/3 b) h/2 c) h/5 d) N.A	B
Q17. The defection at the center of a fixed beam carrying a point load at the center is ……. of the deflection of a simply supported beam a) Half b) One third c) One fourth d) One fifth	C

Q18. The defection at the center of a fixed beam carrying uniformly distributed load over the entire span is ……. of the deflection of a simply supported beam a) Half b) One third c) One fourth d) One fifth	D
Q19. The ratio of the effective length of the column to the least radius of gyration is …… ratio a) Bending b) Slenderness c) Effective d) Gyration	B
Q20. Torsional rigidity is the product of modulus of rigidity and ……. of a shaft a) Moment of inertia b) Neutral axis inertia c) Polar moment of inertia d) Transitional moment of inertia	C
Q21. The deposition occurring in geological cycle due to gravity is known as ……..deposits a) Alluvial b) Techtronic c) Aeolian d) Talu	D
Q22. The moisture content at which soil will be having very little or no shear strength and in state of flow is called a) Plasticity Limit b) Plastic Limit c) Liquid Limit d) Liquidity Limit	C
Q23. The effective size of the soil is a) D10 b) D20 c) D30 d) D60	A
Q24. Which of the following does not contribute directly the permeability of soil? a) Grain size b) Voids ratio c) Degree of saturation d) Specific gravity	D
Q25. The rate of expulsion of pore fluid in a soil mass is directly dependent on which property of soil a) Shear strength b) Effective stress c) Consolidation d) Permeability	D
Q26. The change of volume of soil per unit of initial volume due to a given	C

unit increase in pressure is called a) Coefficient of permeability b) Coefficient of compressibility c) Coefficient of volume compressibility d) Coefficient of curvature	
Q27. The rise of ground water table level upto ground will lead to a) Increase in effective stress b) Decrease in effective stress c) Increase in total stress d) Decrease in neutral stress	B
Q28. The bearing capacity of the soil does not depend upon a) Applied load b) Shear parameters c) Consolidation d) Density of the soil	A
Q29. The Proctor compaction test cannot be applied for construction of a) Road sub grade b) Earthen Dam c) Embankment d) Foundation Trench	D
Q30. The process of obtaining increased density of soil in a fill by reduction of its voids space by expulsion of air is a) Soil exploration b) Soil stabilization c) Soil compaction d) Soil consolidation	C
Q31. Laterite is chemically classified as a) Calcareous rock b) Argillaceous rock c) Siliceous rock d) Metamorphic rock	B
Q32. The central part of the tree is called a) Heart wood b) Pith c) Sap d) Cambium	B
Q33. The defect caused due to over maturity and unventilated storage of wood during its transit causes a) Knot b) Foxiness c) Ring gall d) Heart shake	B
Q34. An assembled product made up of veneers and adhesives is called a) Plywood b) Laminated Veneer Lumber (LVL) c) Particleboard d) MDF (Medium-Density Fiberboard)	A

Q35. The chief ingredients of a paint are a) Pigment, Binder, Solvent b) Water, Resin, Solvent c) Oil, Dye, Binder d) Solvent, Filler, Hardener	A
Q36. The varnish does not contains a) Resin b) Solvent c) Drier d) Carrier	D
Q37. Cutback is a term applied for a type of a) Paints b) Varnish c) Bitumen d) Coal Tar	C
Q38. The small areas on painted surface enclosed by hair line cracks are called a) Crazing b) Crocodiling c) Chalking d) Blistering	A
Q39. The …… primer is used for structural steel a) Zinc rich b) Red lead c) White lead d) Iron oxide	A
Q40. The commonly used cement in making cement paint is a) Ordinary Portland Cement (OPC) b) White Cement c) Rapid Hardening Cement d) Pozzolanic Cement	B
Q41. The common surveying used in an urban area for measuring property boundaries etc is called ……surveying a) Cadential b) Colloidal c) Cadastral	C

d) Candastal	
Q42. The pacing method of surveying for distance measuring is mostly used in …… surveys a) Preliminary b) Reconnaissance c) Location d) Field	B
Q43. When the length of the chain used in measuring a given area is longer than the standard length the error to be applied in the measurement will be …….. error a) Positive b) Cumulative c) Negative d) Compensating	C
Q44. The horizontal angle between the true meridian and a survey line is a) Magnetic bearing b) Dip c) Magnetic declination d) Azimuth	D
Q45. The imaginary line joining the point of intersection of cross hairs of the diaphragm and the optical center of the telescope is a) Line of Sight b) Line of Collimation c) Plumb Line d) Axis of the Telescope	B
Q46. A surface which is normal to the direction of gravity at all points as indicated by plumb line is …… surface a) Datum b) Level c) Horizontal d) Vertical	B
Q47. When several contours coincide then it indicates which landform a) Vertical cliff b) Valley c) Ridge d) Saddle	A
Q48. When the centers of the arcs lie on the opposite sides of the common tangent at the junction of the two curve then it is …….. curve a) Transition b) Vertical	D

c) Compound d) Reverse	
Q49. A stadia telescope in a Tacheometer is fixed with …… hairs a) Two additional vertical b) Two additional horizontal c) Two additional cross hairs d) Two additional box hairs	B
Q50. Point of tangency is ……. of the curve a) Beginning b) Ending c) Intersection d) Vertex	B
Q51. The rate of rise or fall of the road surface along its length is a) Cant b) Super elevation c) Gradient d) Banking	C
Q52. The portion of the road formation which is used by the vehicles is known as a) Shoulder b) Kerb c) Carriageway d) Right of way	C
Q53. The gradient opted to design the road is a) Limiting gradient b) Ruling gradient c) Average gradient d) Special gradient	B
Q54. Rolling terrain will have the cross slope in the range of …….percentage a) Upto 10 b) 10 to 25 c) 25 to 60 d) 60 and more	B
Q55. The side drains are provided on both the sides of the roadway when it is in a) Embankment b) On salient curve c) In cutting d) Along re-entrant curve	C
Q56. The grade separated intersection provided for roads are called a) Inter turnour b) Inter crossing c) Interchange d) Inter cross	C
Q57. Impact test on road aggregates are conducted to evaluate its ……. Property a) Strength	B

b) Toughness c) Hardness d) Soundness	
Q58. PCU stands for a) Passenger Car union b) Passenger Carrying Unit c) Passenger Cart union d) Passenger Car unit	D
Q59. LOS stands for highway is a) Level of Speed b) Level of Service c) Level of Satisfaction d) Level of Sharing	B
Q60. The temperature susceptibility test for Bitumen is carried out by ……. apparatus a) Penetration b) Viscometer c) Ring and Ball d) Ductility	C
Q61. The water of the river has an important property called a) Remediation b) Turbulence c) Self Purification d) Siltation	C
Q62. In water treatment plant the records of raw water temperature is essential because …… changes with temperature a) Water colour b) Character of impurities c) Character of minerals d) Water odour	B
Q63. The water colour is expressed in numbers of a a) Cadmium cobalt scale b) Platinum copper scale c) Platinum cobalt scale d) Cobalt potassium scale	C
Q64.The pO value in water test report indicates a) Alkalinity b) Acidity c) Colour d) Odour	D
Q65. The detention period in sedimentation tank of a water treatment process can be reduced if …….. is used a) Screening b) Coagulation c) Aeration d) Precipitation	B
Q66. The quantity of Iodine and Bromine used for disinfecting the water should not exceed a) 5 ppm	C

b) 6 ppm c) 7 ppm d) 8 ppm	
Q67. The right angled sleeve used in water supply system to connect a service pipe to a water main or for facilitating water distribution to individual properties is called a) Ferrule b) Stop Cock c) Goose neck d) Bib cock	A
Q68. The maximum velocity in sewerage system will be obtained if the sewers are Dmade of a) Earth b) Brick lines c) Concrete d) Stone ware	D
Q69. The velocity in sewers ,which causes solids both floating and heavy to be transported easily with the flow is called ..... velocity a) Critical b) Self cleaning c) Turbulent d) Laminar	B
Q70. In a drainage system the bend provided and kept full of water to prevent foul air or gas to enter the atmosphere is called a) Seal b) Dip c) Trap d) Gully	C
Q71. The unit of Kinematic viscosity is a) Pascal b) Stoke c) Newton d) Poise	B
Q72. Force per unit length is the unit considered for a) Capillarity b) Absolute Viscosity c) Surface Tension d) Specific unit weight	C
Q73. In a flowing river the velocity at any point can be measured by a) Manometer b) Bourdon's scale c) Pascal meter d) Pitot tube	D
Q74. The ratio of inertia force to pressure force is termed as a) Reynold's number b) Euler's number c) Froude's number d) Mach number	B
Q75. The rate of flow for a small channel can be measured with	C

a) Orifice b) Mouthpiece c) Weir d) Venturimeter	
Q76. For a sub critical flow in an open channel the Froude number should be less than a) 0.5 b) 1 c) 1.5 d) 2	B
Q77. The device which converts hydraulic energy into mechanical energy is a) Turbine b) Pump c) Current meter d) Rotameter	A
Q78. Spillways are provided for release of ……. from dam a) Irrigation water b) Extra water c) Pressure d) Canals	B
Q79. For a supersonic flow the velocity increases with the increase of a) Pressure b) Area of flow c) Current of flow d) Potential head	B
Q80. The law of conservation of mass in fluids is stated with a) Bernoulli's theorem b) Pascal's law c) Continuity equation d) Manning;s law	C
Q81. If the area of tensile steel reinforcement is doubled, the moment of resistance of the beam increases only by about a) 12 percent b) 22 percent c) 32 percent d) 42 percent	B
Q82. The maximum spacing of vertical reinforcement in RCC wall should not exceed …….. the thickness of wall a) Equal to b) 1.5 times c) 2 times d) 3 times	D
Q83. The maximum shear stress in a rectangular beam is …… times of average shear stress. a) 1.15 b) 1.25 c) 1.50 d) 1.75	C

Q84. In singly reinforced beams the steel reinforcement is provided in …. zone a) Tensile b) Compressive c) Neutral d) Axial	A
Q85. In a singly reinforced beam, the effective depth is measured from the compression edge to the a) Tensile edge b) Center of tensile reinforcement c) Neutral axis of the beam d) Anywhere near axis	B
Q86. The effective length of a battened column should be increased by a) 5 percent b) 10 percent c) 15 percent d) 20 percent	B
Q87. In riveted construction, effective length of lacing bars in double lacing is adopted as ……. Times the length between inner end rivets a) 0.4 b) 0.7 c) 1.2 d) 1.8	B
Q88. A joint in the length of a steel column is known as …… joint a) Shear b) Lead bearing c) Column splice d) Compression	C
Q89. The effective area of a butt weld is taken as the …….. of the effective throat thickness and the effective length of butt weld a) Sum b) Difference c) Product d) Ratio	C
Q90. The value of Poisson's ratio for steel within the elastic region ranges from a) 0.17 to 0.25 b) 0.25 to 0.33 c) 0.33 to 0.41 d) 0.41 to 0.49	B
Q91. The aircraft parking area is a) Taxiway b) Apron c) Hanger d) Runway	B
Q92. In airport ILS stands for a) Instrument Lined Siren b) Instrument Landing Source	C

c) Instrument Landing System d) Instrument Leaving System	
Q93. The beginning of the runway portion to be used for landing in airport is called a) Threshold b) Approach c) Zoning d) Resisting area	A
Q94. The wind direction while landing against the nose of the aircraft is called a) Head wind b) Cross wind c) Jet wind d) Stop wind	A
Q95. The part of airport used for landing and take off a) Taxiway b) Air striping c) Aerodrome d) Runway	D
Q96 The area in the port where mooring of ships are allowed and also used for repair a) Jetty b) Dock c) Harbour d) Wharf	B
Q97. The structure formed around the harbor area to protect the ships from storm waves is called a) Berthing basin b) Pier Head c) Turning Basin d) Breakwater	D
Q98. The structure constructed in harbor parallel to the shore or break water having platform at top for berthing of ships is called …… a) Jetty b) Dock c) Wharf d) Port	C
Q99. Marine structures for mooring of vessels and not connected to shore are a) Dolphins b) Quay c) Basin d) Berth	A
Q100. A bumper used on berthing sides of the jetty to absorb impact of ships is called…….. a) Buoy b) Fender c) Mooring d) Bearing	B