1. **The shape of the bending moment diagram over the length of a beam, carrying a uniformly varying load, is always-**
   1) Linear
   2) Parabolic
   3) Cubical
   4) Circular

2. **A simply supported beam of span "L' carries a uniformly distributed load of w/m-**
   1) WL/2
   2) $WL^2/8$
   3) $WL^2/2$
   4) WL/16

3. **If the actual cost incurred in constructing the building or in possessing the property is taken as the base for determining the value of property, then it is called as-**
   1) Direct comparison with the capital value
   2) Valuation based on profit
   3) Valuation based on cost
   4) Development method of valuation

4. **For getting the beams of uniform strength, the sections of the beam may be varied by-**
   1) Keeping the width constant throughout and varying the depth
   2) Keeping the depth constant throughout and varying the width
   3) Varying both, ie. Width and depth in a suitable manner
   4) All of these

5. **_____ command draws a line at the corner between two selected lines.**
   1) Fillet
   2) Polyline
   3) Pline
   4) Chamfer

6. **The point of contra flexure is also called-**
   1) The point of inflexion
   2) A virtual hinge
   3) Either of these
   4) None of these

7.

In case of circular section, the section modulus is:	
A.	$\dfrac{\pi d^2}{16}$
B.	$\dfrac{\pi d^3}{16}$
C.	$\dfrac{\pi d^3}{32}$
D.	$\dfrac{\pi d^4}{64}$

8. **Bending moments at supports in case of simply supported beams is always-**
   1) Less than unity
   2) More than unity
   3) Zero
   4) One unity

9. **In which of the following beams, the supports are situated at the ends?**
   1) Cantilever beam
   2) Overhanging beam
   3) Simply supported beam
   4) Inverted overhanging beam

10. **Ziggurats were constructed in the ancient-**
    1) Egypt
    2) Greece
    3) Mesopotamia
    4) Harappa

11. **The deformation per unit length is called-**
    1) Tensile stress
    2) Compressive stress
    3) Shear stress
    4) Strain

12. **A frame in which number of members is less than (2j - 3) is known as-**
    1) Redundant frame
    2) Deficient frame
    3) Perfect frame
    4) Space frame

13. **A branch of surveying in which the horizontal and vertical distances of points are obtained by instrumental observation, is known as-**
    1) Chain surveying
    2) Tacheometric surveying
    3) Plane table surveying
    4) Hydrographic surveying

14. **A simple stress is often called-**
    1) Direct stress
    2) Bending stress
    3) Fatigue stress
    4) None of these

15. **The section in which concrete is NOT fully stressed to its permissible value when stress in steel reaches its maximum value, is called-**
    1) Under-reinforced section
    2) Over-reinforced section
    3) Critical section
    4) Balanced section

16. **The deformation per unit length is called-**
    1) Strain
    2) Stress
    3) Shear stress
    4) Compressive stress

17. **Strain in a direction at right angles to the direction of applied force is known as-**
    1) Lateral strain
    2) Shear strain
    3) Volumetric strain
    4) Compression strain

18. **Two forces act at an angle of 120°. If the greater force is 50 kg, and their resultant is perpendicular to the smaller force, then the smaller force is:**
    1) 20 kg
    2) 40 kg
    3) 30 kg
    4) 25 kg

19.

Shear stress is defined as-		
A.	$\dfrac{\text{Shear force}}{\text{Shear area}}$	
B.	$\dfrac{\text{Shear stress}}{\text{Shear strain}}$	
C.	$\dfrac{\text{Shear area}}{\text{Shear force}}$	
D.	$\dfrac{\text{Shear strain}}{\text{Shear stress}}$	

20.

	Eccentricity is:	
A.	$\dfrac{\text{Bending moment}}{\text{Axial force}}$	
B.	$\dfrac{\text{Axial force}}{\text{Bending moment}}$	
C.	$\dfrac{\text{Shear stress}}{\text{Axial force}}$	
D.	$\dfrac{\text{Bending moment}}{\text{Shear strain}}$	

21. Property of a material, by which it can be drawn, due to tension into a smaller section is called-

1) Plasticity
2) Elasticity
3) Ductility
4) Malleability

22. In timber, the blue strain, brown rot, sap strain are the defects occurring due to-

1) Fungi
2) Insects
3) Natural forces
4) Conversion

23. The concrete surfaces are kept wet for a certain period after placing it, to promote the hardening of cement. It is known as-

1) Consolidation
2) Mixing
3) Transporting
4) Curing

24. Depositing an impervious layer of cement mortar over the exposed surfaces of pipes or cisterns for resisting the water pressure is known as-

1) Surface treatment
2) Guniting
3) Membrane damp proofing
4) Pressure grouting

25. To prepare, flat sheets of plastics, the plastic material is allowed to pass between the cylindrical rollers. The process is termed as-

1) Casting
2) Laminating
3) Moulding
4) Calendering

26. Smith's test is performed on stones for-

1) Durability
2) Water absorption
3) Soluble and clayey matter
4) Hardness

27. Main component of mineral of granite is:

1) Felspar
2) Mica
3) Quartz
4) Free silica

28. Lime is considered to be hydraulic lime when it sets under water within-

1) 3 to 5 days
2) 7 to 30 days
3) 2 to 3 months
4) 3 to 6 months

29. The type of cement generally used for the construction of road pavements is:

1) Rapid hardening cement
2) Low heat cement
3) Blast furnace slag cement
4) Ordinary Portland cement

30. **The maximum percentage of ingredient in cement is that of-**
    1) Lime
    2) Alumina
    3) Silica
    4) Magnesium oxide

31. **The strength of concrete at 28 days as percentage of the strength at one year is:**

    1) 30%
    2) 60%
    3) 80%
    4) 98%

32. **If the slump of a concrete mix is 6 cm, its workability is considered-**
    1) Low
    2) Medium
    3) High
    4) Very high

33. **The major drawback of air seasoning of wood is:**
    1) Loss of strength
    2) Development of knots
    3) Longer duration
    4) Distortion of grains

34. **Cast iron is used for-**
    1) Column and Struts
    2) Wire nails
    3) Members subjected to tension
    4) Trusses

35. **Asphalt is a-**
    1) Mixture of bitumen and inert material
    2) Impure bitumen
    3) Pure bitumen
    4) Lime concrete

36. **The span to overall depth ratios for two way simply supported slab with shorter spans upto 3.5 m, using Fe 415 HYSD bars is:**
    1) 24
    2) 26
    3) 28
    4) 30

37. **Steel and cement are used in concrete mainly because-**
    1) They have near similar coefficients of expansion
    2) They become homogeneous after casting R.C.C
    3) One protects the other from weather problems
    4) They have different coefficient of expansion

38. **An important raw-material for manufacturing glass is:**
    1) Gypsum
    2) Ferric-oxide
    3) Quartz
    4) Cuprous oxide

39. **The terms such as, "R.R ; fully dressed ; semi-dressed ; C.R. etc, are associated with a single building material-**
    1) Brick
    2) Adobe
    3) Stone
    4) Terra-cota

40. **Which of the following is NOT the characteristic of laterite stone?**
    1) Affected by the action of rain water
    2) Porous or cellular structure
    3) Hard and tough to work with
    4) Metamorphic stone

41. **Which of the following glass is compact and used in railway coaches?**
    1) Glass crete
    2) Wired glass
    3) Anti actinic glass
    4) Pyrex glass

42. Light weight concrete is also known as _____ concrete.
    1) Cellular
    2) Polymer
    3) Easy weight
    4) No weight

43. In Sanchi stupa, vedika refers to-
    1) Gateway
    2) Railing
    3) Upright post
    4) Ambulatory passage

44. Islamic garden is derived from-
    1) Japanese style
    2) Chinese style
    3) Egyptian style
    4) Persian style

45. In Ashoka pillar, lion is located on which direction?
    1) North
    2) West
    3) South
    4) East

46. The main material of construction used during Shajahan period is:
    1) Granite
    2) Sandstone
    3) Brick
    4) White marble

47. In the temple of Khons, Karnak, the light in the hypostyle hall was admitted through-
    1) Brick jalis
    2) Clerestory window
    3) Entrance
    4) Batter walls

48. _____ passage along the retaining walls enclosing the two edges of the semicircular Greek auditorium.
    1) Orchestra
    2) Crepidoma
    3) Agora
    4) Parados

49. Roman temples had pseudo peripteral on its sides which denotes-
    1) Instead of a colonade, half columns were attached.
    2) Eight recesses in the walls
    3) Buttresses to support
    4) Octastyle column

50. An example of Basilican church is-
    1) St.Peter, Rome
    2) St.Sophia, Constantinople
    3) The Panthenon, Rome
    4) St.Paul's London

51. The dancing halls of the Orissan Temple is named as-
    1) Bhog mandhir
    2) Natya mandhir
    3) Rekha Deul
    4) Jag Mohana

52. The main entrance to the Hindu temple is always from-
    1) East
    2) West
    3) North
    4) South

53. An Indo Aryan temple part-
    1) Pida
    2) Palagai
    3) Citra gopuram
    4) Monolithic Nandhi

54. Le Corbusier work can be identified by his-
    1) Organic form
    2) Exposed concrete work
    3) Usage of natural materials
    4) Staircase

55. **In Indian Mosque, shahn is the-**
    1) Courtyard
    2) Screened wall
    3) Pulpit
    4) Minaret

56. **The architect of Guggenheim museum at New York is:**
    1) F.L. Wright
    2) B.V. Doshi
    3) Nari Gandhi
    4) Charles Correa

57. **Diwan-e-khas and Diwan-e-am are _____ blocks in Akbar palace.**
    1) Security
    2) Administrative
    3) Servant quarters
    4) Service quarters

58. **The architect who used mud as a predominant building material in all his works is:**

    1) Haffeez Contractor
    2) Alvar Alto
    3) Louis Khan
    4) Laurie Baker

59. **Rock-cut architecture is associated with-**
    1) China
    2) Burma
    3) Srilanka
    4) India

60. **What is a vault?**
    1) It is a pillar
    2) It is part of a shell roofing member
    3) It is a fencing design
    4) It is part of pillar design

61. **Optical correction technique is employed in-**
    1) Greek architecture
    2) Roman architecture
    3) Byzantine
    4) Dravidian architecture

62. **The concept of perspective was evolved during the-**
    1) Renaissance period
    2) Vedic period
    3) Roman period
    4) Gothic period

63. **The Qutab-Minar, New Delhi was built during _____ period.**
    1) Qutub-u-din-Aibak
    2) Shahjahan
    3) Akbar
    4) Lodhi

64. **Fatehpur sikri palace covers an area of _____ .**
    1) 150 m^2
    2) 200 m^2
    3) 250 m^2
    4) 350 m^2

65. **In Islamic history, buildings over a grave is called-**
    1) Mehrab
    2) Maqsura
    3) Madrassa
    4) Makbhara

66. **Spacing of longitudinal bars measured along the periphery of the column shall NOT exceed-**
    1) 300 mm
    2) 250 mm
    3) 350 mm
    4) 150 mm

67. **The diameter of reinforcing bars shall NOT exceed _____ of the total thickness of the slab.**
    1) $1/8^{th}$
    2) $1/7^{th}$
    3) $1/6^{th}$
    4) $1/4^{th}$

68. The maximum area of compression reinforcement shall NOT exceed _____ of the gross area of the beam.
   1) 4%
   2) 6%
   3) 5%
   4) 3%

69. Efficiency of a welded joint is _____ than that of a riveted joint.
   1) Less
   2) More
   3) Fractional less
   4) Smaller

70. The maximum area of steel in tension reinforcement in beam shall NOT exceed (as per IS456 - 2000)
   1) 0.04 bD
   2) 0.05 bD
   3) 0.07 bD
   4) 0.10 bD

71. Side face reinforcement is provided in a beam when the depth of the web in a beam exceeds (as per IS 456-2000)
   1) 750 mm
   2) 775 mm
   3) 700 mm
   4) 650 mm

72. If the diameter of longititudinal bars of a square column is 16mm, the diameter of lateral ties should not be less than (as per IS 456-2000)
   1) 6 mm
   2) 5 mm
   3) 7 mm
   4) 8 mm

73. The weight of a foundation is assumed as-
   1) 5% of the wall weight
   2) 7% of the wall weight
   3) 10% of the wall weight
   4) 12% of the wall weight

74. A foundation is called shallow, if its depth is:
   1) One fourth of its width
   2) Half of its width
   3) Equal to its width
   4) One tenth of its width

75. For a number of columns constructed in a row, the type of foundation provided is:
   1) Strap
   2) Strip
   3) Pile
   4) Deep

76. The horizontal distance between paralleled main reinforcement bars of a slab shall not be more than its effective depth by-
   1) Three times
   2) Seven times
   3) Four times
   4) Ten times

77. _____ is a compression member, the effective length of which does not exceed three times the least lateral dimension.
   1) Pedestal
   2) Column
   3) Strut
   4) Capital

78. The minimum cover for footings shall be-
   1) 50 mm
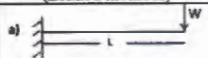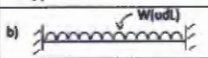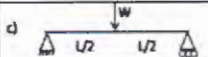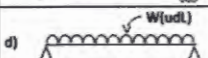   2) 40 mm
   3) 25 mm
   4) 15 mm

79. **Minimum spacing between horizontal paralleled reinforcements of the same size should not be less than-**
    1) The diameter of bar
    2) 1.5 diameters of bar
    3) 4 diameter of bar
    4) 0.75 diameter of bar

80. **The minimum number of longitudinal bars provided in a circular column is :**
    1) Six
    2) Four
    3) Eight
    4) Twelve

81.

Match List I with List II and select the correct answers by using the codes given below the lists:	
List I (Loaded member)	List II (Maximum deflection)
a)	1) $WL^3/8EI$
b)	2) $WL^3/48EI$
c)	3) $WL^3/3EI$
d)	4) $5WL^3/48EI$

	a	b	c	d
A.	3	1	2	4
B.	1	2	3	4
C.	2	3	4	1
D.	4	2	3	1

82. **A column is regarded as long column if the ratio of its effective length and least lateral dimension exceeds -**
    1) 10
    2) 20
    3) 16
    4) 12

83. **Bending moment co-efficients of continuous beams near middle of end span for dead load is ;**
    1) 1/12
    2) 1/16
    3) 1/10
    4) 1/9

84. **_____ is the increase in the average temperature of the earth's near surface air and ocean.**
    1) Global warming
    2) Deforestation
    3) Pollution
    4) Radiation

85. **B.O.D stands for-**
    1) Dissolved oxygen
    2) Bio-Chemical Oxygen Demand
    3) Chemical Oxygen Demand
    4) Bio Degradable

86. **The best process of disinfection of public water supply is by-**
    1) Boiling
    2) Chlorination
    3) Adding lime
    4) Adding Ozone

87. **Asbestos pipes are joined by means of -**
    1) Flanged joint
    2) Flexible joint
    3) Simplex joint
    4) Socket & Spigot joint

88. **Rate of filtration of a slow sand filter is:**
    1) 0.2 - 1.15m³ per m² per hour
    2) 0.2 - 1.0m³ per m² per hour
    3) 0.2 - 0.9m³ per m² per hour
    4) 0.2 - 1.2m³ per m² per hour

89. The process of softening of hard water through the base exchange process is done by adding -
   1) Sodium Carbonate
   2) Calcium carbonate
   3) Sodium Zeolite
   4) Calcium Sulphate

90. The valve used to control the flow of water at low pressure is:
   1) Globe type stop valve
   2) Gate valve
   3) Check valve
   4) Control valve

91. For the supply of coldwater through the direct system, the gap to be provided between the pipe lines and the outer wall is:
   1) 300 mm
   2) 700 mm
   3) 600 mm
   4) 500 mm

92. The maximum distance between a habitable room and the refuse chute is:
   1) 30 M
   2) 50 M
   3) 20 M
   4) 40 M

93. The water tight chamber that receives & stores sewage till it is pumped out for disposal is known as-
   1) Septic tank
   2) Refuse chute
   3) Cesspool
   4) Sump

94. Manholes should be provided at intervals of-
   1) 30 m
   2) 60 m
   3) 90 m
   4) 100 m

95. The length of a septic tank should be-
   1) 2 times its breadth
   2) 3 times its breadth
   3) 1½ times its breadth
   4) 4 times its breadth

96. In water supply system, poly tetra fluoro ethylene tape is used to join-
   1) Lead pipes
   2) Copper pipes
   3) Steel pipes
   4) PVC pipes

97. Incineration is a method of disposing -
   1) Solid waste
   2) Liquid waste
   3) Toxic gases
   4) Waste Water

98. Anti siphonage pipe is connected to-
   1) Main Soil pipe
   2) Bottom of P-trap WC
   3) Top of P-trap WC
   4) Side of water closet

99. The recommended diameter of a domestic sewer pipe laid at gradient of 1:100 is:
   1) 100 mm
   2) 150 mm
   3) 200 mm
   4) 175 mm

100. Design bond stress in plain bars in tension for M_{20} concrete in limit state method is:
   1) 1.7 N/mm^2
   2) 1.5 N/mm^2
   3) 1.4 N/mm^2
   4) 1.2 N/mm^2

101. **Legislation to protect drinking water quality in US began with the Public Health Service Act in:**
   1) 1903
   2) 1912
   3) 1916
   4) 1907

102. **The sewer pipe adopted in areas under railway lines, foundation walls are made of-**
   1) Asbestos cement
   2) Cast Iron
   3) Brick
   4) Wood

103. **Crown corrosion is -**
   1) Seen in water pipes
   2) Sulfuric acid
   3) H_2SO_4 deposition in sewer
   4) SO_4 deposition in water pipes

104. **A _____ is provided in the side of the box through which the rays from the object sighted enters.**
   1) Key
   2) Eyehole
   3) Slot
   4) Coloured glass

105. **The art of showing undulations of ground with the help of contour lines on the map -**
   1) Levelling
   2) Surveying
   3) Contouring
   4) Plane table surveying

106. **In chain surveying, field work is limited to-**
   1) Linear measurements only
   2) Angular measurements only
   3) Linear & Angular measurements
   4) Contour measurements

107. **Straight, parallel and widely spaced contours represent-**
   1) A steep surface
   2) A flat surface
   3) An inclined plane surface
   4) Curved surface

108. **In setting up a plane table at any station -**
   1) Levelling is done first
   2) Centering is done first
   3) Both levelling & centering are done simultaneously
   4) Orientation is done first

109. **The accuracy of measurement in chain surveying does not depend upon-**
   1) Length of the offset
   2) Scale of the plotting
   3) Importance of the features
   4) General layout of the chain lines

110. **The line normal to the plumb line is known as-**
   1) Horizontal line
   2) Level line
   3) Datum line
   4) Vertical line

111. **The angle of intersection of a contour and a ridge line is:**
   1) 30°
   2) 45°
   3) 60°
   4) 90°

112. **The angle between two plane mirrors of an optical square is:**
   1) 20°
   2) 30°
   3) 45°
   4) 60°

113. **The main principle of surveying is to work-**
    1) From part to whole
    2) From whole to part
    3) From higher level to lower level
    4) From lower level to higher level

114. **Short offsets are measured with -**
    1) An ordinary chain
    2) An invar tape
    3) A metallic tape
    4) A steel tape

115. **Under ordinary conditions, the precision of a theodolite transverse is affected by-**
    1) Systematic angular errors
    2) Accidental linear errors
    3) Systematic linear errors
    4) Accidental angular errors

116. **The method generally preferred for contouring an undulating area is:**
    1) Chain surveying
    2) Plane table surveying
    3) Tacheometrical surveying
    4) Compass surveying

117. **The included angles of a theodolite traverse, are generally measured-**
    1) Clockwise from the forward station
    2) Anticlockwise from the back station
    3) Anticlockwise from the forward station
    4) Clockwise from the back station

118. **The survey in which field observation and plotting proceed simultaneously is called -**
    1) Reconnaissance
    2) Alidade
    3) Tacheometry
    4) Plane table

119. **In British unit, 8 furlong is equal to -**
    1) 5 yard
    2) 4 poles
    3) 1 Fathom
    4) 1 Mile

120. **A surveying instrument widely used in surveying for its capability of being employed in the very accurate determination of horizontal and vertical angles-**
    1) Telescope
    2) Satellite
    3) Theodolite
    4) Vernier caliper

121. **When consecutive contour lines run close together, it indicates a -**
    1) Steep slope
    2) Flatter slope
    3) Vertical surface
    4) Horizontal surface with minor undulations

122. **Lines AB and BC intersect at B and**
    1) $90° + < B$
    2) $180° - < B$
    3) $270° - < B$
    4) $270° + < B$

123. **GPS is:**
    1) Geographic Placement Survey
    2) Geographic Personal System
    3) Global Positioning System
    4) Satellite

124. **In the electrical wiring system, phase line is indicated by-**
    1) Green
    2) Red
    3) Yellow
    4) Blue

125. **IBMS stands for-**

1) Intelligent Building Management System
2) International Building Management System
3) Indian Building Management System
4) Intelligent Business Management System

126. **_____ produced when the sound wave reaches the ear just when the original sound from the same source has been already heard.**

1) Reverberation
2) Echo
3) Absorption
4) Reflection

127. **Possibility of fire spreading from an adjoining buildings or building or from across a street or road is referred as-**

1) Personal hazard
2) Internal hazard
3) Exposure hazard
4) Cross hazard

128. **The day light shall penetrate up to _____ times the window height inside the room.**

1) 2.5
2) 5
3) 4
4) 8

129.

	The number of exhaust fans (N) required for a given area can be calculated by which of the following formula?
A.	$N = \dfrac{Output\ of\ one\ fan}{Room\ volume \times Required\ air\ changes\ per\ hour}$
B.	$N = \dfrac{Room\ volume \times Required\ air\ changes\ per\ hour}{Output\ of\ one\ fan}$
C.	$N = \dfrac{Room\ volume \times Output\ of\ one\ fan}{Required\ air\ changes\ per\ hour}$
D.	$N = \dfrac{Room\ volume}{Output\ of\ one\ fan \times Required\ air\ changes\ per\ hour}$

130. **When a vertical member is carrying mainly axial loads, it is termed as a -**

1) Strut
2) Column
3) Tie
4) Purlin

131. **As a thumb rule one Ton(TR) of AC is required for-**

1) 300 to 450 cft
2) 150 to 300 cft
3) 800 to 1200 cft
4) 500 to 600 cft

132. **To achieve a sufficiently rapid disconnection of the supply, the earth loop impedence should be _____ and the disconnection time is to be in milliseconds.**

1) Very low
2) Low
3) High
4) Moderate

133. **The abbreviation for MCB is:**

1) Minimum Circuit Breaker
2) Maximum Circuit Breaker
3) Miniature Circuit Breaker
4) Moulded Circuit Breaker

134. _____ is the persistence of sound after the cause of sound has stopped - a result of repetitions.
1) Reverberation time
2) Reverberation
3) Intensity level of sound
4) Sound absorption

135. The three basic elements of a sound system are-
1) Sound path, Standing waves, Echoes
2) Sound path, Specular reflection, Echoes
3) Output devices, Amplifiers, Loudspeaker system
4) Input device, Amplifiers, Loudspeaker system

136. The basic electric circuit arrangement -
1) Series
2) Series or parallel
3) Parallel
4) Perpendicular

137. The intentional movement of air from outside a building to the inside is:
1) Breeze
2) Wind
3) Ventilation
4) Stack effect

138. HVAC stands for-
1) High Voltage Alternating Current
2) Heating Ventilating and Air Conditioning
3) High Voltage Alternative Current
4) High Voltage, Acid Content

139. An empty vertical pipe intended to distribute water to multiple levels of a building as a component of the fire suppression system is:
1) Wet riser
2) Dry riser
3) Sprinkler
4) Extinguisher

140. The parties under a contract solving their disputes through experts in the same field, in a judicial manner is known as-
1) Judicial expertisation
2) Umpiring
3) Arbitration
4) Easement

141. Blackening of the lamps due to-
1) Reaction of iodine and inert gas
2) Reaction of metal filament above 2000° C
3) Explosion of filament
4) Reaction of sodium and inert gas

142. The movement of air in stack effect is due to-
1) Pressure difference
2) Pressure and thermal difference
3) Thermal difference
4) Volume Difference

143. Which of the following is a non renewable energy source?
1) Fuels
2) Water
3) Solar power
4) Wind

144. The detention period in a septic tank is assumed-
1) 20 min.s
2) 25 min.s
3) 30 min.s
4) 40 min.s

145. The minimum width of a septic tank is:
1) 70 cm
2) 75 cm
3) 80 cm
4) 90 cm

146. **Which of the following statement is correct?**

1) The line ranger is used for fixing intermediate points on the chain lines

2) The indirect ranging is resorted to when the ends of a line are not intervisible due to high ground

3) The chairman at the forward end of the chain is called leader

4) All of these

147. **The most reliable estimate is:**

1) Detailed estimate

2) Preliminary estimate

3) Plinth area estimate

4) Cube rate estimate

148. **Pick up the item of work NOT included in the plinth area estimate.**

1) Wall thickness

2) Courtyard

3) Room area

4) W.C area

149. **The unit of measurement is per quintal for the following.**

1) Collapsible gates with rails

2) Rolling shutters

3) Expanded metal wire netting

4) M.S. Reinforcement of R.C.C Work

150. **The weight of an item is measured correct to nearest-**

1) .25 kg

2) 5 kg

3) .50 kg

4) 1.00 kg

151. **Contour lines cross a valley at-**

1) 0°

2) 45°

3) 60°

4) 90°

152. **The volume is measured correct to the nearest-**

1) .01 cum

2) .02 cum

3) .03 cum

4) .05 cum

153. **The method of surveying used for determining the relative height of points on the surface of the earth, neglecting the curvature of earth is called-**

1) Levelling

2) Profile levelling

3) Differential levelling

4) Cross sectional levelling

154. **The floor area includes the area of balcony up to-**

1) 100%

2) 75%

3) 50%

4) 10%

155. **The technique of determining the fair price of a building is:**

1) Estimation

2) Specification

3) Valuation

4) None of these

156. **Which of the following are NOT deducted from wall masonry while preparing the estimate?**

1) Rectangular openings

2) Opening upto 1000 sq.cm

3) Semi-circular arch openings

4) Lintels over openings

157. **Due to change in price level, A revised estimate is prepared if the sanctioned estimate exceeds,**

1) 2.0%

2) 2.5%

3) 4.0%

4) 5.0%

158. **The instrument which works on the principle of successive reflection of ray of light from two mirrors is:**
    1) Sextant
    2) Abnet Clinometer
    3) Pantagraph
    4) Fennel's Clinometer

159. **For RMM thick cement plastering 1:6 on 100 sq.m new brickwork, the quantity of cement required is:**
    1) 0.200 m^3
    2) 0.247 m^3
    3) 0.274 m^3
    4) 0.295 m^3

160. **The expected out turn of brick work in cement mortar in foundation and plinth per mason per day, is:**
    1) 1.00 m^3
    2) 1.25 m^3
    3) 1.50 m^3
    4) 1.75 m^3

161. **The angle of light plane is:**
    1) 45°or 63.50°
    2) 42° or 69.50°
    3) 90°
    4) 30°

162. **_____ are established along one or both sides of a street and prevents the creation of any new structure between the building line and the street.**
    1) Architectural control
    2) Advertisement control
    3) Building line control
    4) Setback control

163. **_____ is used to indicate an arterial road on which fast urban traffic is allowed to more speedily and safely.**
    1) Expressway
    2) Ring road
    3) Free way
    4) Precincts

164. **A strip of land is provided on the periphery of a town for the special purpose of limiting the growth of a town is known as the-**
    1) Focal points
    2) Neighbourhood planning
    3) Green belt
    4) City block

165. **A pattern language was written by-**
    1) Robert Venturi
    2) Christopher Alexander
    3) Howard Davis
    4) Paolo soleri

166. **Bakeries and confectionaries come under-**
    1) Commercial zone
    2) Light industrial zone
    3) Mixed residential zone
    4) General Industrial zone

167. **The parking space required for a car is:**
    1) 5.5 x 2.5m
    2) 5.0 x 2.5m
    3) 4.0 x 2.5m
    4) 3.0 x 2.5m

168. **The maximum gradient of a ramp provided for offstreet parking is:**
    1) 1:18
    2) 1:10
    3) 1:7
    4) 1:12

169. **In a city area, for a residential building which faces street less than 12m width. The maximum allowable FSI is:**
    1) 1
    2) 2.5
    3) 3
    4) 4

170. The percentage of residential zone in a normal town varies from -
1) 40%-50%
2) 30%-40%
3) 50%-60%
4) 35%-45%

171. For theatres and public assembly halls, one car parking is needed for-
1) 50 seats
2) 25 seats
3) 15 seats
4) 10 seats

172. In a residential area, the maximum height of a compound wall on roadside shall be-

1) 1.8m
2) 1.2m
3) 1.5m
4) 2.0m

173. A precinct is a space enclosed in a series of cells formed by-
1) Arterial and sub arterial roads
2) Sub arterial and local roads
3) Local roads and streets
4) Main roads and streets

174. The recommended number of lands for a capacity of 800 vehicles per hour per lane is:
1) 4 lanes 2 in each direction
2) 8 lanes 4 in each direction
3) 6 lanes 3 in each direction
4) 6 lanes 4 in each direction

175. Cemetries and burial grounds come under-
1) Non urban zone
2) Mixed residential zone
3) Open space and recreational use zone
4) Commercial use zone

176. To provide CUL-DE-SAC, the maximum length should NOT exceed-
1) 30m
2) 40m
3) 50m
4) 60m

177. In a residential-group of apartments, the super built-up area of the building includes-

1) The actual apartment area + the proportional area, in "common area" such as apartments in the total group lifts, stairs, passages etc
2) The total area, divided by the number of apartments in the total group

3) The apartment areas put together in their proportion in percentage and added with stairs area
4) The extent of the site

178. Copy commands comes under-
1) Modify toolbar
2) Drawing toolbar
3) Format toolbar
4) Status bar

179. Shortcut for TRIM command in Autocad is:
1) T or t
2) TR or tr
3) TRIM
4) CUT

180. _____rounds the edges of two arcs, circles, lines, polylines etc with an arc of a specified radius in AutoCAD.
1) Fillet
2) Chamfer
3) Break
4) Trace

181. Shortcut key for snap-
    1) F9
    2) F8
    3) F7
    4) F3

182. To view a particular portion of a drawing, which of the following zoom option is used?
    1) Zoom scale
    2) Zoom window
    3) Zoom extents
    4) Zoom real time

183. Recover is used to-
    1) Regenerate a drawing
    2) Remove blip marks
    3) Repairs a damaged drawing
    4) Continues an interrupted script

184. To set the extents of the drawing, the command used is:
    1) LIMITS
    2) SETUV
    3) BOUNDARY
    4) PAPER SIZE

185. In Autocad, the command 'Divide' is used to,
    1) Place evenly spaced blocks along the length
    2) Break a line
    3) Trim the extended portion of a line
    4) To break the line

186. Polar array is used to-
    1) Copy a selected object
    2) Create a pattern with a selected object
    3) Create a block with a selected object
    4) To delete a selected object

187. To create concentric circles, the command used is:
    1) DONUT
    2) POLYLINE
    3) OFFSET
    4) ARC

188. Which one of the following commands CANNOT be used to select objects in a drawing?
    1) Crossing window
    2) Crossing polygon
    3) Fence
    4) Remove

189. The command used to bevel the edges of objects is:
    1) Chamfer
    2) Fillet
    3) Close
    4) Edge surf

190. In autocad, 'F7' is used to operate-
    1) GRID
    2) SNAP
    3) OSNAP
    4) ORTHO

191. To load a geometry from a selected view (or) layer into a drawing, the command line is:
    1) PASTE BLOCK
    2) PASTE CLIP
    3) PARTIAL OPEN
    4) PASTE ORIG

192. 'OOPS' is used to-
    1) Regenerate a drawing
    2) Restore the erased objects
    3) Undo the previous command
    4) Remove blip marks

193. To constrain the cursor movements along X and Y axes, _____ is to be on.
    1) GRID
    2) SNAP
    3) ORTHO
    4) POLAR

194. Pick up the incorrect statement from the following.

1) F.S.I is fixed by the local authority

2) F.S.I is different for different areas and different buildings in the city

3) F.S.I is fixed by the State Government

4) F.S.I controls the density of population

195. Computer instructions in a programme are performed in which order.

1) Random

2) Consecutive

3) Parallel

4) Alternative

196. Which among the following is data processing?

1) Information

2) Data

3) Software programme

4) System programme

197. The effective depth of a T- beam is the distance between the-

1) Centre of flange and the top of tensile reinforcement

2) Top of the flange and centre of the tensile reinforcement

3) Bottom of the flange and centre of the tensile reinforcement

4) Centre of the flange and the bottom of tensile reinforcement

198. _____ command is used to create user defined text styles.

1) SCALE

2) STYLE

3) MULTILINE

4) ARC

199. L weight is_____?

1) Add width to your objects

2) Controls the layer

3) Used to draw lines

4) Displays the name of the layer

200. _____ option allows the user to add a new vertex to the polyline.

1) TANGENT

2) EXIT

3) INSERT

4) REGEN