1. Match:

(a)	Plinth Area	1.	Area used for movement
(b)	Floor Area	2.	Covered area of a building measured at floor level
(c)	Carpet Area	3.	Clear covered area of a building
(d)	Circulation Area	4.	Useful area in a building excluding kitchen, staircase, verandah, etc.
		5.	Area used for vertical movement

	(a)	(b)	(c)	(d)
(A)	2	3	4	1
(B)	3	2	4	5
(C)	4	3	2	1
(D)	2	4	3	5

(E) Answer not known

2. The value of a property at the end of the utility period without being dismantled is called as ———————— value.

(A) Sentimental value
(B) Salvage
(C) Market
(D) Book
(E) Answer not known

3. Estimated cost is increased by 5% for any Unforeseen items which is known as

(A) Over head charges
(B) Work charged establishment
(C) Contingencies
(D) Supervision charges
(E) Answer not known

4. ———————— estimate should be prepared with a comparative abstract form showing the variations of quantity, rates with that of the original estimate.

(A) Supplementary
(B) Revised
(C) Annual maintenance
(D) Approximate
(E) Answer not known

5. ———————— works are recorded in square metres.

(A) Stone
(B) Brick
(C) Plastering
(D) Concrete
(E) Answer not known

6. The floor finishing are measured in ———————— units.

(A) m^3
(B) Tonne
(C) Kg/m
(D) m^2
(E) Answer not known

7. Brick work for arch is separately measured in

(A) Square metre
(B) Number
(C) Cubic metre
(D) Running metre
(E) Answer not known

8. Which is not included in the report?

(A) Detailed specification
(B) Material statement
(C) Design structure
(D) Workers training
(E) Answer not known

9. Identify the suitable word for the conditions relating to settlement of disputes

(A) Workmanship
(B) Arbitration
(C) Mode of payments
(D) Bill of quantities
(E) Answer not known

10. ———————— specification provides detailed instructions regarding the quality of final product.

(A) General
(B) Technical
(C) Standard
(D) Brief
(E) Answer not known

11. Identify the method to calculate approximate cost for the construction of an overhead tank which is 2 times bigger than the already constructed tank near by locality.

(A) Service unit method
(B) Plinth area method
(C) Cubical content method
(D) Typical bay method
(E) Answer not known

12. Match the following

(a)	General specification	1.	Itemwise work
(b)	Detailed specification	2.	Similar work
(c)	Standard specification	3.	Short and different part of work
(d)	Approximate estimate	4.	Rough expenditure

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

(E) Answer not known

13. The usable area or liveable area of an apartment building is called as ———————— area

(A) Gross
(B) Net
(C) Carpet
(D) Floor
(E) Answer not known

14. As per Tamil nadu building practice, what is the painting coefficient for fully glazed doors and windows?

(A) 2.6
(B) 1.6
(C) 2.0
(D) 3.6
(E) Answer not known

15. Identify the painting coefficient for the fully paneled, braced, ledged or battened doors and windows

(A) 3.60
(B) 2.60
(C) 2.40
(D) 1.60
(E) Answer not known

16. The tolerances allowed in measurement and calculations of area is

(A) 0.01 cubic metre
(B) 0.01 running metre
(C) 0.01 square metre
(D) 0.01 tonne
(E) Answer not known

17. The size of brick is 20 cm × 10 cm × 10 cm, then the number of bricks required for one cubic metre is ———————— numbers.

(A) 50
(B) 500
(C) 5,000
(D) 50,000
(E) Answer not known

18. The weight of one cubic metre of steel is

(A) 785 kg
(B) 7850 kg
(C) 78500 kg
(D) 0.785 kg
(E) Answer not known

19. The multiplying factor for painting collapsible gate measured flat (size of opening) all over is

(A) 1.3 (B) 1.5

(C) 2 (D) 2.5

(E) Answer not known

20. Capital value is equal to

(A) Net income × Year's purchase

(B) Gross income × Year's purchase

(C) $\frac{\text{Year's purchase}}{\text{Net income}}$

(D) $\frac{\text{Year's purchase}}{\text{Gross income}}$

(E) Answer not known

21. In column, both end fixed the equivalent length is

(A) $L_e = l$ (B) $L_e = l/2$

(C) $L_e = 2l$ (D) $L_e = l/4$

(E) Answer not known

22. Generally beams and slabs should be designed as balanced sections, such designs are called

(A) Balanced design (B) Economical design

(C) Critical design (D) Limit state design

(E) Answer not known

23. In symmetrical columns with eccentric loading about one axis, the direct stress is less than bending stress, then the stress in the section will be of

(A) Tensile nature
(B) Compressive nature
(C) Partly compressive and partly tensile
(D) Only compressive nature
(E) Answer not known

24. The maximum eccentricity of a load on a circular column section to have same type of stress is

(A) One - eighth of diameter
(B) One - sixth of diameter
(C) One - fourth of diameter
(D) One - third of diameter
(E) Answer not known

25. A structural member subjected to an axial compressive force is called

(A) Beam
(B) Strut
(C) Slab
(D) Flat slab
(E) Answer not known

26. In the case of R.C.C footings under the column, the minimum cover prescribed as

(A) 40 mm
(B) 25 mm
(C) 50 mm
(D) 15 mm
(E) Answer not known

27. The partial safety factor used for material strength of steel at the limit state of collapse in IS 456-2000 code is

(A) 1.50 (B) 1.00

(C) 1.20 (D) 1.15

(E) Answer not known

28. The amount of reinforcement in the beam is more than the proper requirement of reinforcement, then the section is called

(A) Balanced section (B) Over reinforced section

(C) Under reinforced section (D) Critical section

(E) Answer not known

29. Stiffness factor for a beam simply supported at both ends is

(A) $\frac{3EI}{l}$ (B) $\frac{4EI}{l}$

(C) $\frac{6EI}{l}$ (D) $\frac{8EI}{l}$

(E) Answer not known

30. In cantilever slabs, the minimum thickness provided at free end is

(A) 50 mm (B) 75 mm

(C) 100 mm (D) 150 mm

(E) Answer not known

31. When the overall depth of web in a beam exceeds 750 mm, then the side face reinforcement consisting of

(A) 0.1% of web area
(B) 0.2% of web area
(C) 1.0% of web area
(D) 2.0% of web area
(E) Answer not known

32. A cantilever of span 'l' is fixed at 'A' and propped at other end B. if it is carrying a UDL of ω per unit length, then the prop reaction will be

(A) $\frac{3\omega l}{8}$
(B) $\frac{5\omega l}{8}$
(C) $\frac{3\omega l}{16}$
(D) $\frac{5\omega l}{16}$
(E) Answer not known

33. Retaining wall is generally, constructed to retain

(A) Earth in hilly areas
(B) Water for irrigation purposes
(C) Water in undulating ground
(D) Water in plain ground
(E) Answer not known

34. The following is not a component in the slope deflection equation

(A) Length at the beam
(B) Moment at supports
(C) Slope at supports
(D) Shear force
(E) Answer not known

35. Bending moment and slope at the end of fixed supports of a fixed beam loaded by UDL is ———————— and ————————.

(A) Maximum, Zero
(B) Minimum, Zero
(C) Zero, Minimum
(D) Zero, Maximum
(E) Answer not known

36. In the moment distribution method "Carry-over" moment is

(A) The moment is distributed to the adjacent span
(B) Half of the fixed end moment transferred to the adjacent member
(C) The moment of the support due to external loads
(D) The total moment in the beam
(E) Answer not known

37. The moment to produce a unit rotation at the simply of supported end at member is

(A) Stiffness
(B) Flexibility
(C) Rigidity
(D) Ductility
(E) Answer not known

38. The theorem of three moment equation is $MAL_A + MBL_B + MCL_C = 6EI (\Delta_1 + \Delta_2 + \Delta_3)$ where M_A, M_B, M_C represent is

(A) Shear force
(B) Deflections at mid span
(C) External loads
(D) Moment at the supports
(E) Answer not known

39. The three hinged Arch can support ———————— loads.

(A) Axial loads only
(B) Vertical and horizontal loads
(C) Shear loads only
(D) Moment loads only
(E) Answer not known

40. If a fixed arch has two fixed supports, such that the total number of reaction components is

(A) 6
(B) 4
(C) 8
(D) 2
(E) Answer not known

41. Where does Reciprocal Ranging is employed?

(A) When the two ends of a line are not intervisible
(B) When one end of a line is inaccessible
(C) When both ends are inaccessible
(D) When the ends of the line are not visible even from intermediate points
(E) Answer not known

42. The sag correction on hill

(A) is positive
(B) is negative
(C) may be either positive or negative
(D) is zero
(E) Answer not known

43. A line joining some fixed points on the main survey lines, is

(A) a tie line
(B) a base line
(C) a check line
(D) a chord
(E) Answer not known

44. The following are the steps in Drawing a site plan

(A) Site sketching, Scaling, Site designing
(B) Drawing, Dimensioning, Lettering
(C) Picking, Labeling, Dimensioning
(D) Establish, Scale, Reference, Height
(E) Answer not known

45. The drawing that detail the direction, neighborhood surroundings and site accessibilities is

(A) a floor plan
(B) a elevation plan
(C) a site plan
(D) a landscape plan
(E) Answer not known

46. The number of links in a Revenue Chain is

(A) 66 links
(B) 100 links
(C) 16 links
(D) 50 links
(E) Answer not known

47. In chain surveying the position of the stations are permanently marked by

(A) Arrows
(B) Ranging rod
(C) Pegs
(D) Ranging pole
(E) Answer not known

48. The correction for the atmospheric refraction is equal to

(A) $+\frac{1}{7}$ of the correction for curvature of the earth

(B) $-\frac{1}{7}$ of the correction for curvature of the earth

(C) $+\frac{6}{7}$ of the correction for curvature of the earth

(D) $-\frac{6}{7}$ of the correction for curvature of the earth

(E) Answer not known

49. Reciprocal levelling is employed to determine the accurate difference in level of 2 points which

(A) Are quite apart and where it is not possible to set up instrument midway between points

(B) Are quite close and where it is not possible to set up instrument midway between the points

(C) Have very large difference in level and 2 instrument settings are required to determine difference in level

(D) Are at almost same elevation

(E) Answer not known

50. In Cross-section method of indirect contouring, the spacing of cross-sections depends upon

(i) Contour interval

(ii) Scale of plan

(iii) Characteristics of ground

(iv) The instrument employed

The correct one is

(A) Only (iv)
(B) (i) and (ii)
(C) (i), (iii), (iv)
(D) (i), (ii), (iii)
(E) Answer not known

51. A closed contour line with one or more higher ones inside it represents

(A) a hill
(B) a pond
(C) plane surface
(D) a desert
(E) Answer not known

52. Select the correct procedure of plain table survey working operations.

(1) Fixing the table to tripod

(2) Centering

(3) Levelling

(4) Sighting the points

(5) Orientation

(A) (1), (3), (5), (4), (2)
(B) (1), (5), (4), (3), (2)
(C) (1), (3), (2), (5), (4)
(D) (1), (5), (2), (3), (4)
(E) Answer not known

53. Balancing of sights mean

(A) Making the distance of foresight station equal to that of the back sight station from instrument station

(B) Making fore sight reading equal to back sight reading

(C) Taking fore sight and back sight at same station

(D) Making line of collimation horizontal

(E) Answer not known

54. The instrument employed for finding the lines of highways with a pre determined percentage inclination is

(A) Tangent clinometer

(B) Burel hand level

(C) Fennel's clinometer

(D) Foot-Rule clinometer

(E) Answer not known

55. The instrument employed for locating inaccessible points

(A) Sounding sextant

(B) Nautical sextant

(C) Box sextant

(D) Vibrating sextant

(E) Answer not known

56. A pantograph is a device that reproduces a map

(A) On the same scale

(B) On any scale

(C) On reduced scale

(D) On enlarged scale

(E) Answer not known

57. The Parallax error in Theodolite is elliminated

(A) By refocusing lens in proper position
(B) By turning the eye piece
(C) By centering the instrument
(D) By setting up the instrument
(E) Answer not known

58. The latitude of the line is termed as southing

(A) When the latitude of a line is positive
(B) When the departure of a line is positive
(C) When the latitude of a line is negative
(D) When the departure of a line is negative
(E) Answer not known

59. If force bearing of a line is 0°, its back bearing is

(A) 0° (B) 90°
(C) 180° (D) 360°
(E) Answer not known

60. In a Quadrantal Bearing system, bearing is measured from

(A) West
(B) North
(C) South
(D) Nearest to south (or) nearest to north
(E) Answer not known

61. Why are speeds of travelators typically limited to between 0.6 and 1.3 m/s?

(A) To reduce maintenance costs

(B) To ensure safe and easy entry and exit

(C) To prevent excessive noise levels

(D) To accommodate larger loads

(E) Answer not known

62. Choose the correct one :

Type of building that suitable for single automatic push button life system.

(A) High-Rise office buildings

(B) Large shopping malls

(C) Light traffic, low rise buildings (Nursing homes)

(D) Airports and public transportation hubs

(E) Answer not known

63. If a 42 mm copper tube has a pressure drop of 240 Pa per meter and the effective pipe length is 20 meters, what is total pressure drop?

(A) 1200 Pa (B) 2400 Pa

(C) 4800 Pa (D) 9600 Pa

(E) Answer not known

64. Why are air gaps in plumbing fixtures important for back flow prevention?

(A) They prevent pressure loss in pipes
(B) They allow water to drain faster
(C) They prevent contaminated water from siphoning
(D) They help regulate water flow
(E) Answer not known

65. Why are booster pumps necessary in high-rise buildings for water supply?

(A) To maintain constant water pressure at all levels
(B) To prevent contamination of portable water
(C) To increase water supply for emergency situations
(D) To filter water for upper floors
(E) Answer not known

66. How does the design of a P-Trap in plumbing prevent the back flow of gases?

(A) It allows air to escape while blocking water
(B) It seals off the drain using standing water in the curve
(C) It prevents water from draining too quickly
(D) It blocks sediment buildup in the pipe
(E) Answer not known

67. Why is sludge management an important aspect of sewage treatment plants?

(A) To recover valuable materials from sewage

(B) To treat and dispose of solid waste safely

(C) To reduce the volume of waste produced

(D) To generate energy from waste

(E) Answer not known

68. Reason and assertion type.

Assertion [A] : Specific acoustic impedance is the ratio of the sound pressure to the associated particle velocity.

Reason [R] : Air has low impedance, whereas concrete slab has high impedance.

(A) [A] is true but [R] is false

(B) [A] is false but [R] is true

(C) Both [A] and [R] are true but [R] is not the correct explanation of [A]

(D) Both [A] and [R] are false

(E) Answer not known

69. Why are halons considered more effective than CO_2 in gas extinguishing systems?

(A) They are cheaper to use

(B) They are less harmful to equipment

(C) They are five times denser than air

(D) They are easier to store

(E) Answer not known

70. Why do sprinkler systems use less water to control a fire compared to fire fighting services?

(A) They are designed to operate at higher pressure

(B) They use chemical solution instead of water

(C) They are less effective, requiring additional manual intervention

(D) They provide rapid response that isolates and control the fire more efficiently

(E) Answer not known

71. Which type of lift has overall maximum travel distance limit?

(A) Electric passenger lift

(B) Hydraulic passenger lift

(C) Goods lift

(D) Paternoster lift

(E) Answer not known

72. For building taller than 15 storeys, what type of lift is typically used?

(A) Low–speed cargo lifts

(B) Standard passenger lifts

(C) High–speed express lifts that By–pass lower floors

(D) Manually operated lifts

(E) Answer not known

73. Why is the provision for refuge area in high–rise buildings important according to fire safety?

(A) To provide a space for fire fighter to set up equipment

(B) To offer a safe place for occupants to gather in case evacuation is delayed

(C) To increase the floor area ratio of the building

(D) To store fire fighting equipment

(E) Answer not known

74. How does NBC part 4 ensure the safety of occupants during a fire emergency?

(A) By requiring high rise buildings to have fireman lifts

(B) By recommending the use of wooden materials

(C) By mandating the use of solar–powered fire alarms

(D) By requiring open stairwells for better ventilation

(E) Answer not known

75. How does the solution pump in a vapour absorption refrigeration system operate?

(A) Compress the refrigerant

(B) Increases the absorbent solution pressure

(C) Cools the refrigerant vapour

(D) Generates heats for absorption

(E) Answer not known

76. How does a ground source heat pump (GSHP) extract heat from the ground?

(A) Using solar panel
(B) Circulating a water/anti freezing mix in ground pipes
(C) Burning fossil fuels
(D) Converting wind energy
(E) Answer not known

77. How does 'enthalpy' refer to in air conditioning?

(A) Total heat energy in air (Sensible + Latent)
(B) Moisture content Vs. Saturated air content
(C) Heat energy causing temperature change
(D) Moisture amount in a unit mass of air
(E) Answer not known

78. Choose the best components which provides a 110 V supply with multiple 16 amp double pole sockets for portable tools?

(A) ISA – Incoming Site Assembly (ISA)
(B) TA – Transformer Assembly
(C) Main Distribution Assembly – MDA
(D) Socket Outlet Assembly – SOA
(E) Answer not known

79. How does the lumen method determine the number of light fixtures required in a space?

(A) By dividing the total light output needed by the lumen output of each fixture

(B) By measuring the space dimension

(C) By assessing the color temperature

(D) By evaluating furniture and decor

(E) Answer not known

80. Choose the correct one: What is the typical ground temperature range at 15 meters below the surface for a ground source heat map?

(A) 0° to 5°C

(B) 5° to 8°C

(C) 8° to 12°C

(D) 12° to 15°C

(E) Answer not known

81. How did the design of the Hagia Sophia Dome influence it's structural stability?

(A) By using external flying buttresses to reinforce the dome's support

(B) By incorporating a double dome structure to enhance overall stability

(C) By integrating metal reinforcements around the dome for additional strength

(D) By employing pendentives to channel the dome's weight to the arches

(E) Answer not known

82. How does architecture meet psychological needs in building design?

(A) By using materials that ensure structural integrity

(B) By incorporating elements that make users feel safe and comfortable

(C) By maximizing the use of space for machinery

(D) By following traditional building practices only

(E) Answer not known

83. The dome of Hagia Sophia is carried on ———————— between the semicircular arches carried on piers on the outside of the square.

(A) Pendentives

(B) Squinches

(C) Semidomes

(D) Buttresses

(E) Answer not known

84. The best example of a Roman sports stadium is

(A) Theatre Epidaurus

(B) The circus maximums, Rome

(C) The large theatre, Pompeii

(D) The theatre of Marcellus, Rome

(E) Answer not known

85. The terrace in Sanchi Stupa is called as

(A) Medhi

(B) Arda

(C) Harmika

(D) Berm

(E) Answer not known

86. The study of signs and symbols as elements of communicative behaviour is

(A) Symbiosis
(B) Sanctile
(C) Semiotics
(D) Shoro
(E) Answer not known

87. How were the streets and drainage systems typically organized in Indus Valley cities?

(A) Randomly with open ditches
(B) In a grid pattern with covered drains
(C) Circular layout with above – Ground channels
(D) Parallel streets with underground tunnels
(E) Answer not known

88. Why were Chaitya Halls primarily designed with an apsidal or semicircular end?

(A) To create a grand entrance for visitors
(B) To accomodate large gatherings and facilitate the circum ambulation of a central stupa
(C) To support multiple levels of seating for larger audience
(D) To ensure better acoustics for religious ceremonies
(E) Answer not known

89. How did the introduction of Gopuram influence Hindu Temple design in South India?

(A) By adding decorative gateway with intricate sculptures

(B) By incorporating large central Domes in the temple complex

(C) By expanding the temple to include multiple courtyard

(D) By emphasizing the use of colonnaded halls

(E) Answer not known

90. According to vitrunus, why was the circle important in Roman theatre?

(A) Durable structure

(B) Optimal stage and audience interaction

(C) Allignment with coordinal direction

(D) Easier construction

(E) Answer not known

91. How does the Lingaraja Temple in Bhuvaneswar exhibit an additive form?

(A) By using monolithic structure

(B) By expanding with smaller shrines and pavillions

(C) By focusing on vertical forms

(D) By using modern techniques

(E) Answer not known

92. ———————— colour uses different values of a single colour.

(A) Dichromatic

(B) Monochromatic

(C) Panchromatic

(D) Void

(E) Answer not known

93. The South Indian Hindu temple Architecture is in the ———— style

(A) Indo Aryan
(B) Dravidian
(C) Nagara
(D) Orissan
(E) Answer not known

94. Reason and Assertion type

Assertion : Antoni Gaudi's design the Palau Guell featured elaborate wrought iron gates and balconies to reflect its opulence.

Reason : Gaudi used wrought iron extension for its craftsmanship and decorative appeal.

(A) Both are true – Reason explain why gaudi used wrought iron
(B) Both are true – Reason not explains why gaudi used wrought iron
(C) Assertion true – Reason false
(D) Assertion false – Reason true
(E) Answer not known

95. How did Mies Van Der Rohe's phrase "Less is more" shape the aesthetic of modern architecture?

(A) By encouraging highly decorative and elaborative design
(B) By promoting minimalist, functional designs that avoid unnecessary ornamentation
(C) By focusing on traditional forms of architecture
(D) By promoting the exclusive use of local material
(E) Answer not known

96. How did Le Corbusier's "Five points of architecture" impact modernist design?

(A) By promoting decorative ornamentation and classical forms

(B) By proposing new principles such as pilotis (columns) flat roofs, open plans, horizontal windows and free facades

(C) By limiting the use of modern materials like glass and steel

(D) By emphasizing symmetry and ornamentation

(E) Answer not known

97. Which of the following does not come under theories of proportion?

(A) Golden section

(B) Modulor

(C) Ken

(D) Axis

(E) Answer not known

98. Match the following

(a)	Legislative Assembly, Chandigarh	1.	Repetition
(b)	Sanchi Stupa	2.	Hierarchy
(c)	Humayun Tomb	3.	Symmetry
(d)	Syndey opera house	4.	Datum

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

(E) Answer not known

99. Which of the following building is an example of Art Deco style architecture?

(A) Chrysler Building, New York
(B) Seagram Building, New York
(C) Sears tower, Chicago
(D) Hearst tower, Manhattan
(E) Answer not known

100. The traditional Japanese unit of measure is

(A) Jodo
(B) Pagoda
(C) Ken
(D) Zen
(E) Answer not known

101. Purpose of subtract command on primitive solids in AUTOCAD?

(A) To remove one solid from another, creating a hollow space
(B) To merge two solids into one
(C) To scale down the size of a solid
(D) To subtract a solid from the drawing
(E) Answer not known

102. How do you accurately position a hatch pattern using the hatch command in AUTOCAD?

(A) Drag the pattern after applying it
(B) Use the hatch edit command
(C) Specify the origin and angle in the hatch creation tab
(D) Resize the pattern to fit the area
(E) Answer not known

103. Which of the following is not a valid option when using MTEXT command in AUTOCAD?

(A) Changing text justification
(B) Setting text width
(C) Setting character limit
(D) Creating multiple lines of text
(E) Answer not known

104. How do freezing and turning off a layer differ in AUTOCAD?

(A) Turning off affects performance, freezing doesn't
(B) Freezing improves performance, turning off only hides
(C) Turning off is visible in paper space; freezing hides in model space
(D) No difference between freezing and turning off
(E) Answer not known

105. _____command is used to draw curved lines

(A) Spline
(B) Line
(C) Polyline
(D) Mline
(E) Answer not known

106. The command for creating parallel line is :

(A) Offset
(B) Options
(C) Stretch
(D) Explode
(E) Answer not known

107. What does AUTOCAD stands for?

(A) Automated Computer Application Design or drafting

(B) Autodesk Computer Aided Design or drafting

(C) Automated Computer Aided Design or drafting

(D) Autodesk Computer Application Design or drafting

(E) Answer not known

108. How does the mirror command work in creating symmetrical designs?

(A) By duplicating objects at an offset distance

(B) By flipping objects across a defined axis

(C) By rotating objects around a specific angle

(D) By combining two separate objects into one

(E) Answer not known

109. Why would you use the audit command instead of purge command in AUTOCAD?

(A) Audit repairs drawing errors while purge removes unused objects

(B) Audit scales objects, while purge rotates them

(C) Audit removes the unused objects while purge repairs drawing errors

(D) Audit rotates objects, while purge scales them

(E) Answer not known

110. How does the explode command modify blocks or polyline in AUTOCAD?

(A) Explode scales blocks and polylines to a different size

(B) Explode rotates blocks (or) polylines around a specific point

(C) Explode breaks blocks into parts (or) polylines to line segments

(D) Explode trims blocks and polylines to fit within a defined boundary

(E) Answer not known

111. The command aliases 'H' denotes

(A) Bhatch (B) Hoggle

(C) Hatsoff (D) Divide

(E) Answer not known

112. The command aliases "EX" refers to

(A) Extrude (B) Extend

(C) Erase (D) Ellipse

(E) Answer not known

113. The command aliases "DT" denotes

(A) DTEXT (B) DTP

(C) DIST (D) DDT

(E) Answer not known

114. The command aliases 'UNI' means

(A) Unicorn
(B) Union
(C) Unite
(D) Unit
(E) Answer not known

115. What does the 'Spline" tool in 3Ds max primarily allow you to do?

(A) Create a curved paths and shapes
(B) Generate complex 3D meshes
(C) Apply textures to an objects
(D) Control camera angles and views
(E) Answer not known

116. Which tool in 3Ds max is used to create a symmetrical object by mirroring?

(A) Symmetry modifier
(B) Mirror tool
(C) Transform tool
(D) Align tool
(E) Answer not known

117. Why is global illumination important in Sketchup rendering?

(A) Elliminates need for artificial lights
(B) Improves speed without quality loss
(C) Calculate light bounces for realism
(D) Focuses on direct sunlight only
(E) Answer not known

118. Why is the 'Materials" panel important for realistic visualizations in Sketchup?

(A) It speed up model creation

(B) It allows user to add colors and textures for a more realistic look

(C) It merges all surfaces into one material

(D) It reduces file size

(E) Answer not known

119. Why is it important to use components instead of groups for repetitive objects in Sketchup?

(A) Components reduces file size and make edits globally

(B) Components automatically change the color of grouped objects

(C) Components improve rendering speed but are harder to edit

(D) Components cannot be copied

(E) Answer not known

120. Why is the push pull tool consider one of the most versatile tools in Sketchup?

(A) It is used to create layers

(B) It only moves objects vertically

(C) It extrudes flat surfaces into 3D shapes

(D) It colors surfaces automatically

(E) Answer not known

121. How does Solid Waste Management System works?

A → Waste Handling

B → Transfer and Transport

C → Waste Generation

D → Collection

(A) C→A→D→B (B) B→C→D→A

(C) A→C→B→D (D) D→C→A→B

(E) Answer not known

122. The major gas with other chemical solvent that is responsible for depletion of ozone layer

(A) Sulphur Dioxide (SO_2)

(B) Carbon Monoxide (CO)

(C) Chloro Fluoro Carbons (CFC's)

(D) Carbon Dioxide (CO_2)

(E) Answer not known

123. How are gaseous contaminants controlled

(i) Open dumping and land filling

(ii) Absorption

(iii) Open collection and recovery system

(iv) Combustion

(A) (i) and (ii) (B) (ii) and (iii)

(C) (iii) and (iv) (D) (ii) and (iv)

(E) Answer not known

124. Which statement is correct in respect to Water Pollution?

(A) High copper levels benefits respiratory health

(B) Iron and manganese discolor clothes while washing in it

(C) Copper has no effect on lungs

(D) Iron and manganese are beneficial for washing clothes

(E) Answer not known

125. Which Indian standards specifies or provides the specification of Industrial effluent allowed for discharges into the water courses?

(A) IS – 2490 – 1963

(B) IS – 3490 – 1964

(C) IS – 2490 – 1964

(D) IS – 3490 – 1963

(E) Answer not known

126. The main source for Water Pollution are

(A) Industrial sewage and Domestic sewage

(B) Construction Waste

(C) Debris

(D) Garbage

(E) Answer not known

127. Select the incorrect statement, in case of the characteristics of Industrial Waste

(A) It contain substances with radio activity

(B) B.O.D. is lower than that of ordinary sewage

(C) Temperature may be too high or too low

(D) May be acidic or alkaline

(E) Answer not known

128. As per nomenclature class of Water–Class E Water is used for

(A) Out Door Batting
(B) Drinking Water
(C) Fisheries
(D) Irrigation
(E) Answer not known

129. The Max BOD Level in Class A water is said to be

(A) 2 mg/L
(B) 3 mg/L
(C) 4 mg/L
(D) 5 mg/L
(E) Answer not known

130. In a single stack system what should be the Max Horizontal distance from a fixture to stack be

(A) 3500 mm
(B) 3000 mm
(C) 3400 mm
(D) 3250 mm
(E) Answer not known

131. Identify the state of forms the water can be

(i) Solid
(ii) Semi Solid
(iii) Liquid
(iv) Gas/Vapour

(A) (i) (ii) (iii) (iv)
(B) (i) (iii) (iv)
(C) (i) (ii) (iii)
(D) (ii) (iii) (iv)
(E) Answer not known

132. Identify the types of parameters considered in water treatment process :

(i) Physical

(ii) Chemical

(iii) Biological

(iv) Organoleptic

(A) (i) and (ii)

(B) (i) (ii) and (iii)

(C) (i) (ii) (iii) and (iv)

(D) (ii) and (iii)

(E) Answer not known

133. It is a bed which retain water. But it never gives back when required

(A) Aquifer

(B) Aquiclude

(C) Aquifuge

(D) Aquiglade

(E) Answer not known

134. Select the incorrect statement.

(A) Algae metabolism contributes color to water

(B) Divalent species containing iron and manganese contribute colour to water

(C) End products of degraded organic matter contribute colour to water

(D) The taste contribute colour to water

(E) Answer not known

135. The reservoir typically used for short-term storage to meet daily demand fluctuations is

(A) Elevated reservoir
(B) Ground-level reservoir
(C) Clear water reservoir
(D) Service reservoir
(E) Answer not known

136. The method commonly used to remove suspended solids from water

(A) Electro dialysis
(B) Reverse osmosis
(C) Coagulation
(D) Distillation
(E) Answer not known

137. It is an automatic device which allows the water to go in one direction only.

(A) Reflux valve
(B) Air relief valve
(C) Sluice valve
(D) Scour valve
(E) Answer not known

138. Carbonate Hardness is mainly due to the presence of

(A) Bicarbonates of calcium and magnesium
(B) Sulphates
(C) Chlorides
(D) Nitrates of calcium and magnesium
(E) Answer not known

139. This system reduces the amount of wastage of water.

(A) Continuous system
(B) Intermittent system
(C) Fixed system
(D) Dead end system
(E) Answer not known

140. The chemical expression for the bleaching powder is

(A) $Ca(ClO)_2$ (B) $Ca(ClO)$

(C) $Ca(ClO)_3$ (D) $CaCl$

(E) Answer not known

141. In urban areas, there is heavy rush of vehicles and pedestrians during peak hours of the day and it results into

(A) Overcrowding (B) Simplicity

(C) Refuge islands (D) Grade separations

(E) Answer not known

142. What includes traffic rules and regulations, traffic signs and signals?

(A) Constructive measures (B) Restrictive measures

(C) Productivity measures (D) Quantitative measures

(E) Answer not known

143. How many stories has the load bearing structure of Monadmock building in Chicago?

(A) 16 Story (B) 5 Story

(C) 8 Story (D) 12 Story

(E) Answer not known

144. The term is used to express the smooth and easy flow of vehicles

(A) Traffic survey (B) Traffic management

(C) Traffic congestion (D) Traffic control

(E) Answer not known

145. The organization that promotes housing and urban development programmes in the country.

(A) LICHFL
(B) HUDCO
(C) CIDCO
(D) ICICI
(E) Answer not known

146. The space at the road junction over which traffic is not allowed to move is known as a

(A) Traffic lanes
(B) Traffic signals
(C) Traffic island
(D) Pedestrians path
(E) Answer not known

147. The Ribbon development is development on the

(A) City outside
(B) Village center
(C) City center
(D) Along main road
(E) Answer not known

148. Identify the street connecting system which has more intersections and

(A) Grid iron system
(B) Radial street system
(C) Concentric street system
(D) Topographical street system
(E) Answer not known

149. Around what are the satellite towns developed?

(A) Parent city
(B) Main road
(C) Village
(D) Industries
(E) Answer not known

150. Identify the following

(1)	Town growth	(a)	Industrial and Residential
(2)	Planned town	(b)	Natural and Planned
(3)	Transport planning	(c)	National and Regional
(4)	Forms of planning	(d)	Radial and Rectangular

(A) (1)-(b), (2)-(a), (3)-(d), (4)-(c)
(B) (1)-(c), (2)-(b), (3)-(a), (4)-(d)
(C) (1)-(d), (2)-(c), (3)-(b), (4)-(a)
(D) (1)-(d), (2)-(b), (3)-(a), (4)-(c)
(E) Answer not known

151. The four essential objects of Town plannings are

(A) Parks, Pollutions, Water and Wealth
(B) Beauty, Convenience, Environment and Health
(C) Food, Fuel, Textile and Machine
(D) Daylight, Vehicle, House and Air
(E) Answer not known

152. Row in Indian road congress standards stands for

(A) Row of way
(B) Road of width
(C) Right of way
(D) Road of way
(E) Answer not known

153. The pedestrian facility in a street should not be less than ———— mm clear in width.

(A) 1200 mm
(B) 1500 mm
(C) 1800 mm
(D) 1700 mm
(E) Answer not known

154. National Building Code (NBC) has been published by the

(A) Indian Green Building Council
(B) Bureau of Indian Standards
(C) Green Rating for Integrated Habitat Assessment
(D) Leadership in Energy and Environmental Design
(E) Answer not known

155. As per Tamilnadu slum clearance board EWS stands for

(A) Economically Weaker Section
(B) Economic Weak Society
(C) Economical Weaker Society
(D) Extremely Weaker Section
(E) Answer not known

156. The power of issuing the building completion certificates are now delegated to

(A) Architects registered with COA
(B) Indian Institute of Architects
(C) Structural Engineers registered with Civil Engineer's Association
(D) Civil Engineers registered with civil Engineers Association
(E) Answer not known

157. The usual car parking space is the most of the bye-laws are containing

(A) 2.50 m × 5.0 m
(B) 1.8 m × 4.2 m
(C) 3.5 m × 6.2 m
(D) 3.00 m × 6.5 m
(E) Answer not known

158. The height of the basement floor shall not exceed ———————— in above ground level.

(A) 2.5 m
(B) 3 m
(C) 2 m
(D) 1.2 m
(E) Answer not known

159. The minimum width of the ramp for a differently abled person is

(A) 1000 mm
(B) 1200 mm
(C) 1500 mm
(D) 1800 mm
(E) Answer not known

160. In a stair way the maximum number of riser on a single flight shall be limited to

(A) 10
(B) 11
(C) 12
(D) 13
(E) Answer not known

161. How long does it take for fat lime to slake?

(A) 2-3 hours
(B) 24 hours
(C) 72 hours
(D) 168 hours
(E) Answer not known

162. How do hollow clay products contribute to the efficiency of building construction?

(A) By increasing the overall weight of the structure

(B) By providing excellent insulation through air-filled voids

(C) By reducing the durability of the construction

(D) By making the materials less resistant to weather conditions

(E) Answer not known

163. What adhesive is used to bond veneers in exterior grade plywood to make it waterproof?

(A) Casein glue

(B) Water-soluble glue

(C) Polyurethane adhesive

(D) Phenol formaldehyde adhesive

(E) Answer not known

164. Why is the method wedging suitable for quarrying costly, soft and stratified rocks like marbles?

(A) Because it produces a large amount of waste

(B) Because it is a quick and inexpensive method

(C) Because it minimizes wastage and allows for cutting of slabs

(D) Because it requires no special tools (or) equipment

(E) Answer not known

165. The clay content for feebly hydraulic lime is

(A) 0 – 5%

(B) 5 – 10%

(C) 10 – 15%

(D) 15 – 20%

(E) Answer not known

166. The term ———————— is used to indicate wares or articles prepared from clay which is burnt at low temperature and cooled down slowly.

(A) Earthen ware
(B) Stone ware
(C) Porcelain
(D) Ceramic
(E) Answer not known

167. For a good building stone, its specific gravity should be greater than

(A) 1.2
(B) 1.8
(C) 2.4
(D) 2.7
(E) Answer not known

168. How does the maturity of bamboo impact its use in construction?

(A) Bamboo must be within one year nature to ensure and durability
(B) Younger bamboo is preferred for its flexibility
(C) The maturity of bamboo affects its color
(D) Bamboo must be at least three years mature to ensure strength and durability
(E) Answer not known

169. Why enamels are recommended for woodwork?

(A) They absorb moisture effectively
(B) They allow air to pass through the wood
(C) They are quick to dry and provide a hard, glossy surface
(D) They are difficult to apply
(E) Answer not known

170. Why Aluminium paints are used?

(A) To improve the appearance of surfaces
(B) To protect objects from acid fumes
(C) To increase the surface texture
(D) To provide water resistance to cement surfaces
(E) Answer not known

171. ———————— paint is prepared by dissolving asphalt or mineral pitches or vegetable between in any types of oil or petroleum.

(A) Asbestos paint
(B) Bituminous paint
(C) Cellulose paint
(D) Cement paint
(E) Answer not known

172. The concentration of pigment in a paint is denoted by

(A) Pigment volume concentration number (P.V.C.N.)
(B) Pigment concentration (P.C.)
(C) Volume concentration (V.C.)
(D) Pigment concentration number (P.C.N.)
(E) Answer not known

173. ———————— is a protection constructed around mud wall, to prevent damage, dampness and termites.

(A) Plinth
(B) Apron
(C) Cob
(D) Pise
(E) Answer not known

174. How does the physical state of asphalt change with temperature?

(A) It remains solid at all temperatures
(B) It remains liquid at all temperatures
(C) It softens heated and hardens when cooled
(D) It becomes brittle when heated and pliable when cooled
(E) Answer not known

175. Why is tin used for coating sheets in cans and utensils?

(A) It is high resistant to corrosion
(B) It is poor heat conductor
(C) It has high tensile strength
(D) It is very hard and brittle
(E) Answer not known

176. Why are Colt Twisted Deformed (CTD) bars suitable for building purposes?

(A) Cheaper than plain bars
(B) High strength, yield and bond strength widely used
(C) More flexible than other bars
(D) No special manufacturing treatment needed
(E) Answer not known

177. How can the ultrasonic pulse velocity method be used to evaluate existing structures?

(A) Assessing color changes in concrete
(B) Measuring acoustic impedance of reinforcement
(C) Detecting variations in pulse velocity indicating defects
(D) Calculating thermal conductivity of concrete
(E) Answer not known

178. Choose the correct one : What is the principal ore from which lead is extracted?

(A) Lead carbonate
(B) Lead oxide
(C) Lead sulphide
(D) Lead chloride
(E) Answer not known

179. ———————— is the feeding zone or mouth of blast furnace for manufacture of pig-iron.

(A) Stack
(B) Bosh
(C) Throat
(D) Cylinder
(E) Answer not known

180. ———————— is adopted to test the workability of concrete.

(A) Compression test
(B) Slump test
(C) Sieve test
(D) Silt test
(E) Answer not known

181. Maximum energy that a given component can absorb without undergoing any permanent deformation upto elastic limit as

(A) Proof resilience
(B) Resilience
(C) Hardness
(D) Toughness
(E) Answer not known

182. The stress at which the elongation of the material take place more quickly as compared to the increase in load

(A) Ultimate point
(B) Yield point
(C) Elastic limit
(D) Breaking point
(E) Answer not known

183. How the elastic constant varys with the elongation of a body?

(A) The elastic constant is directly proportional to the elongation
(B) The elongation does not depends on the elastic constant
(C) The elastic constant is inversely proportional to the elongation
(D) None of these
(E) Answer not known

184. Strain is equal to

where L - original length, SL - change in length

(A) L + SL
(B) $L \times SL$
(C) L/SL
(D) SL/L
(E) Answer not known

185. The unit of modulus of elasticity is same as

(A) Stress, strain and pressure
(B) Stress, force and modulus of rigidity
(C) Strain, force and pressure
(D) Stress, pressure and modulus of rigidity
(E) Answer not known

186. In equal and opposite forces applied to a body, tend to elongate the stress is

(A) Compressive stress
(B) Tensile stress
(C) Shear stress
(D) Transverse stress
(E) Answer not known

187. A ratio of the uniform pressure indensity to volumetric strain as

(A) Young's modulus of rigidity
(B) Bulk modulus of elasticity
(C) Shear modulus
(D) Poisson's ratio
(E) Answer not known

188. Impact load is an example of

(A) Fatigue load
(B) Static load
(C) Uniform load
(D) Dynamic load
(E) Answer not known

189. The load is distributed uniformly over the length of the beam, then the load is

(A) Point load
(B) Bending load
(C) Distributed load
(D) Uniformly distributed load
(E) Answer not known

190. The following is a dimensionless quantity

(A) Shear stress
(B) Poisson's ratio
(C) Strain
(D) Both (B) and (C)
(E) Answer not known

191. The following are statically determinate beams

(A) Cantilever and simply supported
(B) Only simply supported beam
(C) Fixed beam
(D) Continuous beam
(E) Answer not known

192. Bending moment at supports in S.S. beam

(A) Positive
(B) Zero
(C) Negative
(D) Depends upon loading
(E) Answer not known

193. Centre of gravity of a rigid body lies

(A) Outside a body
(B) Inside a body
(C) Either inside or outside
(D) None of these
(E) Answer not known

194. The factor of safety is defined as the ratio of

(A) Working stress to ultimate stress

(B) Breaking stress to ultimate stress

(C) Ultimate stress to breaking stress

(D) Ultimate stress to working stress

(E) Answer not known

195. The section modulus of a rectangular section with breadth "b" and depth "d" as

(A) $\frac{bd^2}{12}$

(B) $\frac{bd^3}{12}$

(C) $\frac{bd^3}{6}$

(D) $\frac{bd^2}{6}$

(E) Answer not known

196. The bending stress in a beam is directly proportional with

(A) The distance from the neutral axis

(B) The moment of inertia

(C) The polar moment of inertia

(D) The radius of curve of the beam

(E) Answer not known

197. The S.I. unit of torsional rigidity

(A) $N.m^2$

(B) N.m

(C) N/m

(D) N/m^2

(E) Answer not known

198. The polar moment of inertia of a solid shaft of diameter (d) is

(A) $\frac{\pi}{32}d^4$ (B) $\frac{\pi}{16}d^4$

(C) $\frac{\pi}{16}d^3$ (D) $\frac{\pi}{32}d^3$

(E) Answer not known

199. The following is an analytical method to find the force in a frame

(A) Method of frames (B) Method of joints

(C) Method of hinges (D) Method of pins

(E) Answer not known

200. In solid shaft, stress of the centre is

(A) Zero (B) Maximum

(C) Minimum (D) Average

(E) Answer not known