

1. What is the first step in conservation process?
 - (A) Structural retrofitting
 - (B) Demolition
 - (C) Listing and documenting heritage structures
 - (D) Marketing for tourism
 - (E) Answer not known

2. Compact, discernible settlement of 25 to 60 separate structures with a very small commercial enterprises is called
 - (A) Hamlets
 - (B) Villages
 - (C) Centers
 - (D) Smallets
 - (E) Answer not known

3. _____ means and includes maintaining the fabric of a place in its existing state and retarding deterioration.
 - (A) Preservation
 - (B) Restoration
 - (C) Redevelopment
 - (D) Revitalization
 - (E) Answer not known

4. The minimum extent of plot for EWS category in a layout development as per TNCDBR shall be
 - (A) 45 sqmts
 - (B) 32 sqmts
 - (C) 60 sqmts
 - (D) 50 sqmts
 - (E) Answer not known

5. In Chandigarh city, the common dimension of sector were planned as:
- (A) 200 m × 400 m (B) 400 m × 800 m
(C) 800 m × 1200 m (D) 800 m × 800 m
(E) Answer not known
6. HUDCO means
- (A) Housing and Urban Development Corporation
(B) Housing and United Development Corporation
(C) Housing and Urban Design Corporation
(D) Housing and United Design Corporation
(E) Answer not known
7. A space which act as a back yard space which also act as a buffer from other houses or from another public space
- (A) Private but open area (B) Absolutely private
(C) Semi-public (D) Public
(E) Answer not known
8. Arrangement, size and design of windows and openings in a building is termed as
- (A) Facade (B) Building profile
(C) Massing and proportion (D) Fenestration
(E) Answer not known

9. The objective on which BMTPC (Building Materials and Technology Promotion Council) does not work on is:
- (A) Materials and construction technologies
 - (B) Capacity building
 - (C) Project management
 - (D) Marketing and sales of mass housing units
 - (E) Answer not known
10. According to Kevin Lynch, ————— are the point references considered to be external to the observer and which may vary widely in scale.
- (A) Statues
 - (B) Landmarks
 - (C) Intersections
 - (D) Nodes
 - (E) Answer not known
11. The 'Piazza San Marco' in Venice is an example of
- (A) Landmark
 - (B) Path
 - (C) Edge
 - (D) Node
 - (E) Answer not known
12. Since 1961, New York city has been giving incentive bonuses to builders who provided plazas in that order for each square foot of plaza the builders could add ————— square feet of commercial floor space over the permissible.
- (A) 7
 - (B) 12
 - (C) 8
 - (D) 10
 - (E) Answer not known

13. According to Jane Jacobs the planners have been trained and disciplined in ————— thinking.
- (A) Deductive (B) Inductive
(C) Divergent (D) Convergent
(E) Answer not known
14. San Tempietto in Rome was designed by
- (A) Rossetti (B) Bernini
(C) Bramante (D) Leonardo da Vinci
(E) Answer not known
15. Hadrian's country villa is ————— from Rome.
- (A) 12 miles (B) 15 miles
(C) 10 miles (D) 16 miles
(E) Answer not known
16. The power transmitted through a pipe is maximum, when the head lost due to friction is equal to
- (A) One-half of the supply head
(B) One-third of the supply head
(C) One-fourth of the supply head
(D) Two-third of the supply head
(E) Answer not known

17. If you dispose solid waste by controlled tipping method, at the end of about 12 months period, the decomposition is complete, due to which the tip settles down to a height of
- (A) 10 cm (B) 15 cm
(C) 30 cm (D) 5 cm
(E) Answer not known
18. The design technique, adopted in design of large water supply networks, as an aid to simplify and separate the smaller loops is
- (A) Hardy cross method (B) Equivalent pipe method
(C) Circle method (D) Analyser method
(E) Answer not known
19. For one tonne unit of production of fertilizer the required water quantity in kilolitres per unit is
- (A) 4 (B) 40
(C) 122-170 (D) 80-200
(E) Answer not known
20. Arrange the following mechanical composting in chronological order
- (i) Reception of refuse
(ii) Shredding
(iii) Segregation
(iv) Stabilisation
(v) Marketing the humus
- (A) (i), (ii), (v), (iv), (iii) (B) (i), (iv), (iii), (ii), (v)
(C) (i), (iii), (ii), (iv), (v) (D) (i), (iii), (iv), (ii), (v)
(E) Answer not known

21. In the design of construction of sewer (Flexible Conduit) in embankment construction with positive projection and in well compacted side fill, the recommended value of settlement ratio (r_{sd}) is
- (A) 0 to 0.4 (B) 0 to 0.3
(C) 0 (D) 0.5 to 0.8
(E) Answer not known
22. The permissible turbidity of domestic water may be between
- (A) 5 to 10 ppm (B) 10 to 20 ppm
(C) 30 to 40 ppm (D) 40 to 50 ppm
(E) Answer not known
23. In estimation of runoff by rational method the value of 'C' for Rocky and impermeable type of catchment is
- (A) 0.6 – 0.8 (B) 0.8 – 1.0
(C) 1.0 – 1.2 (D) 1.2 – 1.4
(E) Answer not known
24. The hydrological cycle
- (A) Has beginning but does not end
(B) Has both beginning and end
(C) Occurrence of water and formation of snow
(D) Occurs continuously in nature
(E) Answer not known

25. Loss of energy due to hydraulic jump is expressed as
- (A) $(Y_2 - Y_1)^2 / 4Y_1 \cdot Y_2$ (B) $(Y_2 - Y_1)^3 / 4Y_1 \cdot Y_2$
 (C) $(Y_1 - Y_2)^2 / 4Y_1 \cdot Y_2$ (D) $(Y_1 - Y_2) / 4Y_1 \cdot Y_2$
 (E) Answer not known
26. Regarding criminals and juvenile delinquents normally _____ along is considered the sole basis of making distinction between the two classes.
- (A) Kinds of criminal activities (B) Objective of activities
 (C) Difference of age (D) Mode of working
 (E) Answer not known
27. According to Mumford if Megalapolis subjected to extensive deterioration of socio-economic structure, urban governance and municipal services leading to chaos is called as
- (A) Necropolis (B) Eopolis
 (C) Neopolis (D) Tyrannopolis
 (E) Answer not known
28. The multiple nuclei theory was developed by
- (A) Catanese (B) Burgess
 (C) Ullman and Harris (D) Doxiadis
 (E) Answer not known

29. Examples such as railway colony, University Campus, port areas, Military Camps, which have come up near a statutory town outside its statutory limits but within the revenue limits of a village is called
- (A) Outgrowth (B) Extended areas
(C) Statutory town (D) Cantonment
(E) Answer not known
30. In elasticity of demand, changes in price brings changes in quantity demanded. In this scenario the law of demand tell us the
- (A) Direction of change (B) Quantum of change
(C) Quantity of change (D) Quality of change
(E) Answer not known
31. _____ is the process by which an object, product, capacity or even labour, a belief, representation, or piece of land is converted into an element of market exchange by being assigned a price
- (A) Commodification (B) Growth coalitions
(C) Globalization (D) Development
(E) Answer not known

32. Activity centre used in urban planning and design for a mixed use urban area where there is a concentration of commercial and other land uses. This CBD are also known as
- (i) Central Activities District
 - (ii) Central Activities Zone
 - (iii) Core Activities District
 - (iv) Central Activities Group
- (A) (i) and (iii) (B) (i) and (ii)
(C) (iii) (D) (iii) and (iv)
(E) Answer not known
33. In land use plan preparation practiced in India, which colour denotes industry buildings?
- (A) Blue (B) Yellow
(C) Violet (D) Red
(E) Answer not known
34. Which one of the following is NOT the part of the definition of a town as per census of India?
- (A) A minimum population of 5000
 - (B) Population density 400 persons per sq.km
 - (C) More than 75% of the population engaged in primary sector
 - (D) Presence of municipality, corporation etc.,
 - (E) Answer not known

35. As per the census of India 2011, what was the percentage of people in the state of Tamil Nadu living in urban areas?
- (A) 51.51 (B) 48.45
(C) 30.21 (D) 24.89
(E) Answer not known
36. The Tamil Nadu Real Estate and Regulation Act defines _____ as “the total cost involved in developing the real estate project and includes the land cost, taxes, cess, development and other charges”.
- (A) Estimated cost of the Real Estate project
(B) Completion cost
(C) Finishing cost
(D) Evaluated cost of the Real Estate project
(E) Answer not known
37. According to Tamil Nadu Real Estate/Regulation and Development, Act, 2016 any refund of moneys along with the applicable interest and compensation, if any, payable by the promoter, to the allottee within _____ days from the date on which such refund becomes due.
- (A) 75 (B) 180
(C) 90 (D) 45
(E) Answer not known
38. _____ means an independent housing unit with separate facilities for living, cooking and sanitary requirements and may be a part of a building.
- (A) Dwelling unit (B) Farm house
(C) Habitable room (D) Hut
(E) Answer not known

39. _____ controls the manner in which blocks of land over a certain size may be converted into building lots.
- (A) Sub division regulation (B) Property tax
(C) Infrastructure (D) Social infrastructure
(E) Answer not known
40. As per Rehabilitation and Resettlement Act 2013 _____ means an area where the affected families who have been displaced as a result of land acquisition are resettled by the appropriate government.
- (A) Resettlement area (B) Scheduled areas
(C) Secluded areas (D) Redeveloped areas
(E) Answer not known
41. According to the right to fair compensation and transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, in case of urgency as per the direction of the government the collector can take possession of any land needed for a public purpose on the expiration of _____ days from the publication of the notice.
- (A) 45 (B) 60
(C) 75 (D) 30
(E) Answer not known
42. CIDCO is a limited company wholly controlled by the
- (A) Govt of Maharashtra (B) Govt of Karnataka
(C) Govt of Andhra Pradesh (D) Govt of Tamil Nadu
(E) Answer not known

43. According to 74th CAA, the contribution of ward committee's, consisting of one or more wards, within the territorial area of a municipality having a population of
- (A) 1 lakh or more (B) 2 lakh or more
(C) 3 lakh or more (D) 5 lakh or more
(E) Answer not known
44. The municipalities in pre-1992 era did not have the constitutional status and the ————— were force to extend or control the functional sphere through executive decision.
- (A) District collectors (B) State government
(C) Central government (D) ITPI
(E) Answer not known
45. Net density is defined as the
- (A) Average density of population per unit area of the whole residential zone
(B) Average density of population per unit area
(C) Average density of population per unit of the housing area include local roads only, and excluding open spaces, public institution etc
(D) Average density of population per unit of the commercial area
(E) Answer not known
46. No fires concrete is generally made with the aggregate/cement ratio from
- (A) 6:1 to 10:1 (B) 5:2 to 8:2
(C) 4:1 to 9:1 (D) 3:1 to 10:1
(E) Answer not known

47. The roller, which leads to higher void content in the clayey soils are
- (A) Pneumatic tyred roller
 - (B) Vibratory compactors
 - (C) Smooth wheeler roller
 - (D) Sheep's foot roller
 - (E) Answer not known
48. Use of right quality fly ash in cement results in
- (A) Increase of water demand for desized slump
 - (B) Bleeding of concrete will be increased
 - (C) Reduction in temperature
 - (D) Increase in temperature
 - (E) Answer not known
49. The compressive strength of 100 mm cube as compared to 150 mm cube is always
- (A) Less
 - (B) More
 - (C) Equal
 - (D) Zero
 - (E) Answer not known
50. The scaffolding to be provided in the busy street without obstructing the traffic on road is called
- (A) Double scaffolding
 - (B) Ladder scaffolding
 - (C) Suspended scaffolding
 - (D) Cantilever scaffolding
 - (E) Answer not known

51. Spiral stairs diameter and height for fire Resistant building are
- (A) Not less than 1.5 m and not exceeding 9 m
 - (B) Not less than 1.0 m and not exceeding 9 m
 - (C) Not less than 1.0 m and not exceeding 6 m
 - (D) Not less than 1.5 m and not exceeding 6 m
 - (E) Answer not known
52. Lime mortar is generally made with
- (A) Quick lime
 - (B) Fat lime
 - (C) Hydraulic lime
 - (D) White lime
 - (E) Answer not known
53. A rough estimate of the quantity (A) of dynamite required in grams for blasting rocks is given by
- Where A = quantity of gunpowder in gms
- L = length of line of least resistance in m
- (A) $L^2/500$
 - (B) $L^{2/3}/340$
 - (C) $L^2/0.008$
 - (D) $L^{1/3}/0.008$
 - (E) Answer not known
54. The vertical sides of the openings which are left in walls to receive doors, windows, fire-places, etc. are known as
- (A) Jambs
 - (B) Piers
 - (C) Thresholds
 - (D) Wall plates
 - (E) Answer not known

55. Rupture failure along a vertical joint under vertical loads can be avoided by
- (A) Providing Adequate dimension
 - (B) Providing strong mortar
 - (C) Breaking / staggering the vertical joints
 - (D) Avoiding the use of Bats
 - (E) Answer not known
56. _____ is a line which represents the nearest limits of future uncontrolled building activity in relation to a road.
- (A) Control line
 - (B) Carriage line
 - (C) Motor line
 - (D) Median line
 - (E) Answer not known
57. In a highway design the psychological trait of _____ collectively known as PIEV is considered as important factor.
- (A) Perception, intellection, emotion and volition
 - (B) Perception, intellectual, emotion and volatileness
 - (C) Pedestrians, intellection, movement and volition
 - (D) Pedestrians, intellectual, emotion and volatileness
 - (E) Answer not known
58. The time interval between the passing of the reference line by 2 successive vehicles is termed as
- (A) Gap
 - (B) Lap
 - (C) Acceptance
 - (D) Cordon
 - (E) Answer not known

59. The transport inventory facility consists of the following :
- (1) Inventory of streets
 - (2) Traffic volume
 - (3) Inventory of Land use
 - (4) Inventory of Economic Activity
- (A) (1), (2) (B) (1), (3), (4)
(C) (1), (2), (3), (4) (D) (1), (2), (3)
(E) Answer not known
60. In Arterial Road, the minimum roadway interaction spacing is
- (A) 500 m (B) 300 m
(C) 1 Km (D) 800 m
(E) Answer not known
61. In speed journey, time and delay surveys the device Enoscope is also known as
- (A) Mirror Box (B) Contact tube
(C) Pressure Box (D) Mirror tube
(E) Answer not known
62. TOFC (Trailer-on-flatcar) system is an example of
- (A) Para transit system
 - (B) Rapid transit system
 - (C) Multi modal transport system
 - (D) Pooling system
 - (E) Answer not known

63. As per the multimodal transport systems _____ is a system where in the trucks are carried on ships over long distances.
- (A) Roll-On-Roll-Off (RORO) (B) Piggy back system
(C) TOFC system (D) Road Trailer
(E) Answer not known
64. In the context of modes of transporting people in cities and Towns; IPT refers to
- (A) International Public Transport
(B) Indian Public Transport
(C) Integrated Public Transport
(D) Intermediate Public Transport
(E) Answer not known
65. In Transportation planning which are the following factors governs trip generation and attraction
- (i) Income
(ii) Family size and composition
(iii) Social status and age
(iv) Land use characteristics
- (A) (i), (ii) and (iv) (B) (i), (ii) and (iii)
(C) (i), (ii), (iii) and (iv) (D) (ii), (iii) and (iv)
(E) Answer not known

66. The survey which is conducted with special reference to the conditions prevailing in and around the town to be planned is called
- (A) Civic Survey
 - (B) Regional Survey
 - (C) National Survey
 - (D) Preliminary Survey
 - (E) Answer not known
67. Country planning is complementary to any one of the planning called as
- (A) National planning
 - (B) Regional planning
 - (C) Town planning
 - (D) International planning
 - (E) Answer not known
68. Which one of the following GPS receiver can accommodate the ionospheric error?
- (A) Single frequency receiver
 - (B) Dual frequency receiver
 - (C) Codeless receiver
 - (D) Carrier wave receiver
 - (E) Answer not known
69. Instrument which propagates modulated light waves in EDM is called as
- (A) Tellurometer
 - (B) Geodimeter
 - (C) Distomats
 - (D) Osscillator
 - (E) Answer not known

70. When the image formed by the objective is not in the plane of the cross hairs and the accurate sight is impossible, the adjustment is done in the instrument by?
- (A) doing properly centering of the instrument
 - (B) adjusting footscrews to keep the instrument in levelling
 - (C) focussing the eye-piece and the objective
 - (D) transitting the telescope
 - (E) Answer not known
71. In a stadia tacheometer, If ' θ ' is the inclination of the line of sight with horizontal, 's' is the staff intercept and K_1 , K_2 are instrumental constants, then the horizontal distance 'D' between the instrument and the staff is given by
- (A) $K_1 s \cos \theta + K_2 \cos^2 \theta$
 - (B) $K_1 s \cos \theta - K_2 \cos^2 \theta$
 - (C) $K_1 s \cos^2 \theta + K_2 \cos \theta$
 - (D) $K_1 s \cos^2 \theta - K_2 \cos \theta$
 - (E) Answer not known
72. Brick work in Cement Mortar in super structure per person/day is
- (A) 1.30 m^3
 - (B) 2.50 m^3
 - (C) 3.00 m^3
 - (D) 3.30 m^3
 - (E) Answer not known

73. The estimate prepared when additional works are required or when further development is required during the progress of work is called as
- (A) Revised estimate
 - (B) Supplementary estimate
 - (C) Repair or Maintenance estimate
 - (D) Item rate estimate
 - (E) Answer not known
74. The difference between the maximum time allowed for an activity and its estimated duration is called
- (A) Dummy activity
 - (B) Restraint
 - (C) Total Float
 - (D) Free Float
 - (E) Answer not known
75. 'ESTABLISH' in steps of project planning refers to anyone of the following as
- (A) on a plan
 - (B) forecast and means of achieving goals
 - (C) the objectives of the project in definite words
 - (D) goal and stages intermediate to attain the final target
 - (E) Answer not known
76. Nectographs and anaglyphs are similar in the principle of
- (A) Angular superposition
 - (B) Offset superposition
 - (C) Oblique superposition
 - (D) Vertical superposition
 - (E) Answer not known

77. The device used to fix the exact % of forward lap between successive arrival pictures is called
- (A) Intervalometer (B) Vector graph
(C) Stereoscope (D) Anaglyph
(E) Answer not known
78. The axis of the photograph is purposely tilted between _____ from the vertical in an oblique type of aerial photo in Aerial Photography.
- (A) 3° and 90° (B) 3° and 160°
(C) 3° and 180° (D) 4° and 180°
(E) Answer not known
79. S1 - in land suitability classification stands for
- (A) minimally suitable (B) moderately suitable
(C) marginally suitable (D) highly suitable
(E) Answer not known
80. An arc-nook data base structure avoids _____ problem, since point and lines may be recorded and then referenced by many different spatial objects.
- (A) Overlapping (B) Missing attribute
(C) Inappropriate attribute (D) Mislocated entities
(E) Answer not known
81. Shadows that facilitate interpretation of 3 dimensions are usually
- (A) long and medium (B) long and oblique
(C) long and angular (D) long and dark
(E) Answer not known

82. The Landsat Thematic Mapper has _____ grey level.
- (A) 265 (B) 256
(C) 526 (D) 562
(E) Answer not known
83. The spectral sensitivity of false colour infra-red ranges from
- (A) 0.1 to 0.5 micrometer (B) 1 to 5 micrometer
(C) 0.4 to 0.9 micrometer (D) 4 to 9 micrometer
(E) Answer not known
84. GIS – stands for
- (A) Geographical Information System
(B) Geo-spatial Information System
(C) Geological Information System
(D) Geometrical Information System
(E) Answer not known
85. In remote sensed data, LULC means
- (A) Land Use Land Cover
(B) Land Use Land Connectivity
(C) Land Use Land Compatibility
(D) Land Use Land Control
(E) Answer not known

86. GPS can be used to collect the following data
- (A) Terrain data
 - (B) Demographic data
 - (C) Occupation structure
 - (D) Migration pattern
 - (E) Answer not known
87. The region of the spectrum component of Electromagnetic radiation with wave length between _____ is called the microwave band.
- (A) 1 mm and 1 m
 - (B) 1 m and 1 Km
 - (C) 1 mm and 1 cm
 - (D) 1 cm and 1 m
 - (E) Answer not known
88. LiDAR refers to
- (A) Land Detection and Ranging
 - (B) Level Detection and Ranging
 - (C) Laser Detection and Ranging
 - (D) Light Detection and Ranging
 - (E) Answer not known
89. Which one of the following data formats is 'NOT' based on the raster data model?
- (A) tiff
 - (B) jpeg
 - (C) xls
 - (D) bmp
 - (E) Answer not known

90. IRS missions use the following orbits
- (A) Sun synchronous orbit
 - (B) Geo synchronous orbit
 - (C) Stationary orbit
 - (D) Sun and Geo synchronous orbit
 - (E) Answer not known
91. Radius of relative stiffness ' l ' is _____. When modulus of elasticity of cement concrete ' E ', Poisson's ratio of concrete ' μ ', slab thickness ' h ' and Modulus of subgrade reaction ' K '.
- (A) $\left[\frac{Eh^4}{12K(1-\mu^2)} \right]^{\frac{2}{3}}$

(C) $\left[\frac{8Eh^3}{12K(1-\mu^2)} \right]^{\frac{1}{2}}$

(B) $\left[\frac{Eh^2}{12K(1-\mu^2)} \right]^{\frac{4}{3}}$

(D) $\left[\frac{Eh^3}{12K(1-\mu^2)} \right]^{\frac{1}{4}}$
- (E) Answer not known
92. Which of the following culverts are used where, the nature of the soil below the foundation is not suitable for individual footings under piers and abutments?
- (A) Pipe culverts
 - (C) Slab culverts
 - (E) Answer not known
 - (B) Box culverts
 - (D) Arch culverts

93. Coefficient of volume compressibility (m_v), expressed as

Where,

a_v = Co-efficient of compressibility

e_o = Void ratio of the soil before compression

s_r = Degree of saturation

n = Porosity of soil

(A) $m_v = \frac{a_v}{1 + s_r}$

(B) $m_v = \frac{a_v}{1 + e_o}$

(C) $m_v = \frac{a_v}{2 + n}$

(D) $m_v = \frac{a_v}{3 + e_o}$

(E) Answer not known

94. Which of the following is also known as the Dutch Cone test?

(A) Dynamic Cone penetration test

(B) Standard Cone penetration test

(C) Slump Cone test

(D) Static Cone penetration test

(E) Answer not known

95. Air content, a_c of soil is represented by,

Where, S = Degree of saturation.

(A) $a_c = 1 + S$

(B) $a_c = \frac{1}{S}$

(C) $a_c = 1 - S$

(D) $a_c = S^2 - 1$

(E) Answer not known

96. In Casagrande's liquid limit apparatus test water content corresponding to which blow is termed as liquid limit?
- (A) 20 (B) 25
(C) 30 (D) 35
(E) Answer not known
97. The vane shear test to be used under the following conditions
- (i) The clay is normally consolidated and sensitive
(ii) The clay is highly consolidate
(iii) Only the drained shear strength required
(iv) Only the undrained shear strength required
- (A) (i) and (iii) is correct (B) (ii) and (iii) is correct
(C) (i) and (iv) is correct (D) (ii) only correct
(E) Answer not known
98. The shear strength of a soft saturated clay is to be determined in a borehole, at a depth of 6 m. Suggest a suitable test for the above condition?
- (A) Direct Shear Test
(B) Triaxial Test
(C) Unconfined Compression Test
(D) Vane Shear Test
(E) Answer not known

99. The allowable maximum settlement of raft foundation is
- (A) 20 mm (B) 40 mm
(C) 50 mm (D) 30 mm
(E) Answer not known
100. The ultimate bearing capacity per unit area of clays for general shear failure is given as _____
where C = cohesion value
 γ = Density of soil
 D_f = Depth of foundation
- (A) $C + 2.3 \gamma D_f$ (B) $C + 5.7 \gamma D_f$
(C) $5.7C + \frac{1}{2} \gamma D_f$ (D) $5.7C + \gamma D_f$
(E) Answer not known
101. In which one among the following categories, of protected areas in India are local people not allowed to collect and use the biomass?
- (A) Biosphere reserves (B) Wild life sanctuaries
(C) Wet lands (D) National parks
(E) Answer not known

102. The definition “meet the needs of the present without compromising the ability of future generations to meet their own needs” was given by
- (A) Unconference on environment 2022
 - (B) Brundtland commission
 - (C) Rio summit
 - (D) United Nations Environmental Programme
 - (E) Answer not known
103. The Garden of Kinkaku-ji temple is in
- (A) Osaka
 - (B) Alaska
 - (C) Hiroshima
 - (D) Kyoto
 - (E) Answer not known
104. A conference was held at Kyoto on climate change in the year
- (A) 1980
 - (B) 1992
 - (C) 1995
 - (D) 1997
 - (E) Answer not known
105. The Indian Forest Act is passed by British India in the year
- (A) 1940
 - (B) 1936
 - (C) 1927
 - (D) 1944
 - (E) Answer not known

106. Which among the following is not present in a preliminary site plan?
- (A) location of buildings
 - (B) location of roads and walkways
 - (C) location of parking areas
 - (D) location and names of trees proposed
 - (E) Answer not known
107. The engineer's chain is _____ long and composed of 100 links.
- (A) 100 m
 - (B) 100 cm
 - (C) 100 feet
 - (D) 66 feet
 - (E) Answer not known
108. In surveying, what is 'benchmark'?
- (A) A mark used for leveling references
 - (B) A tool for drawing site diagrams
 - (C) A type of climate record
 - (D) A soil testing unit
 - (E) Answer not known
109. A vegetative buffer strip along a watercourse that filters storm water and provides wildlife habitat is called
- (A) Rip rap
 - (B) Riparian
 - (C) Ringlet
 - (D) Vegelot
 - (E) Answer not known

110. A green wall that uses a tightly intertwined grid of aluminium or light weight steel. Usually attached to the facade via brackets.
- (A) Metal mesh green wall (B) Cable-supported green wall
 (C) Rigid green wall (D) Vegetated mat wall
 (E) Answer not known
111. Which of the following is statically determinate structure?
- (A) Fixed beam (B) Continuous beam
 (C) Two hinged arch (D) Double overhanging
 (E) Answer not known
112. A beam is of triangular section with base 10 mm and height 12 mm. What is the minimum section modulus?
- (A) 60 mm^3 (B) 90 mm^3
 (C) 120 mm^3 (D) 150 mm^3
 (E) Answer not known
113. The equivalent bending moment (M_t) due to torsion (T_u) is given by
- (A) $M_t = \frac{T_u(1 + D/b)}{1.7}$
 (B) $M_t = \frac{T_u(1 - D/b)}{1.7}$
 (C) $M_t = T_u(1 + D/b)$
 (D) $M_t = 1.5T_u(1 + D/b)$
 (E) Answer not known

114. In the design of a cantilever retaining wall by limit state design method of value of load factor assumed as per IS code is
- (A) 2.0 (B) 2.5
(C) 1.5 (D) 3.0
(E) Answer not known
115. A concentrated load 'W' moves on the span of a three-hinged arch. The horizontal thrust at the supports is maximum when the load is at which one of the following?
- (A) The springing
(B) One-sixth of the span from one end
(C) Quarter span
(D) The crown
(E) Answer not known
116. A 3 m long column is hinged at one end and fixed at the other end, what is its equivalent length?
- (A) $3\sqrt{2}$ m (B) 3 m
(C) $\frac{3}{\sqrt{2}}$ m (D) 1.5 m
(E) Answer not known

117. As per IS 456, for the design of reinforced concrete beam, the design shear strength of concrete (T_c) depends upon
- (i) Grade of concrete
 - (ii) Area of steel
 - (iii) Cross-sectional dimension of member
- (A) (i) and (ii) only
(B) (i) and (iii) only
(C) (ii) and (iii) only
(D) (i), (ii) and (iii)
(E) Answer not known
118. In a framed connection between a beam and stanchion, the bolts connecting flange of stanchion and the angle is subjected to
- (A) direct single shear and horizontal force
 - (B) direct double shear and horizontal force
 - (C) torsional shear only
 - (D) tension only
 - (E) Answer not known
119. The relationship between Young's modulus " E ", Modulus of rigidity " C ", bulk modulus " K "
- (A) $E = 9KC/(3K + C)$
 - (B) $E = 9KC/(9K + C)$
 - (C) $E = 3KC/(3K + C)$
 - (D) $E = 3KC/(9K + C)$
 - (E) Answer not known

120. The internal resistance which the body offers to meet the load or external force is called
- (A) Stress (B) Strain
(C) Pressure (D) None of the above
(E) Answer not known
121. Which type of blue infrastructure is specifically designed to create green spaces that can absorb and manage storm water?
- (A) Green Roofs (B) Permeable pavements
(C) Bioswales (D) Rain gardens
(E) Answer not known
122. In low income Housing in urban areas at least _____ of the plots may be of the size less than or upto _____ per dwelling unit in metropolitan towns.
- (A) 75 percent, 60 m² (B) 70 percent, 45 m²
(C) 80 percent, 75 m² (D) 75 percent, 40m²
(E) Answer not known
123. The squatter settlements may be provided with a facility of 1 Toilet for _____ families.
- (A) 4 to 5 families (B) 10 families
(C) 2 families (D) 1 family
(E) Answer not known

124. As per NBC identify the classification of building based on occupancy.

- (i) Mercantile (P) Group J
- (ii) Assembly (Q) Group F
- (iii) Institutional (R) Group D
- (iv) Hazardous (S) Group C
- (A) (i)-(Q), (ii)-(R), (iii)-(S), (iv)-(P)
- (B) (i)-(P), (ii)-(S), (iii)-(R), (iv)-(Q)
- (C) (i)-(S), (ii)-(R), (iii)-(P), (iv)-(Q)
- (D) (i)-(Q), (ii)-(P), (iii)-(R), (iv)-(S)
- (E) Answer not known

125. Timarpur Okhla Integrated Municipal Solid Waste Management Project is a PPP mode of urban infrastructure development project, which was undertaken of _____ basis.

- (A) Build, Operate and Transfer (BOT)
- (B) Build, Own, Operate and Transfer (BOOT)
- (C) Design, Build and Transfer (DBT)
- (D) Design, Build, Finance and Transfer (DBFT)
- (E) Answer not known

126. Identify the primary waste water treatment method from the following, where organic and inorganic suspended solids are removed.

- (A) Screen chamber (B) Grit chamber
- (C) Primary settling tank (D) Aeration tank
- (E) Answer not known

127. As per the broad classification of Industrial and Non-industrial occupancies Aircraft Hangers comes under
- (A) High hazard occupancies
 - (B) Moderate hazard occupancies
 - (C) Low hazard occupancies
 - (D) Medium hazard occupancies
 - (E) Answer not known
128. The _____ indicates the loss of water penetrated into the soil and it may join some underground sources of water.
- (A) Evaporation
 - (B) Transpiration
 - (C) Percolation
 - (D) Surface runoff
 - (E) Answer not known
129. In water supply _____ is the best and most efficient method for small diameter bores in soft soils.
- (A) Hydraulic jet method
 - (B) Percussion method
 - (C) Reverse rotary method
 - (D) Well drilling method
 - (E) Answer not known
130. In the preparation of development plans for cities, it is necessary to earmark land for water treatment plant, which should be _____ hectares to build a 500 MLD water treatment plant.
- (A) 9.34 hectares
 - (B) 3.73 hectares
 - (C) 4.90 hectares
 - (D) 6.72 hectares
 - (E) Answer not known

131. Identify the components of the environment that are effective transporters of matter?
- (A) atmosphere and hydrosphere
 - (B) atmosphere and lithosphere
 - (C) hydrosphere and lithosphere
 - (D) atmosphere and biosphere
 - (E) Answer not known
132. Ozone and nitrous oxides appears at an altitude of _____ and serves to protect the earth from the sun's UV radiation.
- (A) 10 – 15 km
 - (B) 15 – 20 km
 - (C) 15 – 25 km
 - (D) 25 – 30 km
 - (E) Answer not known
133. 'Environment' in EIA context mainly focus on
- (1) Physical dimension
 - (2) Chemical dimension
 - (3) Biological dimension
 - (4) Aesthetic dimension
- (A) (1) and (2)
 - (B) (3) and (4)
 - (C) (1), (2) and (3)
 - (D) (1), (2), (3), (4)
 - (E) Answer not known

134. Flooding can be minimized or prevented by
- (A) Afforestation
 - (B) Cutting the forests
 - (C) Tilling the land
 - (D) Removing the top soil
 - (E) Answer not known
135. New Urbanism, a movement within architecture and urban design held its first annual congress in the year _____ and published a charter in the year _____.
- (A) 1993 and 1996
 - (B) 1996 and 2001
 - (C) 1989 and 1990
 - (D) 1970 and 1974
 - (E) Answer not known
136. How many guiding principles are governing the entire process of EIA?
- (A) 10
 - (B) 08
 - (C) 06
 - (D) 12
 - (E) Answer not known
137. As per EIA notification 2006, Environmental clearance from Central Government is required for all Tourism Projects between 200 m – 500 meters of High water Line and at locations with an elevation of more than 1000 meters with Investment of more than _____ Crores.
- (A) 1 Crore
 - (B) 15 Crores
 - (C) 5 Crores
 - (D) 50 Crores
 - (E) Answer not known

138. Identify the year in which U.S. Green Building Council Found the Green Building Certification Institute to certify Leadership in Energy and Environmental Design (LEED).
- (A) 2001
 - (B) 2010
 - (C) 2005
 - (D) 2007
 - (E) Answer not known
139. _____ is the one of the management tools for incorporating environmental aspects in planning process and in decision making.
- (A) Environmental Impact Assessment (EIA)
 - (B) Environmental Management System (EMS)
 - (C) Environmental Auditing
 - (D) Environmental labelling
 - (E) Answer not known
140. Identify the steps below that is NOT included in the scoping process?
- (A) setup the team of experts that will conduct the EIA
 - (B) describe the project area and the area of project influence
 - (C) identify environmental impacts and create a contingency plan
 - (D) outline project alternative for preparation, implementation and closure
 - (E) Answer not known

141. The term VAV means

- (A) stepped well in which water can be stored
- (B) bamboo drip irrigation system
- (C) diversion channels which carry water from glaciers
- (D) embankment built around a slope
- (E) Answer not known

142. 'House form and culture' is the title of a noted book authored by

- (A) Geoffrey Broadbent
- (B) Jon Lang
- (C) Chiristopher Alexander
- (D) Amos Rapoport
- (E) Answer not known

143. _____ is referred as spaces in front of the home that are nominally a part of the public realm, but have acquired a private character through use, and through various physical modification.

- (A) Work places
- (B) Small shops
- (C) Public structures
- (D) House extensions
- (E) Answer not known

144. Chandigarh reflects the planning idea of

- (A) Ebenezer Howard
- (B) Le Corbusier's Radiant city
- (C) Garden suburb
- (D) Cleancre Perry
- (E) Answer not known

145. For regulating development activities in Coastal Regulation zone the coastal stretches within _____ meters of High tide line on the landward side are classified into four categories.
- (A) 500 m (B) 450 m
(C) 380 m (D) 300 m
(E) Answer not known
146. Religious buildings and welfare institutions occupying a floor area not exceeding _____ sq.m is permissible with special sanction of the CMDA under mixed residential use zone.
- (A) 300 (B) 450
(C) 350 (D) 500
(E) Answer not known
147. Le Corbusier's Radiant city emphasized
- (A) Decentralization
(B) Dispersed – low rise settlements
(C) High rise housing in park-like surroundings
(D) Concentric zone planning
(E) Answer not known
148. Bypass roads are also known as
- (A) fast roads (B) media roads
(C) loop roads (D) cut roads
(E) Answer not known

149. The cities of _____ were developed following the principle of the “Five Elements” of Water, Earth, Fire, Wood and Metal.
- (A) Mesopotamia (B) Nile Valley Civilization
(C) Ancient China (D) Sumerian Civilization
(E) Answer not known
150. Who proposed the concept of linear city?
- (A) Ebenezer Howard (B) Le Corbusier
(C) Arturo soria y mata (D) Frank Llyod wright
(E) Answer not known
151. The chang-an city in China is a walled city covered about _____ square kilometers.
- (A) 90 (B) 100
(C) 70 (D) 80
(E) Answer not known
152. Ancient village divided into interlineal chambers with temple in center, square or rectangle in plan is
- (A) Sarvatothadra (B) Vidharbabhadra
(C) Sikarabhadra (D) Janvabhadra
(E) Answer not known
153. A vertical city of 13,000 inhabitants was planned by architect
- (A) Le Corbusier (B) F.L. Wright
(C) Louis Khan (D) Mies Van der Rohe
(E) Answer not known

154. Select the values relevant for the Victoria Memorial Hall, Kolkata
- (A) Ecological
 - (B) Archeological
 - (C) Historical
 - (D) Associative
 - (E) Answer not known
155. The important purpose of urban renewal is to address predominantly
- (A) Collective ownership of property
 - (B) Create more "neighborhood" developments
 - (C) Urban poverty
 - (D) Improve housing standards
 - (E) Answer not known
156. Completion time of dummy activity is
- (A) Zero
 - (B) Optimistic time
 - (C) Maximum time
 - (D) Greenwich time
 - (E) Answer not known
157. Net present value method are most popular because of
- (A) Discounting criteria
 - (B) Non-discounting criteria
 - (C) Benefit cost criteria
 - (D) Cost criteria
 - (E) Answer not known

158. A project is expected to take 15 months along the critical path, having standard deviation of 3 months, what is the probability of completion of project in 12 months?
- (A) 15.87% (B) 84.13%
(C) 50% (D) 66.6%
(E) Answer not known
159. The important phases in the project management is
- (1) Project planning
(2) Project scheduling
(3) Project controlling
(4) Project feedback
- (A) (1) (B) (1), (2)
(C) (1), (2), (3) (D) (2), (4)
(E) Answer not known
160. Identify the most important parts of a feasibility report from the following
- (i) Cost-benefit analysis
(ii) Statement of the objective of the proposed project
(iii) Who will supply materials for implementing project
(iv) Organizational changes needed to implement the project
- (A) (i) and (ii) (B) (i), (ii) and (iii)
(C) (i) and (iv) (D) (i), (ii) and (iv)
(E) Answer not known

161. The performance of a specific task in CPM is known as
- (A) Activity
 - (B) Dummy
 - (C) Event
 - (D) Node
 - (E) Answer not known
162. In cash flow analysis, the difference between Budgeted Cost of Work Performed (BCWP) and Budgeted Cost of Work Schedule (BCWS) is called
- (A) Cost variance
 - (B) Schedule variance
 - (C) Departure variance
 - (D) Work variance
 - (E) Answer not known
163. In Tamil Nadu Transparency tender document the tender inviting authority shall ensure that adequate time is provided for the submission of Tenders and a minimum time is allowed between date of publication of the Notice inviting tenders in the relevant tender Bulletin or in the newspapers. The minimum period for tenders in excess of rupees 2 crores in value is
- (A) 30 days
 - (B) 15 days
 - (C) 20 days
 - (D) 45 days
 - (E) Answer not known

164. The contractor attains the right to terminate the contract under which situation
- (i) If the work is stopped by the court
 - (ii) If the construction cost exceeds the quoted amount
 - (iii) If the owner fails to pay the contractor after the stipulated period
 - (iv) If he do not have the workforce
- (A) (i) and (iii) (B) (i) and (ii)
 (C) (i) and (iv) (D) (i), (ii) and (iii)
 (E) Answer not known
165. If BCR is Benefit-Cost Ratio, the Net Benefit-Cost Ratio (NBCR) will be
- (A) $\frac{PVB}{I}$ (B) $\frac{I}{PVB}$
 (C) $\frac{BCR}{I}$ (D) $BCR - 1$
 (E) Answer not known
166. In project management _____ is defined as the resource allocation technique for a project that is to be completed by a specified due-date
- (A) Resource Levelling (B) Resource Smoothing
 (C) Resource Histogram (D) Resource Variance
 (E) Answer not known

167. In project management the Capital Asset Pricing Model (CAPM) was developed by
- (A) Sharp, Linter, Mossin
 - (B) GERT
 - (C) Altman
 - (D) Little and Mirrless
 - (E) Answer not known
168. In project management, an analysis that attempts to predict sickness of projects on the basis of a single financial ratio or indicator is called as
- (A) Univariate analysis
 - (B) Schedule performance analysis
 - (C) Multivariate analysis
 - (D) Network analysis
 - (E) Answer not known
169. The following are the important methods of economic evaluation
- (1) Benefit cost ratio method
 - (2) First Year Rate of Return method
 - (3) Net present value method
 - (4) Internal Rate of Return method
- (A) (1), (2), (3), (4)
 - (B) (2), (3), (4)
 - (C) (1), (2), (3)
 - (D) (1), (2), (4)
 - (E) Answer not known

170. In project planning and scheduling slack time (or slack) of an event is the _____ of that event
- (A) Difference between Latest Finish Time (T_L) and the Earliest Start Time (T_E)
 - (B) Difference between Earliest Start Time (T_E) and the Latest Finish Time (T_L)
 - (C) Difference between Latest Start Time (T_L) and the Earliest Finish Time (T_E)
 - (D) Difference between Total Float and Free Float
 - (E) Answer not known
171. Rational comprehensive planning was dominant during
- (A) 1940-1950
 - (B) 1960-1970
 - (C) 1980-2000
 - (D) 1920-1930
 - (E) Answer not known
172. _____ developed the concept of an agora, a central market place laid out along rectangular lines
- (A) Hippodamus
 - (B) Augustus
 - (C) Miletus
 - (D) Julius Caesar
 - (E) Answer not known
173. The concept of “Disjointed Incrementalism” can also be described as
- (A) Choice making
 - (B) Non planning
 - (C) Rational planning
 - (D) Advocacy planning
 - (E) Answer not known

174. Identify the correct statement with respect to normative theories

- (i) Normative theories are more focused in the relationship between press and the government than press and the audience
- (ii) Normative theories book is “Three theories of the Press”
- (iii) Normative theory was pronounced first in UK
- (iv) It was proposed by Fred Siebert T. Peterson and Wilbur
- (A) (i) and (iv) only (B) (i), (ii), (iii) only
- (C) (i), (ii), (iii), (iv) (D) (ii) and (iii) only
- (E) Answer not known

175. Sites within Intense/Standard zones which have existing gross density higher than _____ may not be suitable for redevelopment, but may need retrofitting to meet TOD zone requirements.

- (A) 250 du/ha (B) 250 du/acre
 (C) 150 du/acre (D) 150 du/ha
 (E) Answer not known

176. As per URDPFI guidelines the water requirement for offices and factories is

- (A) 45 litres/head/day (B) 70 litres/head/day
(C) 60 litres/head/day (D) 65 litres/head/day
(E) Answer not known

177. As per URDPFI guidelines one crematorium has to be provided for

- (A) 5 lakhs (B) 2 lakhs
(C) 1 lakh (D) 3 lakhs
(E) Answer not known

178. One of the first urban planning games to be developed was
- (A) GO
 - (B) CLUG
 - (C) WEi-HAi
 - (D) METRO
 - (E) Answer not known
179. In Delphi Technique the group of experts, first respond to
- (A) Interviews
 - (B) Presentations
 - (C) Questionnaires
 - (D) Discussions
 - (E) Answer not known
180. In planning methods _____ is used as a relative index which compares the proportion of production contributed by an Industrial sector (say manufacturing) in a give region, to the proportion of production contributed by that sector nationally
- (A) Location quotient
 - (B) Location sector
 - (C) Input output analysis
 - (D) Best fit method
 - (E) Answer not known
181. In general, regional planning in India is carried out by the
- (A) State Government
 - (B) Central Government
 - (C) Local bodies
 - (D) HUDCO
 - (E) Answer not known
182. In neighbourhood unit concept envisioned by Perry and Duany would have an area of land about _____ acres.
- (A) 160 acres
 - (B) 180 acres
 - (C) 210 acres
 - (D) 175 acres
 - (E) Answer not known

183. Rank Size Rule is based on
- (A) Population of the cities in an ascending order
 - (B) Quality of life of cities
 - (C) City size distribution
 - (D) Distribution of size by rank, in decreasing order of size
 - (E) Answer not known
184. In population data _____ method of forecast is particularly applicable to smaller cities that have fixed boundaries.
- (A) Holding capacity method
 - (B) Logistics curve method
 - (C) Matrix method
 - (D) Threshold method
 - (E) Answer not known
185. The II Five year plan emphasized on
- (A) Less developed area should receive dice attention
 - (B) Balanced regional development
 - (C) Identify the backward regions
 - (D) Problem based Area Programs
 - (E) Answer not known
186. The hypothetical industrial city called “Une Cite” Industrielle was designed by
- (A) Le Corbusier
 - (B) Robert Owen
 - (C) Antonio Sant’Elia
 - (D) Tony Garnier
 - (E) Answer not known

187. The regional planning for delineation of functional region Quantitative methods are used. Match the following:

- | | |
|-------------------------------|-----------------------------------|
| (i) Zipf's | (P) Polygon method |
| (ii) Christaller and Losche's | (Q) Gravity model |
| (iii) Thiessen | (R) Principle of 'Distance Delay' |
| (iv) Stewart's | (S) Central place theory |

- (A) (i)-(R) (ii)-(S) (iii)-(P) (iv)-(Q)
(B) (i)-(Q) (ii)-(P) (iii)-(S) (iv)-(R)
(C) (i)-(P) (ii)-(S) (iii)-(Q) (iv)-(R)
(D) (i)-(P) (ii)-(Q) (iii)-(R) (iv)-(S)
(E) Answer not known

188. The Spatial planning form of Srirangam town in Tamilnadu refers to

- | | |
|----------------------|-------------|
| (A) Swasthika | (B) Karmuka |
| (C) Chathurmuka | (D) Dandaka |
| (E) Answer not known | |

189. The move away from plan based on pure land use to inclusion of social, economic and infrastructure criteria resulted in

- | | |
|----------------------|--------------------|
| (A) Master plan | (B) Systems plan |
| (C) Local plan | (D) Structure plan |
| (E) Answer not known | |

190. In ancient town planning the plan of an Indo-Aryan town fairly reproduced on a grandeur scale the plan of an Indo-Aryan village. This reproduction is in conformity with the rules of _____ and _____.
- (A) Manasara and Mayamuni (B) Mansara and Mangalabithi
(C) Mayamuni and Nagamuni (D) Mansaras and Niagama
(E) Answer not known
191. _____ pricing ensures that new development always pays a proportionate share of the cost of replacing a unit of service in present value terms rather than the historical cost
- (A) Vintage (B) New
(C) Existing (D) Graded
(E) Answer not known
192. One of the following is not part of value capture methods
- (A) Land pooling system
(B) Transfer of development rights
(C) Transit oriented development
(D) Betterment levy
(E) Answer not known
193. As per the guidelines for procurement of PPP projects under Swiss challenge model _____ proposal means an infrastructure proposal submitted by a private sector participant “on its own motion”.
- (A) Suo-Moto (B) Su-Moto
(C) Public Need (D) Bidding project
(E) Answer not known

194. The Development Potential of the whole or a part of the plot or rite may be separated from the land itself and may be made available to the land owner in the form of
- (A) Transferable Development Rights
 - (B) Premium FSI
 - (C) Transit Development Rights
 - (D) Floating FSI
 - (E) Answer not known
195. Transferable Development Rights (TDR) as policy instrument shall be effective when they comply with
- (a) Developers want to buy DRC's and transfer them to receiving areas
 - (b) Landowners are willing to sell DRC's whole permanently restricting development in their land
 - (c) DRC's are expensive than market value of land is receiving area
 - (d) Landowners will be forced to sell DCR
- (A) (a) and (b)
 - (B) (b) and (c)
 - (C) (b) and (d)
 - (D) (a) and (d)
 - (E) Answer not known
196. In AMRUT programme, the Central Government release of funds will be in
- (A) Three instalments of 20:40:40
 - (B) Three instalments of 20:30:50
 - (C) Four instalments of 25:25:25:25
 - (D) Four instalments of 20:30:30:20
 - (E) Answer not known

197. National Rural Health Mission launched during April 2005, covers the entire country, but has a special focus on _____ states, identified to have weak public health indicators and/or weak health infrastructure
- (A) 18 (B) 12
(C) 21 (D) 28
(E) Answer not known
198. As per Rurban clusters, Building Development Guidelines, the parking norm for Mandi and godowns is
- (A) 2 ECS for 100 sq.m plot area
(B) 1 ECS for 200 sq.m plot area
(C) 0.5 ECS for 100 sq.m plot area
(D) 2 ECS for 200 sq.m plot area
(E) Answer not known
199. Social, economical and ecological equity is the necessary condition for achieving
- (A) Social development (B) Economic development
(C) Sustainable development (D) Ecological development
(E) Answer not known
200. _____ of the ministry of urban development, government of India is the key guiding policy at the national level focusing on urban transport in India
- (A) NUTP (B) NTUP
(C) NPUT (D) NMT
(E) Answer not known
-