

Question Booklet No. :

ARPA/2022

Register
Number

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2022
ARCHITECTURE
(Degree Standard)

Duration : Three Hours]

[Total Marks : 300

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1. You will be supplied with this question booklet 15 minutes prior to the commencement of the examination.
2. This question booklet contains 200 questions. Before answering the questions, you shall check whether all the questions are printed serially and ensure that there are no blank pages in the question booklet. **If any defect is noticed in the question booklet, it shall be reported to the invigilator within the first 10 minutes and get it replaced with a complete question booklet. If the defect is reported after the commencement of the examination, it will not be replaced.**
3. Answer all the questions. All the questions carry equal marks.
4. You must write your register number in the space provided on the top right side of this page. Do not write anything else on the question booklet.
5. An answer sheet will be supplied to you separately by the room invigilator to shade the answers. Instructions regarding filling of answers etc., which are to be followed mandatorily, are provided in the answer sheet and in the memorandum of admission (Hall Ticket).
6. You shall write and shade your question booklet number in the space provided on page one of the answer sheet with **BLACK INK BALL POINT PEN**. If you do not shade correctly or fail to shade the question booklet number, your answer sheet will be invalidated.
7. Each question comprises of five responses (answers) : i.e. (A), (B), (C), (D) and (E). You have to select **ONLY ONE** correct answer from (A) or (B) or (C) or (D) and shade the same in your answer sheet. If you feel that there are more than one correct answer, shade the one which you consider the best. **If you do not know the answer, you have to mandatorily shade (E).** In any case, choose **ONLY ONE** answer for each question. If you shade more than one answer for a question, it will be treated as a wrong answer even if one of the given answers happens to be correct.
8. You should not remove or tear off any sheet from this question booklet. You are not allowed to take this question booklet and the answer sheet out of the examination room during the time of the examination. After the examination, you must hand over your answer sheet to the invigilator. You are allowed to take the question booklet with you only after the examination is over.
9. **You should not make any marking in the question booklet except in the sheets before the last page of the question booklet, which can be used for rough work. This should be strictly adhered to.**
10. Failure to comply with any of the above instructions will render you liable for such action as the Commission may decide at their discretion.

SEAL

SPACE FOR ROUGH WORK



1. The Buddhist halls for prayer are called
- (A) Vihara
 - (B) Stupa
 - (C) Torana
 - (D) Chaitya Halls
 - (E) Answer not known
2. The accommodation of the Buddhist monks is known as
- (A) Viharas
 - (B) Chaityas
 - (C) Stupas
 - (D) Prastaras
 - (E) Answer not known
3. The _____ plan was the basis for the classical Greek temple planning.
- (A) Linear
 - (B) Cross
 - (C) Basilican
 - (D) Megaron
 - (E) Answer not known
4. The purpose of the pyramids in ancient Egypt is
- (A) To protect the body of the pharaohs to help it reach after life
 - (B) To create a stairway from heaven to earth
 - (C) To create a memorial for the Pharaoh
 - (D) To provide jobs for the Egyptian people
 - (E) Answer not known
5. The diameter of the dome of the Pantheon, Rome is
- (A) 37.5 m
 - (B) 45 m
 - (C) 39 m
 - (D) 43.2 m
 - (E) Answer not known

6. The following are not the components of king post truss?
- (A) Tie beam (B) Two inclined principal rafter
(C) Two struts (D) Straining Beam
(E) Answer not known
7. The defect due to fungi in Timber, where the wood gets converted to a dry powder form is called
- (A) Brown Rot (B) Heart Rot
(C) Dry Rot (D) Wet Rot
(E) Answer not known
8. The following is not an additive used in concrete
- (A) Fibres (B) Silica fume
(C) Glass wool (D) Plasticizers
(E) Answer not known
9. In _____ cement mortar is reinforced with chicken wire mesh.
- (A) Reinforced cement concrete (B) Fibre reinforced concrete
(C) Ferro cement (D) High Density concrete
(E) Answer not known
10. During curing of concrete, the chemical reaction between the constituents of cement takes place only when the percentage (%) of humidity is
- (A) 98% (B) 95%
(C) 90% (D) 84%
(E) Answer not known
11. The density of Aerated concrete is
- (A) 1000 – 1900 Kg/m³ (B) 480 – 800 Kg/m³
(C) 2200 – 2600 Kg/m³ (D) 3300 – 3800 Kg/m³
(E) Answer not known

12. At what stage of settlement planning a city serves as a capital of state or region
- (A) Metropolis (B) Polis
(C) Ecopolis (D) Megalopolis
(E) Answer not known
13. According to the town planner Doxiadis, the development of the city which undergoes parallel development of several Dynapolises in different direction is called as
- (A) Dynametropolis
(B) Ecumenopolis
(C) Dynapolis
(D) Dynamegapolis
(E) Answer not known
14. The "Broad Acre city" was conceived by
- (A) Le corbusier (B) Paolo solari
(C) F.L. Wright (D) Buckminster fuller
(E) Answer not known
15. During 19th century in Europe and USA many new banks, hotels, libraries and other public buildings were erected in the _____ style with papyrus and lotus column ornamentations.
- (A) Egyptian (B) Greek
(C) Rome (D) Byzantine
(E) Answer not known
16. The Courtyard house is the most common prototype of vernacular dwelling which is a good example of controlling.
- (A) Microclimate (B) Macroclimate
(C) Moisture (D) Wind
(E) Answer not known

17. To determine the boundaries and area of parcel of land is known as
(A) Cadastral survey (B) Engineering survey
(C) Route survey (D) Astronomical survey
(E) Answer not known
18. In levelling, the measurements are taken in
(A) Vertical plane (B) Inclined plane
(C) Horizontal plane (D) Vertical and Horizontal plane
(E) Answer not known
19. The ratio method of slope description defines slope steepness as ratio of
(A) Horizontal dimension to vertical dimension
(B) Larger dimension to shorter elevation
(C) Shorter dimension to vertical elevation
(D) Vertical elevation to horizontal dimension
(E) Answer not known
20. Expansion of "EIA" in Environmental Laws
(A) Environmental Impact Assessment
(B) Ecological Impact Assessment
(C) Environmental Identity Assessment
(D) Ecological Identity Assessment
(E) Answer not known
21. _____ particles are large and travel few centimeters in air causing large amount of ionization.
(A) Alpha rays (B) Beta rays
(C) Gamma rays (D) Tungsten rays
(E) Answer not known

22. Which one of the following is not a characteristic feature of an event?
- (A) Either the start or completion
 - (B) Acts as a controlling point in a project
 - (C) Requires time and resources
 - (D) Does not require time and resources
 - (E) Answer not known
23. You have an activity where the early start is week 6, the early finish is week 10, the latest start is week 14 and the latest finish is week 18. The slack in this activity is
- (A) 8 weeks
 - (B) 6 weeks
 - (C) 4 weeks
 - (D) 18 weeks
 - (E) Answer not known
24. In self-climbing forms, _____ is placed into a continuous climbing.
- (A) Aggregate
 - (B) Mortar
 - (C) Cement
 - (D) Concrete
 - (E) Answer not known
25. In General 1.0 cubic yard natural conditions soil can replace _____ cubic yard after compaction.
- (A) 0.5 cubic yard
 - (B) 0.9 cubic yard
 - (C) 1 cubic yard
 - (D) 1.25 cubic yard
 - (E) Answer not known
26. The process of calculating the quantity of materials required to build a project is called
- (A) Measurements
 - (B) Volume
 - (C) Quantity survey
 - (D) Quality survey
 - (E) Answer not known

27. As per COA guidelines, the third prize for architectural competitions, for projects with built up area above 25,000 sq.m is
- (A) ✓ Rs.4 lakhs (B) Rs.3 lakhs
(C) Rs.2 lakhs (D) Rs.3.5 lakhs
(E) Answer not known
28. An architect may exhibit his name outside his office, provided the lettering does not exceed _____ in height.
- (A) Not exceeding 16 cms (B) Not exceeding 14 cms
(C) Not exceeding 12 cms (D) ✓ Not exceeding 10 cms
(E) Answer not known
29. The council of Architecture – Statuary authority constituted under the :
- (A) The Architects Act, 1964 (B) The Architects Act, 1970
(C) ✓ The Architects Act, 1972 (D) The Architects Act, 1962
(E) Answer not known
30. This function is NOT suitable in warm humid climate?
- (i) Evaporative cooling
(ii) Humidification
(iii) Washing the air
- (A) (i) (B) ✓ (ii)
(C) (iii) (D) (i) and (ii)
(E) Answer not known
31. The minimum fees for comprehensive architectural services in architectural conservation and retrofitting projects as per COA is
- (A) 5.5% on the cost of works assigned
(B) 6.5% on the cost of works assigned
(C) ✓ 7.5% on the cost of works assigned
(D) 8.5% on the cost of works assigned
(E) Answer not known

32. The instrument used to measure the shadow angles is called
- (A) Solar chart (B) Shadow angle protractor
(C) Sun path diagram (D) Perimeter scale
(E) Answer not known
33. The factors that affect the thermal comfort of people and energy use in buildings are
- (A) Temperature and humidity
(B) Landform and vegetation
(C) Time-lag and decrement factor
(D) Thermal capacity and specific heat of building materials
(E) Answer not known
34. The temperature of a still, saturated atmosphere, which would in the absence of radiation produce same effect as the atmosphere is called
- (A) Corrected temperature (B) Effective temperature
(C) Operative temperature (D) Predicted temperature
(E) Answer not known
35. The transmittance value (U Value) of a material is expressed in
- (A) $J/m^3 \text{ degC}$ (B) $W/m^2 \text{ degC}$
(C) $J/m^2 \text{ degC}$ (D) $W/m^3 \text{ degC}$
(E) Answer not known
36. The Angle between a line due South and the shadow cast by a vertical rod on Earth is defined as
- (A) Horizontal shadow angle
(B) Cosine law
(C) Altitude angle
(D) Azimuth angle
(E) Answer not known

37. _____ is made of multiple centers that are cities, towns and villages each with its own identifiable center.
- (A) Monopolis
 - (B) Metropolis
 - (C) Dyanamopolis
 - (D) Cosmopolis
 - (E) Answer not known
38. The process of settlement formation, expansion and change is called
- (A) Population shift
 - (B) Urbanisation
 - (C) Post modern expansion
 - (D) City growth
 - (E) Answer not known
39. Mohallas in walled city of Delhi is also referred as
- (A) Neighbourhood centre
 - (B) Commercial centre
 - (C) Religious centre
 - (D) Industrial centre
 - (E) Answer not known
40. A measurement of all travel in and out of a defined area is
- (A) Travel count
 - (B) Transit count
 - (C) Cordon count
 - (D) Pardon count
 - (E) Answer not known

41. Identify the false statement when air conditioning a guestroom in a large Hotel.
- (A) The sensible heat load of a room is generally low
 - (B) Prevention of transmission of noise from one room to another must be considered
 - (C) Each room need not have an independent temperature control
 - (D) Transmission of odours from one room to another should be avoided
 - (E) Answer not known
42. Passive design strategies, not suitable for hot-dry climates
- (A) An enclosed compact plan
 - (B) Shading devices
 - (C) Small enclosed courtyards
 - (D) Large openings during day
 - (E) Answer not known
43. The desirable minimum Airchanges Per Hour (ACH) for a class room as per NBC 2016 is
- (A) 5-7
 - (B) 15-20
 - (C) 30-35
 - (D) 3-5
 - (E) Answer not known
44. The Electrical distribution, which offers for flexibility for future-replanning and in large office spaces where desks are placed remote from walls, is
- (A) Duct-tube system
 - (B) Floor-trunking system
 - (C) Over head distribution system
 - (D) Skirting trunking system
 - (E) Answer not known

45. A concrete masonry unit with transverse openings to permit ventilation excluding sunlight is called
 (A) Camboge (B) Calyon
 (C) Callotte (D) Calyx
 (E) Answer not known
46. Match the philosophies of architects in Group A with the architect who quoted it in Group B
- | | |
|--|---|
| Group A
(a) Architecture is the play of forms under light
(b) Function follows form
(c) Design is deeply rooted in local cultures
(d) Concept of unity in nature | Group B
1. F.L. Wright
2. Charles Correa
3. Mies Vande Rohe
4. Le Corbusier |
|--|---|
- | | | | |
|---|-----|-----|-----|
| (a) | (b) | (c) | (d) |
| (A) 2 | 1 | 4 | 3 |
| (B) 2 | 1 | 3 | 4 |
| (C) 3 | 4 | 1 | 2 |
| (D) <input checked="" type="checkbox"/> 4 | 3 | 2 | 1 |
- (E) Answer not known
47. Atmospheric perspective refers to the progressive muting, that occur with increasing of distance from the observer.
 (A) of hues, tonal value and contrast (B) of point, line and texture
 (C) of colour, tones and texture (D) of spacing, texture and density
 (E) Answer not known
48. A raised platform, approached by steps at the entrance of house is called
 (A) Courtyard (B) Stoop
 (C) Fore court (D) Piloti
 (E) Answer not known
49. Technique for rendering atmospheric perspective involves mute colors, lighten values and soften contrast, which will
 (A) move objects back (B) move objects forward
 (C) move objects both back and forward (D) move objects sideways
 (E) Answer not known
50. The form of a circulation space varies according to how
 1. its boundaries are defined
 2. its forms relates to the form of the space it links
 3. entrances open onto it.
 (A) 1 and 2 are true, 3 is false (B) 1 and 3 are false, 2 is true
 (C) 1, 2 and 3 are true (D) 1 is false, 2 and 3 are true
 (E) Answer not known

51. Identify the buildings designed by Charles Correa?
- (A) I.I.M. Bangalore (B) Asiad Village, New Delhi
(C) University of Jodhpur Campus (D) ✓ Tara group Housing, New Delhi
(E) Answer not known
52. Corbusier was inspired by the cooling towers of the power stations of Ahmedabad for the design of the _____ in Chandigarh.
- (A) Secretariat Building (B) City Centre
(C) High court (D) ✓ Assembly Building
(E) Answer not known
53. Tudor Arch is essentially a _____ centered arch.
- (A) Three (B) ✓ Four
(C) Two (D) Five
(E) Answer not known
54. Who designed New Delhi, the current capital of India?
- (A) E.B. Havell (B) Louis Kahn
(C) ✓ Sir Edwin Landseer Lutyens (D) Le Corbusier
(E) Answer not known
55. CIAM stands for
- (A) ✓ Congr's International Architecture Moderne
(B) Competition of International Architecture Moderne
(C) Cities of International Architecture Moderne
(D) Culture of International Architecture Moderne
(E) Answer not known

56. The base of Early greek temples are called as
- (A) Stereobate (B) Stereobase
(C) Stylobate (D) Stylobase
(E) Answer not known
57. The columns of the old Kingdom of Ancient Egypt had decorations of a _____ origin.
- (A) Animal (B) Inscriptional
(C) Vegetative (D) Human
(E) Answer not known
58. The geological name given to a group of hydrated, laminar materials which are aluminium-iron-magnesium silicates and resemble mica in appearance is known as
- (A) Asphalt (B) Bitumen
(C) Vermiculite (D) Balata
(E) Answer not known
59. Mineral fibres as insulating material are coated with oil and phenolic resin to make them,
- (A) Fire resistant (B) Water repellent
(C) Chemical resistance (D) Non-Combustile
(E) Answer not known
60. Most popular system of foundation in India, normally done by local masons without consulting professionals
- (A) Strip foundation
(B) Raft foundation
(C) Pile foundation
(D) Shot-bored pile foundation
(E) Answer not known

61. Rocks formed due to the actions of earth movements, temperature changes liquid pressures are called
- (A) Sedimentary rock (B) Plutonic rock
(C) Metamorphic rock (D) Stratified rocks
(E) Answer not known
62. The safe allowable compressive strength for brick masonry in 1:3 or 1:4 cement mortars is _____ t/m²
- (A) 125 (B) 175
(C) 200 (D) 225
(E) Answer not known
63. Identify one Characteristics which does NOT fall under the disadvantages of urban sprawl
- (A) High car dependence
(B) Inadequate facilities eg. cultural, emergency
(C) Low public support for sprawl
(D) Low per person Infrastructure costs
(E) Answer not known
64. Name the tool that guides the development of the new areas in accordance with the Land use plan
- (A) Sub-division regulations (B) Density population
(C) FSI (D) Plot coverage
(E) Answer not known
65. A factor in which Rural to urban migration is happening on a massive scale due to population pressure and lack of resources in rural areas.
- (A) Push factor (B) Pull factor
(C) Both push and pull factor (D) Drought
(E) Answer not known

66. As per the traditional town planning principles Nandyavarta (Town plan) resembles which of the following
- (A) Flower shaped (B) Lotus shaped
(C) Bow shaped (D) Star shaped
(E) Answer not known
67. In Ancient planning text, the measurement of 10 dandas = _____ feet
- (A) 100 (B) 60
(C) 80 (D) 40
(E) Answer not known
68. Identify the Bi-lateral agency which provides aid to developing countries from its own government.
- (A) Organization for Economic Cooperation and Development (OECD)
(B) US Agency for International Development (USAID)
(C) Asian Development Bank (ADB)
(D) World Bank
(E) Answer not known
69. Rank the following in terms of run-off retention
- (i) Thin extensive green roofs
(ii) Intensive green roofs
(iii) Brown roofs
- (A) (i), (ii) and (iii) (B) (ii), (i) and (iii)
(C) (iii), (ii) and (i) (D) (ii), (iii) and (i)
(E) Answer not known
70. The vertical section of the layers of soil is known as soil
- (A) Horizon (B) Lamina
(C) Profile (D) Strata
(E) Answer not known

71. The liquid form of aerosol is
- (A) Dust
 - (B) Fog
 - (C) Mist
 - (D) Smoke
 - (E) Answer not known
72. The disposal method of pyrolysis follows the processes of
- (A) Evaporation
 - (B) Condensation
 - (C) Distillation
 - (D) Fermentation
 - (E) Answer not known
73. The term 'Noosystem' was used by _____ in 1978.
- (A) Barrett
 - (B) Lock whistler
 - (C) Locks wheeler
 - (D) Tansley. A
 - (E) Answer not known
74. In project management, The process of establishing a structural relationship among functions of people is called
- (A) Planning
 - (B) Leading
 - (C) Organising
 - (D) Staffing
 - (E) Answer not known

75. Contraction joint allows
- (A) Proper bond between old and new concrete
 - (B) Expansion movement
 - (C) Shrinkage movement
 - (D) Higher strength of concrete
 - (E) Answer not known
76. Renewal of the foundation is carried out by
- (A) Shoring method
 - (B) Scaffolding method
 - (C) Underpinning method
 - (D) Tremie method
 - (E) Answer not known
77. In tower crane, the diameter of coil is cable way
- (A) 75 mm
 - (B) 25 mm
 - (C) 50 mm
 - (D) 100 mm
 - (E) Answer not known
78. Construction method in which formwork is continuously risen vertically as a work process and generally used to construct core wall, lift shafts etc. is called as
- (A) Engineered Formwork method
 - (B) Flexible Formwork method
 - (C) Slip forming Formwork method
 - (D) Re-usable plastic Formwork method
 - (E) Answer not known

79. _____ is a right which the owner or occupier of certain land possesses for the benefit enjoyment of land.
- (A) Dispute (B) Right to act
(C) Easement (D) Arbitration
(E) Answer not known
80. NBO is an abbreviation of
- (A) National Building Organisation (B) Network Building Organisation
(C) Native Building Organisation (D) National Building Operation
(E) Answer not known
81. What is the possible temperature depression of radiant cooling during Humid nights and clear nights?
- (A) 7° F and 10° F (B) 7° F and 12° F
(C) 10° F and 12° F (D) 10° F and 14° F
(E) Answer not known
82. Expansion of 'ASHRAE'.
- (A) The American Society of High Rise Buildings and Environment
(B) The American Society of Heating, Refrigerating and Air Conditioning Engineers
(C) Association of Sustainable High Rise Buildings and Air conditioning Engineers
(D) The American Society of Heating, Refrigeration and Energy
(E) Answer not known.
83. The passive solar elements can be divided into two groups as
- (A) The passive heating and passive cooling elements
(B) Trombe wall systems and Earth Channels
(C) Passive and Active Solar systems
(D) Heat collectors and heat transporters
(E) Answer not known

84. Environmental factors that determine human thermal comfort include air temperature, air velocity, relative humidity and
- (A) Radiant temperature
 - (B) Clothing
 - (C) Metabolic Rate
 - (D) Activity
 - (E) Answer not known
85. Instrument used for measuring relative humidity is
- (A) Thermometer
 - (B) Hygrometer
 - (C) Anemometer
 - (D) Pyranometer
 - (E) Answer not known
86. This is of least importance in an inventory sheet used for documenting heritage buildings
- (A) Name, photo and age of the building
 - (B) Address of the building with location map
 - (C) Name of the documenting person and date of documentation
 - (D) Photo of person who had documented the site
 - (E) Answer not known
87. The term "ICOMOS" refers to
- (A) International council of Monuments and sites
 - (B) International council for Monuments and sites
 - (C) International council in Monuments and sites
 - (D) International council for Monuments and structures
 - (E) Answer not known
88. The existing sound buildings are preserved or retained in their position by the application of certain bye-laws and ordinance from the local authority is called as
- (A) Conservation
 - (B) Modification
 - (C) Maintenance
 - (D) Protection
 - (E) Answer not known

89. The physical material of a building or artefact is called
- (A) Texture
 - (B) Cloth
 - (C) Fabric
 - (D) Delude
 - (E) Answer not known
90. Carved male figures used as a column in classical architecture is called
- (A) Atlantes
 - (B) Caryatid
 - (C) Andron
 - (D) Nebulos
 - (E) Answer not known
91. _____ are the meaning associated with an object or a phenomenon, or classes of objects and phenomena.
- (A) Concrete meaning
 - (B) Symbolic meaning
 - (C) Visual meaning
 - (D) Haptic meaning
 - (E) Answer not known
92. The special use areas, which are necessarily dominated by a single primary activity at regional level is
- (A) Districts
 - (B) Centers
 - (C) Preserves
 - (D) Corridor
 - (E) Answer not known

93. The switches used in a lighting load sub-circuit in a domestic supply, must be of rating
- (A) 5A, 200V
 - (B) ✓ 5A, 250V
 - (C) 15A, 200V
 - (D) 15A, 250V
 - (E) Answer not known
94. In a capping wiring system, the casing is generally kept at a distance of 3.2 mm away from the wall or ceiling, mainly to
- (A) ✓ to protect the casing from dampness
 - (B) to protect the casing from fire
 - (C) to protect the casing from mechanical shocks
 - (D) to protect the casing from cracking due to structural damages
 - (E) Answer not known
95. A septic tank functions on the principle of
- (A) ✓ Bio-chemical reaction by Anaerobic digestion
 - (B) Incineration
 - (C) Composting
 - (D) Biological treatment unit based on Aerobic digestion
 - (E) Answer not known
96. BOD of sewage refers to
- (A) Biological Oxygen Demand
 - (B) Biophysical Oxygen Demand
 - (C) ✓ Biochemical Oxygen Demand
 - (D) Biological Oxygen Disposal
 - (E) Answer not known

97. A beam supporting the weight above a door or window opening is
(A) Loggia (B) Mactrasah
(C) Lintel (D) Harmony
(E) Answer not known
98. The configuration of surface features of a plot of land is called
(A) Geology (B) Paleo geography
(C) Topography (D) Historicity
(E) Answer not known
99. _____ refers to the measurements of the size and proportions of the human body.
(A) Trigonometry (B) Ergonomics
(C) Anthropometry (D) Design thinking
(E) Answer not known
100. _____ refers to a line, plane or volume of reference to which other elements in a composition can relate
(A) form (B) unity
(C) hierarchy (D) datum
(E) Answer not known
101. An equal distribution of weight, relationship or forces
(A) Equipoise (B) Equilibrium
(C) Counterpoise (D) Equality
(E) Answer not known
102. _____ shadows are generally darkest where they meet a surface in shade, becoming lighter towards its outer edge
(A) Rendered (B) Non linear
(C) Linear (D) Cast
(E) Answer not known

103. "—————" is associated with the emergence of new materials like steel, concrete and glass, which enabled the construction of sky scrapers.
- (A) Cubism
 - (B) Modernism
 - (C) Contemporary
 - (D) TEAM X
 - (E) Answer not known
104. The balustrade around the balconies of the Qutb Minar has stepped battlements or merlous called
- (A) Kanjuras
 - (B) Hirah
 - (C) Chajja
 - (D) Chadar
 - (E) Answer not known
105. The important features of Indo Islamic Architecture are
- (A) Massive columns with Broader capitals
 - (B) Precise and Harmonious patterns
 - (C) Elaborate Geometric Decorations
 - (D) Square and Grid ground plans
 - (E) Answer not known
106. The Arabic script that is simple, cursive and generally without diacritical marks?
- (A) Kufic
 - (B) Maghribi
 - (C) Hijazi
 - (D) Andalusí
 - (E) Answer not known

107. _____ are added to the paint to make it thin so that it can be easily applied on the surface.
- (A) Solvent (B) Base
(C) Binder (D) Drier
(E) Answer not known
108. One of the following is not a carrier in the ingredient of paints
- (A) Linseed oil
(B) Poppy oil
(C) Nut oil
(D) Naptha oil
(E) Answer not known
109. The asphalt that cannot be used for water proofing?
- (A) Asphaltic cement
(B) Asphaltic emulsion
(C) Cut-back Asphalt
(D) Mastic Asphalt
(E) Answer not known
110. The glass that provides undistorted vision
- (A) Float glass (B) Frosted glass
(C) Wired glass (D) Fibre glass
(E) Answer not known
111. In medium carbon steel, the percentage of carbon content is
- (A) 0.3 - 0.8 (B) 0.8 - 0.14
(C) 0.15 - 0.3 (D) 0.2 - 0.25
(E) Answer not known

112. The resources like railways, irrigation projects, heavy industries, hydroelectric works, etc suggests the setting up of which forms of planning
- (A) National planning (B) International planning
 (C) Country planning (D) Regional planning
 (E) Answer not known
113. As per CRZ Notification 2019, A _____ has been demarcated by the survey of India taking into account the extent of the flooding on the land area due to water level fluctuations, sea level rise and shoreline changes (erosion or accretion) occurring over a period of time
- (A) Hazard line (B) Demarcation line
 (C) Buffer line (D) High Tide line
 (E) Answer not known
114. The maximum travel distance to exists on a floor for educational institutions is
- (A) 22.5 m (B) 30.0 m
 (C) 150 feet (D) 200 feet
 (E) Answer not known
115. According to CRZ-I, No new construction shall be permitted except
- (A) Projects relating to department of atomic energy
 (B) Resort projects
 (C) Institutional projects
 (D) Recreational projects
 (E) Answer not known
116. In urban Renewal, which term refers to the removal of buildings from blighted area which have completed their useful life and thus beyond conservation and proposing new structures?
- (A) Redevelopment (B) Rehabilitation
 (C) Restoration (D) Renovation
 (E) Answer not known

117. Planting in landscape design refers to
(A) Plants (B) Stone
(C) Street (D) Water
(E) Answer not known
118. Trees organised on a grid in French formal gardens is known as
(A) Bosquet (B) Buxus
(C) Grove (D) Plantation
(E) Answer not known
119. The modification of landform is termed as
(A) Grading (B) Leveling
(C) Resculpting (D) Regrading
(E) Answer not known
120. The minimum required designated parking areas should be provided in the parking lot as per NBC – 2016
(A) 1 Designated parking upto 30 parking space
(B) 2 Designated parking upto 20 parking space
(C) 4 Designated parking upto 50 parking space
(D) 3 Designated parking upto 100 parking space
(E) Answer not known
121. _____ are tray gardens composed solely of white sand, pebbles and small rocks.
(A) Bonseki
(B) Topiary
(C) Karesansui
(D) Plant sculpting
(E) Answer not known

122. In a Critical Path Method (CPM), the latest event time (T_L) is computed using
- (A) Backward pass
 - (B) Forward pass
 - (C) Both Backward and Forward pass
 - (D) Optimistic time estimate
 - (E) Answer not known
123. Which one of the activity times is not used in Critical Path Method (CPM)?
- (A) Earliest start time
 - (B) Earliest finish time
 - (C) Latest start time
 - (D) Most likely time
 - (E) Answer not known
124. An unbroken chain of activity arrows connecting the initial event to some other event
- (A) Event
 - (B) Activity
 - (C) Network
 - (D) Path
 - (E) Answer not known
125. For large, one-time research and development type 4 projects. Which one is used for analysis.
- (A) CPM Analysis
 - (B) Fulkerson's Rule
 - (C) PERT Analysis
 - (D) Deterministic Approach
 - (E) Answer not known

126. In Residential PUDs, a minimum of _____ of the net area must be common open space.
- (A) 10% (B) 20%
(C) 30% (D) 40%
(E) Answer not known
127. This is not an editing command in AUTOCAD?
- (A) Copy (B) Trim
(C) Extend (D) Hatch
(E) Answer not known
128. In 3D model viewing, the _____ allows us to change the types as, wire frame, hidden or shaded.
- (A) View Orientation (B) View Manipulation
(C) Orbits (D) View modes
(E) Answer not known
129. The tool that lets one create and edit multiple views in an AUTOCAD Drawing is
- (A) View port (B) UCS
(C) Surface (D) Layer
(E) Answer not known
130. To place a number of identical entities uniformly at specified location both rectangularly or circularly, the command used is
- (A) Copy
(B) Move
(C) Array
(D) X-ref
(E) Answer not known

131. The design strategy that is recommended for warm-humid climates.

- (A) Adequate air movement
- (B) Evaporative cooling
- (C) Wall material with high U-value
- (D) More glazing on the west
- (E) Answer not known

132. In day light factor, constant ratio is expressed as

- (A) $DF = \frac{E_i}{E_o} \times 100\%$
- (B) $DF = \frac{I_i}{I_o} \times 100\%$
- (C) $DF = \frac{R_i}{R_o} \times 100\%$
- (D) $DF = \frac{S_i}{S_o} \times 100\%$
- (E) Answer not known

133. In areas where the sky is bright and its high luminance can cause glare, it is advisable to

- (A) have tall windows
- (B) permit view of sky and ground near the horizon only
- (C) avoid sunshades and louvres
- (D) make the opening as big as possible
- (E) Answer not known

134. In Aerogels, a commonly used building insulation materials.

- (A) the liquid component of the gel is replaced with gas
- (B) the gas component is replaced with gel
- (C) the liquid component of the gel is replaced with resilient materials
- (D) the gas component is replaced with mercury
- (E) Answer not known

135. Thermal resistance 'R' is expressed by

- (A) $R = k \left(\frac{1}{C} - \Delta L \right)$
- (B) $R = k / C - \Delta L$
- (C) $R = \frac{1}{C} = \frac{\Delta L}{k}$
- (D) $R = \frac{k}{\Delta L} = CA$
- (E) Answer not known

136. The term "ASI" refers to
- (A) Architectural Society of India
 - (B) Archaeological Survey of India
 - (C) Ancient Survey of India
 - (D) Architectural Survey of India
 - (E) Answer not known
137. This is not a public housing agency in India
- (A) State Housing Boards
 - (B) Slum Clearance Board
 - (C) Co-operative Housing Society
 - (D) Municipal Corporations
 - (E) Answer not known
138. The Trump World Tower in New York City is one of the world's tallest
- (A) Mixed use skyscraper
 - (B) Commercial Complex
 - (C) Residential Building
 - (D) Institutional Building
 - (E) Answer not known
139. The width of public walks for physically challenged persons as per URDPFI guidelines should be a minimum of
- (A) 1.0 m
 - (B) 1.2 m
 - (C) 1.5 m
 - (D) 1.8 m
 - (E) Answer not known
140. As per Higher education norms for providing a college of 1000-1500 student strength of URDPFI guidelines is a population of
- (A) 1.25 lakh
 - (B) 1.50 lakh
 - (C) 1.75 lakh
 - (D) 2.00 lakh
 - (E) Answer not known

141. The following material / condition has the highest noise reduction coefficient.
- (A) Terrazo
 - (B) Carpet
 - (C) Seating occupied
 - (D) Seating Unoccupied
 - (E) Answer not known
142. A driving force in tune with natural frequency of an oscillator can build up larger amplitudes than the oscillator could alone. This build up is known as
- (A) Resonance
 - (B) Reverberation
 - (C) Wavelength
 - (D) Frequency
 - (E) Answer not known
143. A podium may be permitted in a plot of area _____ or above.
- (A) 500 sq.m
 - (B) 1000 sq.m
 - (C) 1500 sq.m
 - (D) 2000 sq.m
 - (E) Answer not known
144. The maximum travel distance to the exits for fire and life safety standards of NBC India for a residential building type 1 and 2 is
- (A) 22.50 m
 - (B) 30.00 m
 - (C) 45.00 m
 - (D) 60.00 m
 - (E) Answer not known

145. In plumbing vent systems are essential for
- (A) Allowing users to open and close it when needed
 - (B) Ventilating the toilets and urinals
 - (C) Protecting trap seals from siphonage and back pressure
 - (D) systemizing the ventilation process
 - (E) Answer not known
146. As per NBC water requirements for factories is
- (A) 50 Litres per worker per day
 - (B) 60 Litres per worker per day
 - (C) 40 Litres per worker per day
 - (D) 70 Litres per worker per day
 - (E) Answer not known
147. Water requirements for offices is
- (A) 55 Litres per head per day
 - (B) 25 Litres per head per day
 - (C) 35 Litres per head per day
 - (D) 45 Litres per head per day
 - (E) Answer not known
148. Average Domestic water consumption for flushing of Latrines in toilets as per IS : 1172-1171 is
- (A) 30 litres / day / person
 - (B) 40 litres / day / person
 - (C) 20 litres / day / person
 - (D) 10 litres / day / person
 - (E) Answer not known

149. The Tonal Value for the colour blue is
- (A) 3 (B) 7 ✓
(C) 5 (D) 4.5
(E) Answer not known
150. Any part of the elevation of a building having a plane surface with symmetrical boundaries is called
- (A) ✓ PANE (B) PROLOGUE
(C) GROTTA (D) ORIEL
(E) Answer not known
151. Find the odd one out
- (A) Menhir (B) Column of Marcus Aurelius
(C) Obelisk (D) ✓ Caryatid porch
(E) Answer not known
152. Fatehpur Sikri, India is an example for _____ organization.
- (A) Radial
(B) Semi circular
(C) ✓ Clustered
(D) Linear
(E) Answer not known
153. In architecture, the golden ratio responds to
- (A) ✓ 1: 1.618
(B) 1: 1.912
(C) 1: 2
(D) 1: 1.542
(E) Answer not known

154. The "Spear headed" fringe was used in the intrados of the pointed arch in the _____ in the Islamic style.
- (A) Alai Darwaza
(B) Jami Masjid, Ahmedabad
(C) Tomb of Mubarak Shah Sayyid
(D) Tin Darwaza
(E) Answer not known
155. The arch used primarily in the Islamic architecture of India is the
- (A) Horse shoe arch
(B) Corbelled arch
(C) 4 - Centred arch
(D) 2 - Centred arch
(E) Answer not known
156. The _____ window is a Characteristic feature of an Orissan Indo-Aryan temple.
- (A) Oriel
(B) Bay
(C) Arched
(D) Mullioned
(E) Answer not known
157. A series of monolithic temples called "Rathas" at Mahabalipuram widely known as _____ during the Pallava period.
- (A) Seven Pagodas
(B) Black Pagoda
(C) Arjuna's Penance
(D) Shore Temple
(E) Answer not known
158. The Shikara of the Indo-Aryan temple is crowned by the _____ at its summit.
- (A) Bada
(B) Cupola
(C) Amla
(D) Kalasa
(E) Answer not known

159. The phenomenon of passivation and self-healing is associated with
- (A) TMT steels
 - (B) High strength Low Alloys (HSLA) steels
 - (C) Steel
 - (D) Stainless steel
 - (E) Answer not known
160. These consist of small flat iron rivetted to the column components in a zigzag manner
- (A) Single Lacing
 - (B) Batten plates
 - (C) Double lacing
 - (D) Z type lacing
 - (E) Answer not known
161. The unit density of structural light weight concrete is
- (A) $1440 \text{ Kg/m}^3 - 1840 \text{ Kg/m}^3$
 - (B) $1900 \text{ Kg/m}^3 - 2240 \text{ Kg/m}^3$
 - (C) $2240 \text{ Kg/m}^3 - 2400 \text{ Kg/m}^3$
 - (D) $800 \text{ Kg/m}^3 - 1000 \text{ Kg/m}^3$
 - (E) Answer not known
162. The proportion of concrete mix 1:4:8 or 1:5:10 or 1:6:12 is used in
- (A) Mass concrete works of heavy walls, foundation footings, etc.
 - (B) Heavily loaded R.C.C. columns, footing arches of long span, etc.
 - (C) Water retaining structures, Piles, pre-cast products, etc.
 - (D) For all general works in buildings like beam, column, stairs, slab, etc.
 - (E) Answer not known
163. M15 grade of concrete approximates
- (A) 1 : 1 : 2 mix
 - (B) 1 : 2 : 4 mix
 - (C) 1 : 3 : 6 mix
 - (D) 1 : 5 : 3 mix
 - (E) Answer not known

164. This phenomenon refers to urban growth along transportation routes in linear form on both sides of road, taking advantage of accessibility, flow of goods and services
- (A) Urban sprawl
 - (B) Urban agglomeration
 - (C) Urban decay
 - (D) Leapfrog development
 - (E) Answer not known
165. Development of vacant or under utilized land within areas that are largely developed is
- (A) Inter development
 - (B) Mediate development
 - (C) Out Spring development
 - (D) Infill development
 - (E) Answer not known
166. What is the usual percentage of zoning allotted for Recreational zones in a town? As per URDPFI
- (A) 40% – 50%
 - (B) 15% – 20%
 - (C) 30% – 40%
 - (D) 5% – 10%
 - (E) Answer not known
167. The minimum built up area requirement for IT/ITES SEZs for Chennai city is
- (A) 50,000 sq.m
 - (B) 1,00,000 sq.m
 - (C) 2,00,000 sq.m
 - (D) 10,00,000 sq.m
 - (E) Answer not known

168. The planning of Mughal gardens were based on the concept of
- (A) Char bagh
 - (B) Kineaesthetics
 - (C) Human analogy
 - (D) Spirituality
 - (E) Answer not known
169. A _____ landscape is any portion of land surfaces that has been drastically altered and is not attractive or productive.
- (A) Undisturbed
 - (B) Pristine
 - (C) Disturbed
 - (D) Historic
 - (E) Answer not known
170. The climate at the site scale is called as _____ climate
- (A) Macro
 - (B) Meso
 - (C) Micro
 - (D) Topo
 - (E) Answer not known
171. The most familiar methods of managing storm water run-off are _____ which are usually "dry" basins that fill with water only during a rain.
- (A) Detention basin
 - (B) Discharge basin
 - (C) Drainage basin
 - (D) Cesspool
 - (E) Answer not known
172. The main principle of surveying is to work from
- (A) Part to the whole
 - (B) Whole to the part
 - (C) Higher to lower level
 - (D) Lower to higher level
 - (E) Answer not known

173. In Generalist organisation structure the staff authority is represented by
- (A) ✓ Horizontal line
 - (B) Vertical line
 - (C) Diagonal lines
 - (D) Circular closed lines
 - (E) Answer not known
174. The shortest possible time in which an activity can be achieved under ideal circumstances is known as
- (A) Pessimistic time estimate
 - (B) ✓ Optimistic time estimate
 - (C) Expected time estimate
 - (D) The most likely time estimate
 - (E) Answer not known
175. A technique that allows you to identify tasks that are necessary for project completion is known as
- (A) PERT
 - (B) ✓ Critical path method
 - (C) Positive slack method
 - (D) Total float method
 - (E) Answer not known
176. The complete process of CPM can be summarised by the following sequence
- (A) ✓ Describe → Determine → Predict → Analyse → Replan → Allocate → Develop
 - (B) Describe → Predict → Analyse → Determine → Replan → Allocate → Develop
 - (C) Describe → Determine → Predict → Allocate → Analyse → Replan → Develop
 - (D) Describe → Predict → Analyse → Allocate → Determine → Replan → Develop
 - (E) Answer not known

177. The function key shortcut F8 denote
- (A) Words (B) Help
(C) Ortho toggle (D) Tablet
(E) Answer not known
178. For in-house projects, the type of estimate can vary over the life cycle of a project. Identify the stage which is NOT part of the process.
- (A) Development stage (B) Conceptual stage
(C) Main stage (D) Termination stage
(E) Answer not known
179. The estimate which provides itemwise quantities of work, item wise unit rates and item wise expenditure in the construction project is
- (A) item rate estimate
(B) detailed estimate
(C) qualitative estimate
(D) quantitative estimate
(E) Answer not known
180. The unit of measurement for white washing 2 coats is
- (A) Cu.m (B) m
(C) m² (D) m³
(E) Answer not known
181. Minimum crushing strength of Bricks used in 1st class brick work shall be
- (A) 105 kg/cm²
(B) 250 kg/cm²
(C) 150 kg/cm²
(D) 78.5 kg/cm²
(E) Answer not known

182. Which of the following statement/s is / are True?
I. Radiation received by a surface is fully reflected.
II. Light coloured, smooth, shiny surfaces tend to have higher reflectance.
(A) I is false; II is true (B) Both I and II are false
(C) Both I and II are true (D) I is true; II is false
(E) Answer not known
183. The passive design strategy that is not effective for composite climate
(A) Time-lag more than 8 hours
(B) Courtyard type planning
(C) Massive walls with large shuttered openings in ground floor
(D) Light weight walls with large openings in the ground floor
(E) Answer not known
184. A glazed sun-oriented surface with a dark massive heat - storing wall behind is known as
(A) Curtain walls (B) Lean - to walls
(C) Trombe - wall - systems (D) Earth - channels system
(E) Answer not known
185. Evaporative cooling works best in which of the following climates?
(A) Hot-Dry (B) Warm humid
(C) Humid (D) Temperate
(E) Answer not known
186. Heat transfer through a building happens through the following ways
(A) Conduction, convection and radiation
(B) Conduction and Radiation only
(C) Conduction and evaporation
(D) Conduction, Convection and transmission
(E) Answer not known

187. The size of the group for Focussed group discussion as per URDPFI guidelines
- (A) 5-6 (B) 8-10
(C) 10-12 (D) 12-14
(E) Answer not known
188. According to norms for educational facilities of URDPFI guidelines, A primary school of 500 students strength should be provided for a population of
- (A) 2500 people
(B) 5000 people
(C) 7500 people
(D) 10,000 people
(E) Answer not known
189. The attributes of identity and structure of the mental image defines
- (A) Imageability
(B) Vitality
(C) Permeability
(D) Legibility
(E) Answer not known
190. The "Ancient Monuments Preservation Act" was passed in
- (A) 1901 (B) 1905
(C) 1904 (D) 1906
(E) Answer not known
191. Where there is a mixture of static possession and possession in movement, we find _____, the formation of slower activities.
- (A) Enclaves (B) Advantage
(C) Viscosity (D) Enclosure
(E) Answer not known

192. Every Interior courtyard shall be raised at least _____ above the determining ground level and shall be satisfactorily drained.
- (A) 100 mm (B) 150 mm
(C) 200 mm (D) 250 mm
(E) Answer not known
193. _____ systems are used as fire protection systems where the piping is subject to freezing.
- (A) Class I pipe (B) Class II pipe
(C) Dry pipe (D) Stand pipe
(E) Answer not known
194. This is not related to vertical movement systems.
- (A) Wall
(B) Staircase
(C) Ramp
(D) Elevator
(E) Answer not known
195. The shaft for travel of one or more elevator is called
- (A) Hoist way (B) Bumper
(C) Porticellus (D) Carriage way
(E) Answer not known
196. Where could a double-deck lift system apply?
- (A) Combined goods and passenger lift cars
(B) Commercial buildings of around 20 stories
(C) High speed long-travel lifts
(D) Low-speed short-travel lifts
(E) Answer not known

197. The Wedge-sloped or tapered units of bricks, stones forming the courses of an arch is called a

- (A) Crown
- (B) Skew-back
- (C) Voussoir
- (D) Intrados
- (E) Answer not known

198. In normal field of vision, the cone of vision is

- (A) 90°
- (B) 60°
- (C) 45°
- (D) 30°
- (E) Answer not known

199. Match the styles of architecture in Group A with the examples of building in Group B

- | Group A | | | Group B | |
|---|------------------|-----|---------|----------------------|
| (a) Prairie style | | | 1. | Falling waters |
| (b) Organic architecture | | | 2. | Dacca assembly house |
| (c) Classically romantic style | | | 3. | Unite 'd' habitation |
| (d) Modulor | | | 4. | Robie House |
| (a) | (b) | (c) | (d) | |
| (A) 3 | 1 | 4 | 2 | |
| (B) <input checked="" type="checkbox"/> 4 | 1 | 2 | 3 | |
| (C) 4 | 3 | 2 | 1 | |
| (D) 2 | 3 | 4 | 1 | |
| (E) | Answer not known | | | |

200. Vaults with six cells is called as

- (A) Groin Vault
- (B) Sexpartite Vault
- (C) Sixpartite Vault
- (D) Six Vault
- (E) Answer not known

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

SEAL