45/2014

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. For the application of a building permit, if the plot is owned by more than one person the application shall be submitted :
   (A) Jointly and signed by all suchpersons (B) Any one of the person
   (C) Need not be signed (D) None of the above

2. The width of every new street, public or private, intended for use as a cart or carriage way giving access to or through an organized industrial area with not less than six constituent units, shall be :
   (A) Minimum 5 meters (B) Minimum 15 meters
   (C) Minimum 10 meters (D) Minimum 3 meters

3. According to the use or character of occupancy any building which accommodates more than one use shall be classified in one of the following occupancies :
   (A) Character of occupancy in the ground floor
   (B) The most restrictive group
   (C) Character of occupancy of maximum area
   (D) None of the above

4. Fire escape stair case shall be provided for every buildings of :
   (A) Residential occupancies exceeding three storey's above ground level
   (B) Occupancies other than residential exceeding two storey's above ground level
   (C) Both of the above
   (D) None of the above

5. No leech pit, sock pit, refuse pit, earth closet or septic tank shall be allowed or made within a distance of :
   (A) 3 meters radius from any existing well used for supply of water for human consumption or domestic purposes
   (B) 10 meters radius from any existing well used for supply of water for human consumption or domestic purposes
   (C) 5 meters radius from any existing well used for supply of water for human consumption or domestic purposes
   (D) 7.5 meters radius from any existing well used for supply of water for human consumption or domestic purposes

6. When the work is executed wholly or in part with old materials or labour or carriage is provided by the Client, the percentage fees of the Architect shall be calculated as :
   (A) The work had been executed wholly by the contractor supplying all labour and new materials
   (B) The work is executed wholly or in part with old materials
   (C) This part of the work is not taken into account
   (D) Only 50% of the expense is considered considering the work had been executed wholly by the contractor

7. If the date of receiving and opening of tenders comes out to be a holiday :
   (A) The next working day will become to date of receiving or opening of tenders
   (B) The same day would only be considered
   (C) The previous day becomes the date of receiving or opening of tenders
   (D) The Tender becomes cancelled

8. All assembly buildings, whether existing or hereafter proposed, shall be classified in one of the following occupancies according to the use or character of occupancy, namely :
   (A) Group A
   (B) Group B
   (C) Group C
   (D) Group D

9. The Council Of Architecture (COA) constituted by the Government of India under the provisions of the Architects Act, 1972, enacted by the Parliament of India, which came into force on :
   (A) 1st October, 1972
   (B) 1st September, 1972
   (C) 1st July, 1972
   (D) 1st July, 1972

10. This is the most common type; it is mainly used where you have strong soil base and non-waterlogged areas. Most small buildings of just a floor are constructed with this type of foundation :
   (A) Strip foundation
   (B) Pad foundation
   (C) Raft foundation
   (D) Pile foundation

11. The low artificially built part of a structure which transmits the load of the structure to the ground is called :
   (A) Super structure
   (B) Lintel
   (C) Foundation
   (D) Column

12. When two slopes of a roof meeting at a ridge and two walls extend up to the ridge, the roof is called :
   (A) Gambrel roof
   (B) Hip roof
   (C) Mansard roof
   (D) Gable roof

13. A roof is designated as pitch roof if its slope is more than :
   (A) 10 degrees
   (B) 15 degrees
   (C) 30 degrees
   (D) 45 degrees

14. When a wall of a structure bears the weight and force resting upon it, conducting the vertical load from the upper structure to the foundation is called :
   (A) Column
   (B) Beams
   (C) Load bearing wall
   (D) Retaining wall

15. In traditionally constructed roofs, a double roof is a roof whose rafters are of such a length that they require an intermediate support. This support is usually a beam which is secured under the rafters at a point half way between the ridge and the wallplate. This beam is known as :
   (A) Rafters
   (B) Purlin
   (C) Strut
   (D) Joist

16. The art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, quality and participation satisfaction :

(A) Contract
(B) Project management
(C) Consultancy
(D) Supervision

17. Give the expansion of PERT :

(A) Project Evaluation and Review Method
(B) Project Estimation and Review Method
(C) Program Evaluation and Review Method
(D) Program Estimation and Review Method

18. The emergency which includes technological or industrial accidents, usually involving hazardous material, and occur where these materials are produced, used or transported are termed as :

(A) Natural disasters
(B) Environmental emergencies
(C) Complex emergencies
(D) Pandemic emergencies

19. A 2-dimensional line with no form or thickness. These are fiat and can be grouped into two categories, geometric and organic. This is known as :

(A) Shape
(B) Form
(C) Space
(D) Area

20. In design, this is concerned with the area deep within the moment of designated design; the design will take place on. For a two-dimensional design *this*' concerns creating the illusion of a third dimension on a flat surface. What is '*this*'?

(A) Shape
(B) Form
(C) Space
(D) Area

21. A 3-dimensional object having volume and thickness. It is the illusion of a 3-D effect that can be implied with the use of light and shading techniques. This can be viewed from many angles :

(A) Shape
(B) Form
(C) Space
(D) Area

22. Which of the following principles could be applied to the elements of design that bring them together into one design of contrast in Space :

(A) Filled / Empty
(B) Near / Far
(C) 2-D / 3-D
(D) All of the above

23. Which of the following principles could be applied to the elements of design that bring them together into one design of contrast in Form :

(A) Large / Small
(B) Deep / Shallow
(C) Simple / Complex
(D) None of the above

24. Which of the following are considered as the elements of design :

(A) Line, Shape, Direction
(B) Size, Texture, Colour
(C) Both of the above
(D) None of the above

25. Principles of design deals with the following :
    (A) Balance, Proximity, Alignment, Repetition, Contrast and Space
    (B) Line, Shape, Direction, Size, Texture and Colour
    (C) Both of the above
    (D) None of the above

26. This is the principle of design which strengthens a design by tying together individual elements. This also helps to create association and consistency :
    (A) Balance
    (B) Repetition
    (C) Contrast
    (D) Space

27. Which principle deals with visual composition in design? Composition means the relationship between the visual elements. The brick work, timber and concrete which we use as building materials for protection from weather or for structural support form the visual composition of architectural composition :
    (A) Balance
    (B) Repetition
    (C) Contrast
    (D) Unity

28. In architecture, harmony can be described as the pleasing interaction or appropriate orderly combination of the elements in a composition. Harmony can be of :
    (A) Colour, Tone
    (B) Direction
    (C) Proportion, Form
    (D) All of the above

29. This basic theory is concerned with the arrangement or categorisation of elements that relate to one another. To understand why, when elements of a similar nature are grouped together the information becomes a visual unit. Which is this basic design principle?
    (A) Proximity
    (B) Repetition
    (C) Contrast
    (D) Emphasis

30. A basic design principle which refers to the relative size and scale of the various elements in a design. This gives meaning to the relationship between objects, or parts, of a whole. Scale is used to create the contrasting relationship of size between elements in a composition :
    (A) Repetition
    (B) Unity
    (C) Balance
    (D) Visual Hierarchy

31. The combination of opposing elements in a composition that results in visual stability, the concept of visual equilibrium :
    (A) Symmetry
    (B) Balance
    (C) Unity
    (D) Rhythm

32. This design principle refers to the organisation of elements in which a balanced visual hierarchy is achieved through the alignment of graphics along a horizontal or vertical axis. This means that your design can be reflected precisely over a central axis like a mirrored image :
    (A) Balance
    (B) Rhythm
    (C) Symmetry
    (D) Repetition

33. An effective use of this principle enables you to add interest to your design by highlighting specific graphic elements. This will result in a more visually striking composition. To achieve this it is employed as a means of creating a visual hierarchy among different graphic elements. It can be applied to graphic elements, as light, dark, warm, cool, large, small; etc. :

(A) Contrast
(B) Dynamics
(C) Emphasis
(D) Direction

34. The primary elements of visual perception are :

(A) Balance, Emphasis, and Movement (Dynamics)
(B) Line, Shape/Form Color, Value (Light), Space, and Texture
(C) Both of the above
(D) None of the above

35. The period within the stone age from 10,000 BCE – 8,000 BCE is known as the :

(A) Paleolithic Period
(B) Neolithic Period
(C) Mesolithic Period
(D) Iron Age

36. Our understanding of prehistoric art and culture remains somewhat elusive for which of the following reasons?

(A) There are not enough surviving artifacts to provide a coherent sense of Prehistoric art
(B) Prehistoric art was created before the 'development of writing systems
(C) Scholars have not yet deciphered the written languages of prehistoric peoples
(D) The documents left by prehistoric peoples contradict themselves

37. Ancient architecture is characterized by the tension between the divine and mortal world. Cities would mark a contained sacred space over the wilderness of nature outside, and the temple or palace continued this order by acting as a house for the gods. The architect, being the priest or king, was not the sole important figure; he was merely part of a continuing tradition :

(A) Ancient Egyptian Architecture
(B) Greek Architecture
(C) Roman Architecture
(D) Byzantine Architecture

38. Civic life was sustained by new, open spaces called the agora which were surrounded by public buildings, stores and temples. The agora embodied the newfound respect for social justice received through open debate rather than imperial mandate. The agora is found in which period :

(A) Roman Architecture
(B) Byzantine Architecture
(C) Islamic Architecture
(D) Greek Architecture

39. During this period buildings increased in geometric complexity, brick and plaster were used in addition to stone in the decoration of important public structures, classical orders were used more freely, mosaics replaced carved decoration, complex domes rested upon massive piers, and windows filtered light through thin sheets of alabaster to softly illuminate interiors :

(A) Roman Architecture
(B) Byzantine Architecture
(C) Islamic Architecture
(D) Greek Architecture

40. The Church of St. Anne which is cast in the Indian Baroque Architectural style under the orientation of the most eminent architects of the time. It is a prime example of :
(A) Ancient Indian art of construction blended with Greek styles
(B) Roman Architecture
(C) The blending of traditional Indian styles with western European architectural styles
(D) Persian Architecture

41. Number of architects around the world began developing new architectural solutions to integrate traditional precedents with new social demands and technological possibilities, This movement is known as :
(A) Beaux – Arts
(B) Modern Architecture
(C) Renaissance
(D) Art Nouveau

42. Architectural movement that developed in Northern Europe during the first decades of the 20th century in parallel with the expressionist visual and performing arts was :
(A) Beaux – Arts
(B) Expressionist architecture
(C) Renaissance
(D) Art Nouveau

43. The notion that "*Form follows function*", meaning that the result of design should derive directly from its purpose, a dictum originally was expressed by :
(A) Frank Lloyd Wright
(B) Walter Gropius
(C) Ludwig Mies van der Rohe
(D) Le Corbusier

44. Who was the German architect and founder of the Bauhaus School, widely regarded as one of the pioneering masters of modern architecture :
(A) Ludwig Mies van der Rohe
(B) Le Corbusier
(C) Frank Lloyd Wright
(D) Walter Adolph Georg Gropius

45. Who was the architect of '*open hand monument*' :
(A) Luis khan
(B) Le Corbusier
(C) Charles chorea
(D) Hafiz Contractor

46. Architectural interest centered on the dissolution and reconstitution of three-dimensional form, using simple geometric shapes. juxtaposed without the illusions of classical perspective. Diverse elements could be superimposed, made transparent or penetrate one another, while retaining their spatial relationships was :
(A) Modernism
(B) Deconstructivism
(C) Cubism
(D) Minimalism

47. Its characteristic feature is the idea of fragmentation. It also manipulates the surface and the cover of the construction. It is dominated by curvilinear shapes, which are supposed to disturb and dislocate the skeleton of the object. What is this movement in architecture?
(A) Brutalism
(B) Deconstructivism
(C) Structuralism
(D) Modernism

48. Who adopted the motto '*Less is More*' :
(A) Ludwig Mies van der Rohe,
(B) Le Corbusier
(C) Frank Lloyd Wright
(D) Walter Adolph Georg Gropius

49. A term used to categorise methods of construction which use locally available resources and traditions to address local needs :

(A) Sustainable architecture
(B) Vernacular architecture
(C) Contemporary architecture
(D) None of the above

50. Aeration of water is done to remove :

(A) Odour
(B) Colour
(C) Bacteria
(D) Hardness

51. The fire demand of a city may be worked out by :

(A) Kuichling's formula
(B) Freeman formula
(C) Under Writers formula
(D) Bustan's formula

52. Water supply includes :

(A) Collection, transportation and treatment of water
(B) Distribution of water to consumers
(C) Provision of hydrants for fire fighting
(D) All the above

53. The maximum permissible nitrites in public water supplies, is :

(A) Nil
(B) 0.5 P.P.M
(C) 1.0 P.P.M
(D) 1.5 P.P.M

54. Most commonly used pump for lifting water in water supply mains, is :

(A) Axial flow pump
(B) Reciprocating pump
(C) Rotary type pump
(D) Centrifugal pumps

55. If operable windows will be used to supplement the HVAC system, it should be ensured that :

(A) Openings for outdoor air are located between 3-6 feet from the floor
(B) The windows are adjustable and can close tightly and securely
(C) The windows are placed to take maximum advantage of wind direction, with openings on opposite sides of the building to maximize cross-ventilation
(D) All the above

56. Autoclaved Aerated Concrete (AAC) is :

(A) Lightweight
(B) Energy efficient
(C) Non – Toxic
(D) All the above

57. For steels, if the magnitude of stress is reduced to a particular value, it can undergo an infinitely large number of cylces without fatigue failure and the corresponding stress is knows as :

(A) Endurance limit
(B) Elastic limit
(C) Poisons ratio
(D) Hookes law

58. During normal operating conditions, the stress experienced by the material is referred to as working stress or allowable stress or design stress. the ratio of ultimate strength to allowable stress is defined as

(A) Factor of safety
(B) Stress concentration factor
(C) Strain energy density
(D) Modulus of resilience

59. The application, before casting, of a tensile force to high tensile steel tendons around which the concrete is to be cast. When the placed concrete has developed sufficient compressive strength a compressive force is imparted to it by releasing the tendons, so that the concrete member is in a permanent state of prestress. This method of pre stressing is called :

(A) Pre – tensioning
(B) Post – tensioning
(C) Cast in situ
(D) None of the above

60. Pick up the correct statement given below :

(A) Prestressing maximises the effect of cracks in concrete elements by holding the concrete in compression
(B) Prestressing increase beam depths to be achieved for equivalent design strengths
(C) Prestressed concrete is resilient and will recover from the effects of a greater degree of overload than any other structural material
(D) Prestressing does not permit a more efficient usage of steel and does not enable the economic use of high tensile steels and high strength concrete

61. In a desert ecosystem the Abiotic components are :

(A) Plants, Animals, Microbes
(B) Precipitation, Temperature Sunlight, Soil
(C) Rain, Light, Wind Temperature
(D) None of the above

62. The mixture of gases enveloping the surface of the earth held by gravitational force and friction is the :

(A) Troposphere
(B) Stratosphere
(C) Atmosphere
(D) Exosphere

63. The radiation received by the earth or absorbed by the earth each year is balanced by corresponding heat loss. Without this cooling the thermal balance would not be maintained. The earth's surface looses heat by :

(A) By evaporation
(B) By long wave radiation to the outer space
(C) Rising of hot air
(D) All the above

64. The air movement on the surface of earth due to difference in pressure which is caused due to change in temperature is called winds. Types of wind flowing over earth's surface :

(A) Planetary Winds
(B) Monsoon Winds
(C) Cyclonic/Anticyclonic Winds
(D) All the above

65. The main factors that influence thermal comfort are those that determine heat gain and loss, namely :

(A) Metabolic Rate
(B) Clothing Insulation
(C) Relative Humidity
(D) All the above

66. Relative humidity is the

(A) Ratio of the amount of water vapor in the air to the amount of water vapor that the air could hold at the specific temperature and pressure

(B) The amount of radiant heat transferred from a surface, and it depends on the material's ability to absorb or emit heat, or its emissivity

(C) Average temperature of the air surrounding the occupant, with respect to location and time

(D) Average speed of the air to which the body is exposed, with respect to location and time

67. Overall Thermal Transfer Value (OTTV) depends on :

(A) The type of glazing and the window size

(B) External shading to window

(C) Wall type and colour

(D) All the above

68. There are three ways to improve workplace acoustics and solve workplace sound problems — the ABCs. What does this ABC stands for :

(A) A- Attract, B- Bifurcate, C- Conserve

(B) A- Allow, B- Boost, C- Combine

(C) A- Absorb, B- Block, C- Cover

(D) A- Add, B- Branch, C- Control

69. Which of the statement is TRUE in Sabine's reverberation equation :

(A) The equation does not take into account room shape

(B) The equation does not take into account losses from the sound travelling through the air

(C) The equation does not take into account room shape or losses from the sound travelling through the air

(D) None of the above

70. The study of ancient civilizations, human settlements; their culture and evolution reveals the following pattern :

(A) They were not surrounded by systems of defense like walls, riverfronts, hillside, etc;

(B) The built environment contradicts the harmony with the exogenic factors (natural forces)

(C) Most settlements bear social stratification based on occupation, clan, caste, etc; portrayed though zoning, clustering and plot size

(D) Historic Cities follow an inorganic pattern in built form and growth

71. Who was the first major urban planning theorist who, initiated the garden city movement in 1898 :

(A) Ebenezer Howard

(B) Raymond Unwin

(C) Patrick Geddes

(D) Lewis Mumford

72. In which of the following planning models was public participation was first introduced and integrated into the system process :

(A) Rational planning
(B) Synoptic planning
(C) Transactive planning
(D) Advocacy planning

73. Neighbourhood planning gives communities the power to :

(A) Make a neighbourhood development plan
(B) Make a neighbourhood development order
(C) Make a Community Right to Build order
(D) All the above

74. In the Eighth five year plan (1992-97) of the National Urban Housing and Habitat Policy the emphasis was given on the :

(A) Housing construction on the private sector
(B) To promote smaller towns in new urban centres
(C) The role and importance of urban sector for the national economy
(D) Institution building and on construction of houses for Government employees and weaker sections

75. The arrangement of a built up area. This arrangement is made up of many components including how close buildings and uses are together; what uses are located where; and how much of the natural environment is a part of the built up area :

(A) Urban structure
(B) Urban grain
(C) Urban form
(D) Urban morphology

76. The temperature difference between the city and its surroundings is known as the :

(A) Urban heat island
(B) Urban density
(C) Building envelope
(D) Urban structure

77. '*We shape our dwellings and afterwards our dwellings shape our lives*' was quoted by :

(A) Karl Marx
(B) Winston Churchill
(C) Franklin D Roosevelt
(D) Emile Durkheim

78. Green building also known as green construction refers to a structure :

(A) Efficiently using energy, water, and other resources
(B) Protecting occupant health and improving employee productivity
(C) Reducing waste, pollution and environmental degradation
(D) All the above

79. Life Cycle Assessment (LCA) is widely recognized in association with :

(A) Evaluate the environmental impacts of buildings
(B) To calculate the life of a building
(C) Both the above
(D) None of the above

80. The goals of green building includes :
(A) Energy efficiency
(B) Indoor environmental quality enhancement
(C) Operations and maintenance optimisation
(D) All the above

81. National technological day is observed on :
(A) March 15 (B) July 1
(C) April 11 (D) May 11

82. Who is the Chairman of 14th Finance Commission :
(A) Dr. C. Rangarajan (B) Dr. Y.V. Reddy
(C) Raghuram Rajan (D) Dr. Anil Kakodkar

83. National food security mission was launched in :
(A) 2007 – 2008 (B) 2009 – 2010
(C) 2006 – 2007 (D) 2008 – 2009

84. The First Deputy Prime Minister of India:
(A) Morarji Desai (B) Jagjeevan Ram
(C) Lal Bahadur Sastri (D) Sardar Patel

85. Nal Sarovar Bird Sanctuary is in the state of :
(A) Assam (B) Chathisgarh
(C) Gujarath (D) Rajasthan

86. Annie Besant became the president of Indian National Congress in the year :
(A) 1917 (B) 1916
(C) 1919 (D) 1918

87. The News Paper 'National Herald' was started by :
(A) Motilal Nehru (B) C.R. Das
(C) Jawaharlal Nehru (D) M.N. Roy

88. Who called Subash Chandra Bose as 'Desh Nayak' ?
(A) Rash Bihari Bose (B) Rabindranath Tagor
(C) Dr. S. Radha Krishnan (D) Mahatma Gandhi

89. All India States People Conference was formed in the year :
(A) 1929 (B) 1930
(C) 1926 (D) 1927

90. Hawa Mahal is at :
(A) Agra (B) Delhi
(C) Jaipur (D) Bhopal

91. In the following which is a significant work of K.P. Karuppan :
(A) Baala Kalesam (B) Prarodanam
(C) Chidakasalayam (D) Jathi Nirnayam

92. Which is the longest river of Peninsular India ?
(A) Kaveri (B) Godavari
(C) Krishna (D) Mahanadi

93. Kumaranasan was born in 1873 at :
(A) Venganoor (B) Kottarakara
(C) Kumarakam (D) Kayikkara

94. Who among the following is known as Bharata Kesari ?
(A) Dr. B.R. Ambedkar (B) T. Prakasam
(C) Lala Lajpat Rai (D) Mannath Padmanabhan

95. Barrister G.P. Pillai was the leader of :
(A) Ezhava Memmorial (B) Nivarthana Agitation
(C) Malayali Memmorial (D) Kochi Rajya Prajamandalam

96. Who among the following is also known as 'Muthukutty'?
(A) Thycaud Ayya (B) Ayya Vaikundar
(C) Ayyan Kali (D) Chattampi Swamikal

97. The rebel leader who led the revolt of 1857 at Jagdishpur :
(A) Kunwar Singh (B) Manlavi Ahamadullah
(C) Nana Saheb (D) General Bhakt Khan

98. Who is the founder of East India Association in London?
(A) Dadabai Naoroji (B) Surendranath Banerji
(C) M.G. Ranade (D) G. Subramania Iyer

99. The Govt. of India Act which introduced Dyarchy in the provinces :
(A) Govt. of India Act 1935 (B) Govt. of India Act 1909
(C) Govt. of India Act 1919 (D) None of these

100. Thoovanam water falls is in the river :
(A) Mullayar (B) Pambar
(C) Muthirapuzha (D) Kalladayar