

Seat No. \_\_\_\_\_

**SUB: ARCHITECTURE (Master of Architecture)**

**Time:1 Hour 30 minutes**

**Instructions:**

1. Ensure that all pages are printed.
2. Use Black ball pen only
3. Change in option is not allowed
4. There is no negative marking
5. Use of non-programmable scientific calculator is allowed

|     |   |   |   |  |
|-----|---|---|---|--|
| 1.  | Two-point perspective is also known as  |   |   |  |
|     | A   | Regular perspective   | B | Two-View perspective   |
|     | C   | Parallel perspective  | D | Angular perspective  |
| 2.  | How many surfaces are there in a square pyramid?  |   |   |  |
|     | A   | 2   | B | 3  |
|     | C   | 4   | D | 5  |
| 3.  | This is the intersection of the ground plane with the picture plane                           |   |   |  |
|     | A   | Ground line   | B | Vanishing Point  |
|     | C   | Station Point   | D | Horizon  |
| 4.  | What are Vanishing points?  |   |   |  |
|     | A   | A vanishing point is a point on the image plane of a perspective drawing. | B | Imaginary points which are infinite distance away from the station point |
|     | C   | Both A and B are correct  | D | None of the above  |
| 5.  | Which of the following is the correct statement?  |   |   |  |
|     | A   | The lower angle of sun casts shorter shadow                               | B | The lower angle of sun casts longer shadow                               |
|     | C   | The sun angle does not affect the length of the object shadow             | D | The lower angle of sun does not cast the shadow                          |
| 6.  | Continuous thin lines terminate at the outer ends by pointed arrowheads touching the outlines |   |   |  |
|     | A   | Dimension Lines   | B | Margin Lines   |
|     | C   | Construction Lines  | D | Section Lines  |
| 7.  | CAD stands for  |   |   |  |
|     | A   | Computer art design   | B | Car art design   |
|     | C   | Computer-aided design   | D | Computer Architecture Design   |
| 8.  | The higher number of pixels gives us a ----- image  |   |   |  |
|     | A   | Smaller   | B | Better   |
|     | C   | Bigger  | D | Worst  |
| 9.  | The process of repositioning an object along a circular path is called                        |   |   |  |
|     | A   | Rotation  | B | Scaling  |
|     | C   | Translation   | D | Revolution   |
| 10. | Which of the following are the 2d color models?   |   |   |  |

|     |   |  |   |   |
|-----|---|--|---|---|
|     | A   | RGB and CMYK   | B | RGB and CMK   |
|     | C   | RGB and CMG  | D | RGB   |
| 11. | Which Command is used to twist selected object on a path?   |  |   |   |
|     | A   | Loft   | B | Extrude   |
|     | C   | Revolve  | D | Sweep   |
| 12. | Which is the lowest division of a building/structure, partly or wholly below the ground, designed to support and anchor the superstructure and transmit its loads to the soil below it. |  |   |   |
|     | A   | Plinth   | B | Foundation  |
|     | C   | Floors/Slabs   | D | Beams and Columns   |
| 13. | A thin, curved plate structure shaped to transmit applied forces by compressive, tensile, and shear stresses that act in the plane of the surface is known as -----                     |  |   |   |
|     | A   | Folded plate structure                               | B | Shell structure   |
|     | C   | Tensile structure                                    | D | Frame structure   |
| 14. | Which structure is most often used as a roof, as they can economically and attractively span large distances-----   |  |   |   |
|     | A   | Frame structure                                      | B | Load bearing Structure  |
|     | C   | Tensile membrane structure                           | D | None of the above   |
| 15. | Choose the incorrect statement about 'Toughened glass'  |  |   |   |
|     | A   | This type of glass is tempered                       | B | May have distortions  |
|     | C   | May have low visibility                              | D | Cannot be used in making fire-resistant doors   |
| 16. | Choose the incorrect statement about construction material, 'Bamboo'  |  |   |   |
|     | A   | Bamboo has a very strong fiber                       | B | Compressive strength of Bamboo is more than concrete  |
|     | C   | Bamboo cannot be curved                              | D | Bamboo fiber has a shear stress that is higher than wood  |
| 17. | Choose the correct statement about concrete   |  |   |   |
|     | A   | Concrete is strong in compression,                   | B | Concrete is weak in tension   |
|     | C   | Concrete is strong in tension                        | D | Both A and B  |
| 18. | What is FRP   |  |   |   |
|     | A   | Fiberglass-Reinforced Polymer                        | B | Fine Reinforced Polymer   |
|     | C   | Fire Resistant Polymer                               | D | None of the above   |
| 19. | PERT and CPM are  |  |   |   |
|     | A   | the two network-based project management techniques  | B | exhibit the flow and sequence of the activities and events  |
|     | C   | Both A and B   | D | None of the above   |
| 20. | Which is the most correct statement about 'Building Estimate'.  |  |   |   |
|     | A   | The actual cost of the project after execution.      | B | The project cost does not include the cost of woodwork.   |
|     | C   | The project cost does not include the cost of steel. | D | Predicting probable cost of the project by calculating material quantity and their costing with help of market rates. |
| 21. | Vertical loads of the structure and weight of permanent elements is called -----  |  |   |   |
|     | A   | Dead Load  | B | Live Load   |

|     |  |                              |   |                               |
|-----|--|------------------------------|---|-------------------------------|
|     | C  | Wind Load                    | D | Earth quake forces            |
| 22. | What causes tension on one side of beam and compression on the other.  |                              |   |                               |
|     | A  | Torsion                      | B | Bending                       |
|     | C  | Strain                       | D | None of the above             |
| 23. | The most suitable materials used for the structural system of high-rise buildings are                                |                              |   |                               |
|     | A  | Wood and Brick               | B | Reinforced Concrete and Steel |
|     | C  | Steel and Wood               | D | None of the above             |
| 24. | Pneumatic structure contains   |                              |   |                               |
|     | A  | Water                        | B | Metal                         |
|     | C  | Wood                         | D | Compressed Air                |
| 25. | Vault is an architectural term for   |                              |   |                               |
|     | A  | Cable                        | B | Arch                          |
|     | C  | Bridges                      | D | Dam                           |
| 26. | Which of the below is a disadvantage of frame structure?   |                              |   |                               |
|     | A  | Economy                      | B | Speed of construction         |
|     | C  | Ease of construction         | D | Span length                   |
| 27. | Shell structure does not have any  |                              |   |                               |
|     | A  | Bending moment               | B | Shear stress                  |
|     | C  | Compressive stress           | D | Tensile stress                |
| 28. | Triangulated structure is used for   |                              |   |                               |
|     | A  | Bridges                      | B | High rise buildings           |
|     | C  | Arch                         | D | Wall                          |
| 29. | Which part bear tension in a truss structure?  |                              |   |                               |
|     | A  | Base                         | B | Joints                        |
|     | C  | Bottom chords                | D | Top chords                    |
| 30. | What occurs when the air in a space is changed with outdoor air without the use of mechanical systems, such as a fan |                              |   |                               |
|     | A  | Mechanical Ventilation       | B | Wind effect ventilation       |
|     | C  | Stack effect ventilation     | D | Natural Ventilation           |
| 31. | Room air conditioners and packaged units are examples of   |                              |   |                               |
|     | A  | Chilled water systems        | B | Direct expansion systems      |
|     | C  | Indirect contraction systems | D | Indirect expansion systems    |
| 32. | Felt and mineral wool are examples of _____  |                              |   |                               |

|     |  |   |   |   |
|-----|--|---|---|---|
|     | A  | Non-rigid porous materials              | B | Non-porous rigid partitions                       |
|     | C  | Non-rigid non-porous materials          | D | Porous rigid materials                            |
| 33. | Which of the following constructions is effective against both air-borne and structure-borne sounds?                 |   |   |   |
|     | A  | Concrete floor floating construction    | B | Use of resilient surface material                 |
|     | C  | Timber floor floating construction      | D | Timber floor with suspended ceiling and air space |
| 34. | The type of pipe commonly used in water supply distribution schemes, is  |   |   |   |
|     | A  | Cast iron pipes                         | B | R.C.C. pipes                                      |
|     | C  | Hume pipes                              | D | G.I. pipes  |
| 35. | Water supply includes  |   |   |   |
|     | A  | Provision of hydrants for fire fighting | B | Collection, transportation and treatment of water |
|     | C  | Distribution of water to consumers      | D | All the above                                     |
| 36. | The maximum permissible hardness for public water supplies is  |   |   |   |
|     | A  | 95 mg/liter                             | B | 115 mg/liter                                      |
|     | C  | 105 mg/liter                            | D | 125 mg/liter                                      |
| 37. | An intersection that is provided for different levels of road is called _____  |   |   |   |
|     | A  | Channelized intersection                | B | Intersection at grade                             |
|     | C  | Grade separated intersections           | D | Rotary intersection                               |
| 38. | The arterial roads are a classification of which type of roads?  |   |   |   |
|     | A  | Urban Roads                             | B | National highway                                  |
|     | C  | State highway                           | D | Rural roads                                       |
| 39. | On which of the factors mentioned below, the type of the sewer installed does not depend on?                         |   |   |   |
|     | A  | Terrain                                 | B | Storm water                                       |
|     | C  | Location                                | D | Usage pattern                                     |
| 40. | Which building material have high Seismic resistance and flexibility of nailed joints.                               |   |   |   |
|     | A  | Timber                                  | B | Ply   |
|     | C  | Husk                                    | D | Bamboo  |
| 41. | The tropical climate which consists of heat waves, hot winds and low humidity comes under which climatic conditions? |   |   |   |
|     | A  | Hot-dry                                 | B | Cool-dry  |
|     | C  | Hot-wet                                 | D | Rainy   |
| 42. | The temperature at the _____ is the highest and it is lowest at the _____  |   |   |   |

|     |  |   |   |   |
|-----|--|---|---|---|
|     | A  | Equator, poles  | B | North, South  |
|     | C  | Longitude, Latitude   | D | Poles, Equator  |
| 43. | Identify the degradable pollutant from the following.  |   |   |   |
|     | A  | Discarded vegetables  | B | Chemicals   |
|     | C  | Metals  | D | Plastic   |
| 44. | Greenhouse gases are those that absorb and emit infrared radiation. Examples include_____  |   |   |   |
|     | A  | Nitrogen  | B | Ozone   |
|     | C  | Argon   | D | None of the above   |
| 45. | Which of the following facts are incorrect?  |   |   |   |
|     | A  | Eutrophication is observed in water bodies                            | B | Global warming is the rise in the average temperature of the earth's climate system |
|     | C  | The greenhouse effect is a natural phenomenon                         | D | Ozone is harmless to breathe  |
| 46. | Mercury and lead are toxic elements that cause _____   |   |   |   |
|     | A  | Air pollution   | B | Noise pollution   |
|     | C  | Water pollution   | D | Land contamination  |
| 47. | Which of the following is not used in a passive solar heating/cooling system?  |   |   |   |
|     | A  | Building walls  | B | Building roofs  |
|     | C  | Air conditioners  | D | Building floors   |
| 48. | The data regarding temperature, moisture, timings of sunset and sunrise and direction of wind are collected and preserved by _____ |   |   |   |
|     | A  | Bureau of Indian Standards, New Delhi                                 | B | Indian Institute of Weather Forecasting and Research Centre                         |
|     | C  | Meteorological Department of the Ministry of Commerce, Govt. of India | D | National Institute of Technology  |
| 49. | The main cause of global climatic change is  |   |   |   |
|     | A  | Increase in the content of carbon dioxide in the atmosphere           | B | Emissions of industrial gases   |
|     | C  | Adding of dust  | D | Changes in plant cover  |
| 50. | Elements such as water body and water fountain are the examples of   |   |   |   |
|     | A  | Evaporative cooling   | B | Thermal mass  |
|     | C  | Direct heat gain  | D | Induced ventilation   |
| 51. | Who initiated the garden city movement in 1898?  |   |   |   |
|     | A  | Frank Lloyd Write   | B | Sir Frederic Osborn   |
|     | C  | Sir Ebenezer Howard   | D | None of the above   |
| 52. | Who is the author of the book titled” the image of the city”?  |   |   |   |
|     | A  | Sir Ebenezer Howard   | B | Kevin Lynch   |
|     | C  | Le Corbusier  | D | None of the above   |
| 53. | Choose the most appropriate definition of “Satellite Towns”  |   |   |   |
|     | A  | Smaller municipalities that are adjacent to a major city              | B | Municipalities that are adjacent to a village                                       |
|     | C  | Town that are adjacent to a village                                   | D | None of the above   |

|     |  |   |   |  |
|-----|--|---|---|--|
| 54. | What is Restoration, Reconstruction and Preservation?  |   |   |  |
|     | A  | Methods of building conservation.                             | B | Methods of reconstruction.   |
|     | C  | Methods of building a new house.                              | D | Methods of painting a building.  |
| 55. | Based upon the colour and texture psychology of the plant material, which of the following plants is likely to be used in an informal and cheerful indoor environment? |   |   |  |
|     | A  | A bright coloured floral plant with small and dense leaves    | B | A bright coloured floral plant with large leaves   |
|     | C  | A Fine-textured plant with more defined silhouette            | D | A plant with dark loose and large leaves with less distinct outline than the finer-textured plants |
| 56. | Identify the 'correct' statement among following, with reference to the sizes by which the plant material is categorized   |   |   |  |
|     | A  | Intermediate shrubs (between 1ft - 30cm and 3ft - 1m tall)    | B | Large (40ft -12m tall or more) and intermediate trees (Max. 40ft -12 m tall) at maturity.          |
|     | C  | Ground shrubs (a max height of 6 in - 15 cm to 12 in - 30 cm) | D | None of the above  |
| 57. | Landscape Continuity and Illusion of space was a major goal of   |   |   |  |
|     | A  | Egyptian Garden   | B | Greek Garden   |
|     | C  | Mughal Garden   | D | Japanese Garden  |
| 58. | A major focus of the Islamic gardens was to  |   |   |  |
|     | A  | Provide a sensory experience                                  | B | Provide respite from a hot and arid environment  |
|     | C  | Includes themes of water and shade                            | D | All of the above.  |
| 59. | Choose the correct option about "intangible cultural heritage"   |   |   |  |
|     | A  | transmitted from generation to generation                     | B | not promoted by UNESCO   |
|     | C  | does not represent inherited traditions                       | D | constantly not recreated by communities  |
| 60. | Which among the following was an exclusive university town?  |   |   |  |
|     | A  | Taxila  | B | kashi  |
|     | C  | Pataliputra   | D | Nalanda  |
| 61. | Who developed the concept of urbanism as a way of life?  |   |   |  |
|     | A  | Fisher  | B | Louis Wirth  |
|     | C  | Louis Coser   | D | None of these  |
| 62. | Which of the following cities can be called megalopolis?   |   |   |  |
|     | A  | Ahmadabad   | B | Kochi  |
|     | C  | Chennai   | D | Mumbai   |
| 63. | Conurbation means  |   |   |  |
|     | A  | Cluster of Cities & Town                                      | B | Group of Slums   |
|     | C  | Cities of Cities  | D | Town and Villages  |
| 64. | An example of combination of Rectangular with Radial street system   |   |   |  |
|     | A  | New Delhi   | B | Chandigarh   |

|     |   |   |   |   |
|-----|---|---|---|---|
|     | C   | Bhubaneswar   | D | Gandhinagar   |
| 65. | National Smart Cities Mission is a -----  |   |   |   |
|     | A   | Develop smart cities only in Gujarat                                  | B | An urban renewal and retrofitting program by the Government of India          |
|     | C   | Develop only road network   | D | Village development program   |
| 66. | Which of the following is not a classification according to "Mansara" for formation of new town and villages? |   |   |   |
|     | A   | Dandaka   | B | Paraka  |
|     | C   | Savatobhadra  | D | Nandyvarta  |
| 67. | The "Concept of Green Belt" consists of   |   |   |   |
|     | A   | Can constrict and control urban growth                                | B | Generative and Parasitic city concept   |
|     | C   | Garden city development tools   | D | Development of neighbourhood  |
| 68. | The main function of "NITI Aayog" is  |   |   |   |
|     | A   | Development of smart city   | B | 'Think-tank of India' for providing policy and directional inputs             |
|     | C   | Development of garden cities  | D | None of the above   |
| 69. | Burgess model or the CCD model is   |   |   |   |
|     | A   | Based on human ecology theory done by Burgess and applied on Chicago  | B | Based on human ecology theory done by Zaha Hadid and applied on Washington DC |
|     | C   | Based on landscape theory done by Le Corbusier and applied on Chicago | D | Based on smart city concept done by Burgess and applied on London             |
| 70. | Housing and Urban Development Department in India is mandated to -----  |   |   |   |
|     | A   | To frame policies for villages only                                   | B | Prepare plans and schemes for the degrowth of urban areas                     |
|     | C   | To provide civic amenities in the villages only                       | D | Strengthening urban local self-governments                                    |
| 71. | What is the following is generally not a characteristic of Informal Housing?                                  |   |   |   |
|     | A   | Developed on Encroached   | B | Land Illegal structure on owned land  |
|     | C   | Superior quality of basic services                                    | D | No formal transaction as per government act                                   |
| 72. | Which of following is not an organic housing typology?  |   |   |   |
|     | A   | Urban village   | B | Old city/inner city housing   |
|     | C   | Traditional housing   | D | Private Developers Housing  |
| 73. | The key barriers faced by the government in achieving housing for all people                                  |   |   |   |
|     | A   | Housing affordability   | B | Slower technology and system  |
|     | C   | Availability of land  | D | All of above  |

|     |  |  |   |   |
|-----|--|--|---|---|
| 74. | Which is largest housing scheme in India   |  |   |   |
|     | A  | Rajiv Awas Yojana  | B | Indira Awas Yojana  |
|     | C  | Jawahar Awas Yojana  | D | Valmiki Ambedkar Awas Yojana  |
| 75. | A typical Housing Strategy starts with   |  |   |   |
|     | A  | Analysis   | B | Study of existing situation   |
|     | C  | Action planning  | D | Setting Aims and Objectives   |
| 76. | Desired density in a typical proposed housing districts is ensured by  |  |   |   |
|     | A  | Prescribing maximum Floor Space Index (FSI)                      | B | Prescribing minimum Floor Space Index (FSI)   |
|     | C  | Prescribing height of the buildings                              | D | Prescribing maximum width of the plots  |
| 77. | A total of 18,000 people are to be accommodated in a plotted housing scheme. For this, a proportion of 2:3:5 is kept between HIG, MIG and LIG plots respectively. Number of HIG plots in the housing scheme, considering 5 persons per dwelling unit and 3 dwelling units per plot, will be----- |  |   |   |
|     | A  | 1300   | B | 240   |
|     | C  | 400  | D | 600   |
| 78. | Landmark initiatives pronounced with National Housing and Habitat Policy 1998 are  |  |   |   |
|     | A  | Involvement of one type-stakeholder                              | B | Not permitting Foreign Direct Investment in Housing                                 |
|     | C  | Repeal of Urban Land Ceiling Act                                 | D | Discourage real estate development  |
| 79. | Which of the following is a housing sector development scheme?   |  |   |   |
|     | A  | HRIDAY   | B | PMAY  |
|     | C  | AMRUT  | D | SBM   |
| 80. | Egyptian architecture is characterized by?   |  |   |   |
|     | A  | Very ornate  | B | Ornamentation   |
|     | C  | Highly decorative  | D | Massive walls covered with hieroglyphic and pictorial carving                       |
| 81. | Pointed arch and flying buttresses characterizes   |  |   |   |
|     | A  | Gothic Architecture  | B | Egyptian Architecture   |
|     | C  | Islamic Architecture   | D | Roman Architecture  |
| 82. | Garden at Taj Mahal is designed in which style?  |  |   |   |
|     | A  | Paradise   | B | Medieval  |
|     | C  | Char-Baugh   | D | Zen   |
| 83. | Which one of the following is incorrect for the Jodhabai Palace in Fatehpur Sikri?   |  |   |   |
|     | A  | It is by far the tallest building in the entire palace complex.  | B | Consists of curvilinear square pillar, square brackets and toran niches.            |
|     | C  | It was built specially for residence of zenanis (for the women). | D | Completely enclosed with single entrance, no window facing outside in first storey. |
| 84. | Which one of the following is an example of a hypostyle mosque?  |  |   |   |
|     | A  | The great mosque of Isfahan, Iran                                | B | The great mosque of Hagia Sophia, Istanbul, Turkey                                  |



|     |  |   |   |  |
|-----|--|---|---|--|
|     | C  | The great mosque of Cordoba, Spain      | D | The Jama mosque of Delhi, India          |
| 85. | Mound-like or hemispherical structure containing relics is known as  |   |   |  |
|     | A  | Church                                  | B | Stupa                                    |
|     | C  | Mosque                                  | D | None of the above                        |
| 86. | Tall columns, intricate detail, symmetry, harmony, and balance are characteristics of the which architectural style.                                 |   |   |  |
|     | A  | Greek architecture                      | B | Egyptian architecture                    |
|     | C  | Mughal architecture                     | D | Temple architecture                      |
| 87. | Major architectural style that was developed in the 1920s and 1930s is known as  |   |   |  |
|     | A  | Postmodern Style                        | B | European Style                           |
|     | C  | International Style                     | D | Rococo Style                             |
| 88. | Ornamental, flamboyant, intricately detailed and layered style of architecture is known as   |   |   |  |
|     | A  | International Style                     | B | Rococo architecture                      |
|     | C  | Mughal architecture                     | D | Egyptian architecture                    |
| 89. | Choose the most famous example of Byzantine Architecture.  |   |   |  |
|     | A  | Hagia Sophia                            | B | Parthenon, Acropolis.                    |
|     | C  | Temple of Hera, Olympia.                | D | Temple of Apollo, Delphi.                |
| 90. | “Villa Savoye” was designed by   |   |   |  |
|     | A  | Le Corbusier and Pierre Jeanneret       | B | Le Corbusier and IM Pei                  |
|     | C  | Le Corbusier and Frank Lloyd Wright     | D | Le Corbusier and Charles Correa          |
| 91. | “An Act to provide for the registration of architects and for matters connected therewith”, choose the correct option                                |   |   |  |
|     | A  | The Architects Act, 1992                | B | The Architects Act, 1972                 |
|     | C  | The Architects Act, 1952                | D | The Architects Act, 1982                 |
| 92. | The fees charged by an Architect to provide comprehensive Architectural Services for a Single Block Housing and sites up to 0.5 hectare is           |   |   |  |
|     | A  | 5 Percent on the cost of works assigned | B | 15 Percent on the cost of works assigned |
|     | C  | 8 Percent on the cost of works assigned | D | 10 Percent on the cost of works assigned |
| 93. | What is the name of the process by which the client or employer invites contractors to place a bid for work on a construction project?               |   |   |  |
|     | A  | Retendering                             | B | Tendering                                |
|     | C  | Contracting                             | D | Consultancy                              |
| 94. | What is the name of the document used in tendering in the construction industry in which materials, parts, and labor (and their costs) are itemized? |   |   |  |
|     | A  | Contract document                       | B | Tender document                          |
|     | C  | Bill of Quantities                      | D | Working Drawing                          |
| 95. | Singapore’s Jewel Changi Airport designed by   |   |   |  |
|     | A  | Architect Moshe Safdie                  | B | architect Zaha Hadid                     |
|     | C  | architect Charles Correa                | D | architect I.M. Pei                       |
| 96. | Central Vista Project is designed by   |   |   |  |

|      |   |   |   |                                  |
|------|---|---|---|----------------------------------|
|      | A   | Bimal Patel                               | B | Charles Correa                   |
|      | C   | B.V. Doshi                                | D | Zaha Hadid                       |
| 97.  | Who is named as 2018 Pritzker Prize Laureate?                   |   |   |                                  |
|      | A   | Zaha Hadid                                | B | B.V. Doshi                       |
|      | C   | Louis Khan                                | D | I.M. Pei                         |
| 98.  | The book "The Fountainhead." Was written by                     |   |   |                                  |
|      | A   | Zaha Hadid                                | B | Richard Joseph Neutra            |
|      | C   | Ayn Rand                                  | D | Charles Correa                   |
| 99.  | Gehry's best-known works include                                |   |   |                                  |
|      | A   | Guggenheim Museum in Bilbao, Spain        | B | Gehry Residence in Santa Monica, |
|      | C   | California Museum of Science and Industry | D | None of the above                |
| 100. | "Apple Park" is the corporate headquarters of Apple designed by |   |   |                                  |
|      | A   | Zaha Hadid                                | B | Richard Joseph Neutra            |
|      | C   | Louis Khan                                | D | Norman Foster,                   |