

1. Anti-static tiles are usually specified in areas having
  - (a) Chemical spillage
  - (b) High dampness
  - (c) Several electrical equipment
  - (d) Movement of heavy machineries
  
2. The project 'HABITAT' Montreal Canada, designed by renowned architect 'Moshe Safdie', is an example of
  - (a) Prefabricated housing
  - (b) Low-rise detached dwellings
  - (c) High-rise apartments
  - (d) Organic architecture
  
3. 'Logical Process' and 'Magical Abstraction' are two aspects of
  - (a) Architectural design methodology
  - (b) Structural analysis of a building
  - (c) Physical planning process
  - (d) Urban design methodology
  
4. Design of Jain Temple Complex at Ranakpur is an example of
  - (a) Unilateral symmetry
  - (b) Asymmetry
  - (c) Bilateral symmetry
  - (d) 3-dimensional symmetry

5. Le Corbusier put forth his Theory of Proportions in a book titled
  - (a) The Dimensions
  - (b) The Modulor
  - (c) The Golden Section
  - (d) Towards The New Architecture
  
6. Providing a protective cap, or course, to an exterior wall is designated as
  - (a) Pilaster
  - (b) Gable
  - (c) Coping
  - (d) Template
  
7. Ornamental work of branchlike lines in the upper part of a Gothic window is called
  - (a) Tracery
  - (b) Oriel
  - (c) Cuspitation
  - (d) Foliation
  
8. Integrity of design concerns primarily with
  - (a) Diversity
  - (b) Continuity
  - (c) Originality
  - (d) Unity

9. Arrangement of organs in the human body exemplifies the Design Principle of
- (a) Rhythm
  - (b) Unity
  - (c) Contrast
  - (d) Movement
10. The repetition of windows in large buildings is to impress the viewer by
- 1. Harmony and balance
  - 2. Movement and rhythm
  - 3. Space and function

Which of the above is/are correct?

- (a) 1 only
  - (b) 2 only
  - (c) 3 only
  - (d) 1, 2 and 3
11. Sciagraphy refers to
- (a) The study of screen print
  - (b) Learning of graphic design
  - (c) The study of textile design
  - (d) The study of the geometry of shadow projection

12. The purpose of entourage is to
- (a) Encourage people to draw human figures
  - (b) Motivate an artist to draw perfectly
  - (c) Bring a sense of scale and increase the 'dimension' of reality
  - (d) Develop architects to do manual sketches
13. Which one of the following colour groups is an example of 'Analogous' colours?
- (a) Yellow, red and blue
  - (b) Red-orange, yellow and blue
  - (c) Violet, red and orange
  - (d) Red-orange, red and red-violet
14. Who contributed to the 'De Stijl' art movement, and also evolved the non-representational form called 'Neoplasticism' consisting of a white background with a grid of black lines and three primary colours?
- (a) Theo Van Doesburg
  - (b) Piet Mondrian
  - (c) Pablo Picasso
  - (d) Gerrit Rietveld
15. The term Morphing refers to
- (a) Dramatic transition
  - (b) Enlargement
  - (c) Integration
  - (d) Sudden translation

16. The term 'Ghosting' is used in the context of
- (a) Array of forms
  - (b) Segmentation of curves
  - (c) Repetition
  - (d) Invisible line
17. The minimum time delay required between initiation of successive memory operations is called
- (a) Memory cycle time
  - (b) Read cycle time
  - (c) Read recovery time
  - (d) Waiting time
18. When the available RAM is not sufficient for the system to run the current applications, it will take some memory from the hard disc; this latter memory is termed as
- (a) Virtual memory
  - (b) Auxiliary memory
  - (c) Buffer memory
  - (d) Cache memory

19. Narrow streets with tall buildings are characteristic of Vernacular layouts of which one of the following types of cities?

- (a) Hot-humid climate city
- (b) Temperate coastal climate city
- (c) Hot-arid climate city
- (d) Cool climate city

20. Which one of the following can be used to heat and cool the air in a building?

- (a) Air flow windows
- (b) Solar apertures
- (c) Ducts and plenums
- (d) Daylight apertures

21. The term comfort zone is used in relation to which of the following?

- (a) Bioclimatic chart
- (b) Sun path diagram
- (c) Wind square
- (d) Sundial

22. ISHRAE stands for

- (a) International Society of Heating, Refrigeration and Air-conditioning Engineers
- (b) Imperial Society of Heating, Refrigerating and Air-conditioning Engineers
- (c) Institution for Science of Heating, Refrigeration and Air-conditioning Engineering
- (d) Indian Society of Heating, Refrigerating and Air-conditioning Engineers

23. A building that uses technology, programming and remote control for better efficiency is

- (a) Green building
- (b) Smart building
- (c) Sustainable building
- (d) Eco-friendly building

24. Ceilometer is used for measuring

1. Cloud Ceiling
2. Visibility during Fog
3. Fog Density

Which of the above is/are correct?

- (a) 1 only
- (b) 2 and 3
- (c) 2 only
- (d) 3 only

25. Large door, window openings and jaalis are a common feature of traditional buildings in

- (a) Hot and dry climatic zone
- (b) Hot and humid climatic zone
- (c) Composite climatic zone
- (d) Cold and dry climatic zone

26. While designing climate responsive building insulation properties of the material play an important role. Which of the following pertains to this consideration?

- (a) 'R' Value
- (b) 'U' Factor
- (c) 'K' Value
- (d) 'I' Factor

27. A multi-storeyed central space within a building, covered on top is

- (a) Courtyard
- (b) Plaza
- (c) Atrium
- (d) Light well



28. The repeated sequence of two shapes, changing order of appearance in a directional pattern is known as

- (a) Gradation
- (b) Harmony
- (c) Balance
- (d) Alternation

29. Which of the following classic orders provides a column shaft height of 7 times its diameter?

- (a) Tuscan
- (b) Doric
- (c) Ionic
- (d) Corinthian

30. Which one of the following staircases of same width would occupy the minimum area?

- (a) Elliptical staircase
- (b) Dog-legged staircase
- (c) Spiral staircase
- (d) Quarter-turn staircase

31. The process of using language to understand one thing in terms of other things is known as

- (a) Analogy
- (b) Metaphor
- (c) Interpretation
- (d) Juxtaposing

32. A tube structure having closely spaced perimeter columns rigidly connected by deep spandrel beams

- (a) Framed tube
- (b) Braced tube
- (c) Bundled tube
- (d) Trussed tube

33. The works of Richard Rogers and Norman Foster could be classified as which architectural style?

- (a) Modernism
- (b) Late Modernism
- (c) Art Deco
- (d) Critical Regionalism

34. Frank Lloyd Wright designed

- (a) Eco Houses
- (b) Usonian Houses
- (c) Modular Houses
- (d) Eclectic Houses

35. Which of the following are provided at grade changes and hazardous areas of vehicular movement for the benefit of the visually impaired?

- (a) Graded sand and gravel
- (b) Metal grating
- (c) Tactile warning strips
- (d) Water channel

36. Sound absorption depends on:

- 1. Porosity of materials
- 2. Thickness of materials
- 3. Diameter of perforations

Which of the above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

37. Consider the following sounds:

- 1. Impact sound
- 2. Vibratory sound
- 3. Duct-borne sound

Which of the above are structure-borne sounds?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

38. “Sabine’s Formula” is related to which aspect of building design?
- (a) Lighting
  - (b) Electrical load
  - (c) Acoustics
  - (d) Heat transfer through walls
39. The most important consideration in acoustical design of an auditorium is
- (a) Volume of auditorium
  - (b) Wattage of sound system
  - (c) Time of reverberation
  - (d) Time of relapse
40. The process that can produce Honeycomb structure at a molecular level is known as
- (a) Rational polymerization
  - (b) Honeycomb racial chambers
  - (c) Polymerizing
  - (d) Free-living radical polymerization
41. ‘Quattro Libri dell’ Architettura’ was the architecture treatise that had a profound influence on architecture in many countries for a long time. It was written by
- (a) Andrea Palladio
  - (b) Vitruvius
  - (c) Leon Battista Alberti
  - (d) Fillipo Brunelleschi

42. Consider the following structures:

1. Dolmens
2. Stonehenge
3. Ziggurat
4. Mastaba

Which of the above are tomb structures?

- (a) 1, 2 and 3
- (b) 1, 3 and 4
- (c) 1, 2 and 4
- (d) 2, 3 and 4

43. Polymorphism refers to

- (a) Homogenizing different materials
- (b) A state of being made of many different elemental forms
- (c) Heterogeneity of materials
- (d) Hybrid materials

44. Typogenesis refers to the occurrence of a

- (a) New type
- (b) Different type
- (c) Similar type
- (d) Common type

45. A vertical window in a projection built out from a sloping roof

- (a) Casement window
- (b) Dormer window
- (c) French window
- (d) Gable window

46. Consider the following items:

- 1. Room area
- 2. Verandah area
- 3. W.C. area
- 4. Courtyard area

Which of the above areas are included in plinth area estimation?

- (a) 1, 2, 3 and 4
- (b) 1 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3 only

47. Consider the following regarding the rate of an item of work:

1. Specifications of works
2. Specifications of materials
3. Proportion of mortar
4. Method of construction

The rate of an item of work depends on which of the above?

- (a) 1, 2 and 3 only
- (b) 2, 3 and 4 only
- (c) 1, 2 and 4 only
- (d) 1, 2, 3 and 4

48. The carpet area includes the area of:

1. The walls along with doors and other openings
2. Verandas, corridor and passage
3. Bath room

Which of the above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

49. Consider the following statements regarding estimating and costing:

1. The actual expenditure involved to complete a work including incidental, establishment and travelling charges, is called 'actual cost'.
2. The formal acceptance by the administrative department for incurring an expenditure on the work is called 'administrative approval'.
3. The order of a competent authority sanctioning a detailed estimate of the cost of a work of construction or repair is called 'technical sanction'.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

50. In which estimating method, does the estimator measure the total centre line length of the walls in a building and, considering segments thereof, multiply the respective segment length by other appropriate measurements, to arrive at the total quantity under consideration?

- (a) Long and short wall method
- (b) Out-to-out and in-to-in method
- (c) Crossing method
- (d) Centre line method



51. The effective floor area available for use within the building in case of residential apartments is
- (a) Built-up area
  - (b) Super Built-up area
  - (c) Floor area
  - (d) Carpet area
52. 'Generic Space' is otherwise known as
- (a) Sacred space
  - (b) Specific space
  - (c) Multi-strategic space
  - (d) Self-evolved space
53. AMRUT Mission launched by the Government of India stands for
- (a) Alternative Method for Reforms and Urban Transport
  - (b) Atal Mission for Rejuvenation and Urban Transformation
  - (c) Alternative Mission for Rejuvenation and Urban Transportation
  - (d) Atal Mission for Reforms and Urban Transportation
54. Which of the following cities pioneered the Bus-Rapid-Transit (BRT) mode in urban transportation?
- (a) Caracas and Lima
  - (b) Curitiba and Bogota
  - (c) Sao Paulo and Rio de Janeiro
  - (d) Buenos Aires and La Paz

55. NABARD stands for
- (a) National Bank for Agriculture and Rural Development
  - (b) National Banking Association for Rural Development
  - (c) National Business And Rental Division
  - (d) National Building Agriculture Reforms Division
56. FRUIT is the acronym for
- (a) Fear of Revitalization Urban-Infill and Towers
  - (b) Fit to Revive Urban Infrastructure and Towns
  - (c) Feed to Revitalize Urban Infill and Towns
  - (d) Fix to Review Urban Infill and Towers
57. The name of 'Clarence Perry' is associated with which important concept of town planning?
- (a) Radiant city
  - (b) Neighbourhood
  - (c) Garden city
  - (d) Land use planning
58. CUDS stand for
- (a) Centre for Urban Development Studies
  - (b) Central Urban Design Standards
  - (c) Centre for United Development Strategies
  - (d) Centre for United Developing States

59. 'Order of Reference' is the term associated with

- (a) Contract document
- (b) Valuation process
- (c) Tender document
- (d) Arbitration process

60. Consider a tender in which a contractor undertakes to carry out the project work on plans as further described in specifications, till completion, with supply of materials and labour for a prefixed sum. What is the type of tender called?

- 1. Item rate tender
  - 2. Lump sum tender
  - 3. Cost plus percentage tender
- (a) 1 only
  - (b) 2 only
  - (c) 3 only
  - (d) 2 and 3

61. The firm in which the architect is the principal and will be solely responsible for all the decisions involved in running the office is

- (a) Very large office
- (b) Partnership firm
- (c) Single proprietorship firm
- (d) Limited company

62. As per the National Building Code of India, the floor area ratio (FAR), is
- (a) The total area covered on ground floor to the area of plot
  - (b) The total area covered of all floors to the area of plot
  - (c) The area of plot to the total area covered on ground floor
  - (d) The area of plot to the total area covered on all floors
63. An offer made by the contractor to the owner with a view to obtaining his acceptance for construction of a facility is a/an
- (a) Contract
  - (b) Tender
  - (c) Easement
  - (d) Acquisition
64. An upright pipe, with one or more nozzles or spouts, for drawing water from a main, especially for firefighting, is a
- (a) Fire hose
  - (b) Sprinkler head
  - (c) Standpipe
  - (d) Hydrant

65. An arch shaped to develop only axial compression under a given loading

- (a) Trefoil arch
- (b) Funicular arch
- (c) Rampant arch
- (d) Segmental arch

66. If a person has been enjoying light and air to his building from adjoining property or land uninterrupted continuously for 20 years, he gains the right to enjoy the same. The owner of the adjoining property cannot construct anything that can obstruct such light and air. This easement right is known as

- (a) Easement lights
- (b) Revas projection
- (c) Flying shores
- (d) Ancient lights

67. The term security deposit is used for the process of

- (a) Fixed deposit in banks
- (b) Tender
- (c) Security systems
- (d) Safe deposit vault

68. Luminaire efficiency is the
- (a) Quotient of the luminous flux leaving the source propagated in an element of solid angle containing the given direction
  - (b) Quotient of the luminous flux incident on an element of the surface
  - (c) Percentage of lamp lumens produced that actually exits the fixture
  - (d) Quotient of the luminous flux incident on an element of the luminaire
69. In which interior designer firm does the Board of Directors legally obligate business?
- (a) Limited partnership
  - (b) Sole proprietorship
  - (c) Corporation
  - (d) General partnership
70. A pure colour is described by the term
- (a) Chroma
  - (b) Tone
  - (c) Value
  - (d) Hue

71. Which one of the following flooring is eco-friendly available in rolls of various colours and designs and is laid on already existing floors to improve the floors' durability and appearance?

1. Carpet flooring
2. Linoleum flooring
3. Glass flooring

- (a) 1 only
- (b) 2 only
- (c) 3 only
- (d) 1 and 3

72. The poorest colour combination with regard to visibility for any graphics is

- (a) Red on white
- (b) White on green
- (c) Black on yellow
- (d) Green on red

73. The main materials in the construction of Crystal Palace, Hydro Park London in 1851 were

- (a) Steel and glass
- (b) Cast iron and glass
- (c) Galvanized iron and glass
- (d) Exposed concrete and glass

74. The factors that contribute to the design of artificial illumination are
- (a) Utilization factor of the fitting and sky component
  - (b) Maintenance factor and externally reflected component
  - (c) Sky component and externally reflected component
  - (d) Utilization factor of the fitting and maintenance factor
75. The design of outdoor public areas, landmarks and structures to achieve environmental and social approbation is called as
- (a) Garden architecture
  - (b) Interior architecture
  - (c) Landscape architecture
  - (d) Modern architecture
76. Balance, symmetry and harmony along with water flow manipulated variously were the highlights of
- (a) Zen garden
  - (b) English garden
  - (c) Mughal garden
  - (d) Spanish garden
77. Use of wind towers to control the temperature within a building is known as
- (a) Active cooling
  - (b) Passive cooling
  - (c) Temperature cooling
  - (d) Atmospheric cooling



78. Consider the following types of waves:

1. P-waves
2. S-waves
3. Rayleigh waves

Which of the above are propagated as seismic waves?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

79. Which of the following is/are the most adoptable option(s) for earthquake resistant construction?

1. Flexible joints
2. Base isolation
3. Deconstructivism

- (a) 1 and 3 only
- (b) 2 only
- (c) 3 only
- (d) 1, 2 and 3

80. What is the file extension for an Auto CAD template file?

- (a) DWT
- (b) DWG
- (c) TEM
- (d) DWF

81. The National Building Code of India has divided the seismic zones of India into

- (a) Nine zones
- (b) Six zones with subzones in two of them
- (c) Five zones
- (d) Four zones

82. Transit-Oriented Development implies

- 1. Pedestrian friendly street design in residential neighbourhoods
- 2. High density development around important transportation nodes
- 3. According priority to public transport in a city

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

83. Concentric spread is a type of

- (a) Disease
- (b) Growth of a town
- (c) Hazardous fire
- (d) Flood

84. The time duration by which the completion time of an activity can be delayed without affecting the start of any of the succeeding activities is known as
- (a) Total float
  - (b) Independent float
  - (c) Free float
  - (d) Interfering float
85. Which one of the following represents an event?
- (a) Concrete cured
  - (b) Selecting sites
  - (c) Plastering of walls
  - (d) Fixing of doors
86. Power stations are generally treated as
- (a) Electrical construction
  - (b) Industrial construction
  - (c) Light construction
  - (d) Heavy construction
87. Horizontal intermediate member separating a door from a window is called
- (a) Rail
  - (b) Mullion
  - (c) Transom
  - (d) Stile

88. Screen constructed to regulate sun rays entering the building is called

- (a) Brise Soleil
- (b) Sun screen
- (c) Reva's projection
- (d) Cantilever

89. The software package considered usable for the development of networks is

- 1. Primavera project planning software
- 2. STAAD Pro
- 3. Harvard Total Project Manager (HTPM)

Which of the above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

90. After Project-scope, Layout and Design have been finalized, the areas in which further cost control can be best achieved is

- 1. Labour
- 2. Plants and equipment
- 3. Materials

Which of the above are correct?

- (a) 1, 2 and 3
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1 and 2 only

91. Which one of the following materials is capable of taking maximum flexural tension?

- (a) Bamboo
- (b) Cement concrete
- (c) Lime concrete
- (d) Brick

92. The supports given to a dilapidated, or otherwise unstable, building by means of horizontal or inclined members are called

- (a) Shores
- (b) Struts
- (c) Centering
- (d) Scaffolding

93. Solar charts for a particular location help to locate

1. Solar azimuth angle and solar altitude angle
2. Sun's position and the Sun path

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

94. 'Nosing' is provided in
- (a) Water proofing
  - (b) Masonry
  - (c) Staircase
  - (d) Painted finish
95. Which factor is not responsible for thermal heat gain in the human body?
- (a) Conduction
  - (b) Convection
  - (c) Radiation
  - (d) Evaporation
96. The atmospheric layer near the surface of earth is
- (a) Troposphere
  - (b) Mesosphere
  - (c) Ionosphere
  - (d) Stratosphere
97. A high Biological Oxygen Demand (BOD) indicates that water
- (a) is pure
  - (b) has high level of microbial pollution
  - (c) has negligible microbial action
  - (d) has low level of microbial pollution

98. 'LEED' rating of building stands for
- (a) Local Energy and Economic Development
  - (b) Leadership in Energy and Environmental Design
  - (c) Local Environmental and Energy Data
  - (d) Leadership in Economic and Environmental Development
99. The term 'GRIHA' used in connection with environmental performance of buildings stand for
- (a) Green Ranking in Indian Housing Assessment
  - (b) Green Rating in India for Integrated Habitat Activities
  - (c) Green Ranking in Innovative Habitat Administration
  - (d) Green Rating for Integrated Habitat Assessment
100. Which one of the following is not a gateway?
- (a) Gopuram
  - (b) Amalaka
  - (c) Torana
  - (d) Nandaimon
101. The only structure made of marble in the entire enclosure of Fatepur Sikri is
- (a) Salim Chishti Tomb
  - (b) Diwan-i-Aam
  - (c) Diwan-i-Khas
  - (d) Panch Mahal

102. Which of the following have been cited as the objectives of the 74<sup>th</sup> Constitution Amendment Act?

1. Participatory Planning
2. Decentralization of Planning
3. Review financial conditions of the Urban Local Bodies

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

103. Consider the following substances:

1. Chlorofluoro carbon
2. Hydro chlorofluoro carbon
3. Halon
4. Helium

Which of the above are ozone depleting?

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 2 and 3 only
- (d) 1, 2 and 3



104. When rainwater harvesting is undertaken on the roof, the water should be

1. Discharged to ground
2. Stored in a closed tank

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

105. The area of the earth's surface necessary to provide resources for a number of specific one-time human needs refers to

- (a) Non-marginalization
- (b) Ecological Footprint
- (c) Eco-sensitive Approach
- (d) Green Development

106. Which one of the following remits is not included under the architect's service responsibility?

- (a) Taking client's instruction and preparation of design brief
- (b) Design and site development
- (c) To appoint clerk of works
- (d) Structural design

107. As per the agreement, a contractor agrees to pay an amount of Rs. 1000/- per day after the expiration of the time limit for completing the construction work of an institution building. The above amount which the contractor is liable to pay for non-completion of the work as per terms and condition of contract is termed as

- (a) Default damages
- (b) Un-liquidated damages
- (c) Liquidated damages
- (d) Penalty

108. A set of species found in a well-delineated geographical location, interacting with one another and functioning together to make possible the persistence of life is held to be:

- (a) Preserved Area
- (b) Ecosystem
- (c) Ecological community
- (d) Homeostasis

109. The townhouse has its antecedents in

- (a) Ancient Greek housing
- (b) 16<sup>th</sup> Century Dutch and Belgian
- (c) Roman settlement
- (d) Islamic urban dwellings

110. A living residential environment employed by inhabitants for enhancement of their lives, while providing security for their families, neighbours and friends is termed as

- (a) Defensible space
- (b) Secured space
- (c) Orderly space
- (d) Concordant space

111. Which one of the following shapes is the most suitable earthquake resistant plan form?



112. NIABY is the acronym for

- (a) None In Any Business Year
- (b) Not In Anybody's Back Yard
- (c) No Impressive Affluence in Business Yield
- (d) No Intended Action to Bypass You

113. Setback (land use) is defined as
- (a) Front margin of building from abutting road space
  - (b) Longitudinal levelling in reverse direction to improve precision
  - (c) Settlements of people claiming as backward
  - (d) Provision of reserve stock – money, materials, etc
114. Jan Gehl is renowned for popularizing the concept of
- (a) Monumental urban design
  - (b) Axis and geometry in urban form
  - (c) Pedestrian friendly public spaces
  - (d) Building friendly public spaces
115. Zoning, in the context of housing developments, relates most to
- (a) Parking zone
  - (b) Prohibited zone
  - (c) Non-smoking zone
  - (d) Density zone

116. Consider the following for the cultural significance of the place in conservation process:

1. Reconstruction
2. Restoration

Which of the above is/are relevant?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

117. Which of the following are parts of architectural conservation?

1. Renovation
  2. Preservation
  3. Rehabilitation
  4. Restoration
- (a) 2, 3 and 4
  - (b) 1, 2 and 3
  - (c) 1, 2 and 4
  - (d) 1, 3 and 4

118. The process of heat transfer through electromagnetic waves is:
- (a) Conduction
  - (b) Insulation
  - (c) Radiation
  - (d) Convection
119. Star rating of an air-conditioner is determined by its
- (a) Power usage
  - (b) Compressor capacity
  - (c) Cooling capacity
  - (d) Energy efficiency ratio
120. The enclosed part of a room projecting into the open space on any upper floor of a building is called
- (a) Balcony
  - (b) Chajja
  - (c) Revas projection
  - (d) Box projection