# MCQ (MULTIPLE CHOICE QUESTIONS) SEMESTER – 6<sup>TH</sup>

# **SUBJECT- ADVANCED CONSTRUCTION TECHNIQUES**

- 1. **Fibers** is a material which is naturally or artificially produced & is a filament or thread like piece of any material
  - (a) **Fibers**
  - (b) plaster
  - (c) PVC
  - (d) Artifical Timber

### 2. Full form of PVC- Polyvinyl chloride

- (a) Polyethenevinyl chloride
- (b) Polyethylvinyl chloride
- (c) Polyvinyl chloride
- (d) Polymethylvinyl chloride
- 3. <u>Prefabrication</u> is the practice of assembling components of a structure in a factory or other manufacturing site, and transporting complete assemblies or sub-assemblies to the construction site where the structure is to be located.
  - (a) fabrication
  - (b) Prefabrication
  - (c) Damping
  - (d) Scaffolding
- 4. When a construction is done above the 1.5m height then a temporary structure is needed to support the labours to continue the construction process. These structures are called <u>scaffoldings</u>
  - (a) seismic weight
  - (b) building configuration
  - (c) scaffoldings
  - (d) fibers
- 5. The shaking of earthcrust due to the movement of collision of the techtonic plattes is called **earthquake** 
  - (a) earthquake
  - (b) cyclone
  - (c) volcanic Eruptions
  - (d) flood
- 6. **Jacketing** is the process in which we cover the structural members of a building to increase the strength of the building.
  - (a) Jacketing
  - (b) scaffoldings
  - (c) Shoring
  - (d) Sesmic Retrofitting

- 7. \_\_\_\_\_is the unit of measurement of intensity of light?
  - (a)  $1 lux 5 luman/m^2$
  - (b)  $1 \ln 1 \ln m / m^2$
  - (c) 1 lux 10 luman/m2
  - (d) 2 lux 6 luman/m2
- 8. The instrument which is used to measure the earthquake shaking is called Seismograph
  - a) Seismograph
  - b) Anemometer
  - c) Barometer
  - d) Nomograph
- 9. The depth of the focus from the epicentre is known as Focal depth
  - a) Shock depth
  - b) Epicentre depth
  - c) Focal depth
  - d) Earthquake depth
- 10. Which of the following instruments is used to measure the magnitude of an earthquake?
  - a) Seismograph
  - b) Speedometer
  - c) Ammeter
  - d) Richter scale
- 11. The first formal seismic code in India is **IS 1893** 
  - a) IS 1893
  - b) IS 1920
  - c) IS 1937
  - d) IS 1993
- 12. Indian standard criteria for earthquake resistant design of structures (first part, fifth revision) is stated by \_\_\_\_\_ IS 1893, 2002
  - a) IS 1899, 2000
    b) IS 1894, 2000
    c) IS 1893, 2002
    d) IS 1896, 2001
- 13. A square pit, known as <u>Test pits</u> with side as about 1.50 m, is excavated upto a depth at which sufficiently hard soil is available.
  - a) Test pits
  - b) Probing
  - c) Test piles
  - d) Deep boring
- 14. **Probing** consists of driving either a hollow tube or a steel rod or an iron rod into the ground.
  - a) Trail pits
  - b) Test piles
  - c) Probing
  - d) Digging

- 15. The bearing capacity of soil is calculated in  $\underline{kN/m^2}$  units.
  - a) gm/cc
  - b)  $kg/m^3$
  - c)  $kN/m^2$
  - d) N/m
- 16. The science which deals with the sound insulation in a building is known as <u>Acoustic</u>
  - a) Reverberation
  - b) Transmission
  - c) Acoustic
  - d) Air borne
- 17. The treatment given to the roof of a building to prevent the roof from the leakage of water is known as

# Damp proofing

- a) Fire proofing
- b) Damp proofing
- c) Termite proofing
- d) Sound proofing
- 18. <u>Hot bitumen</u> is a flexible material which is commonly used for the damp proofing.
  - a) Hot bitumen
  - b) Bituminous felts
  - c) Mastic asphalt
  - d) Metal sheets
- 19. In order to secure superstructure from an earthquake **<u>Base Isolation</u>** technique is most preferred and used worldwide.
  - a) Reinforcement
  - b) Base Isolation
  - c) Energy Dissipation
  - d) Sesmic Dampers

# 20. Load bearing wall is constructed in order to support load other than its own.

- a) Load supporting
- b) Load distributing
- c) Load bearing
- d) Load releasing
- 21. Sometimes the structures are to be temporarily supported. This is achieved by what is known as the <u>Shoring</u>
  - a) Scaffolding
  - b) Shoring
  - c) Underpinning
  - d) Grouting
- 22. In <u>Raking shore</u> shore arrangement, the inclined supports are given to the external walls from the ground.a) Raking shore
  - b) Flying shore
  - c) Dead shore
  - d) Patented shore

- 23. In **<u>Flying shore</u>** arrangement, the horizontal supports are given two parallel walls which have become unsafe due to the removal or collapse of the intermediate building.
  - a) Inclined shore
  - b) Raking shore
  - c) Dead shore
  - d) Flying shore
- 24. In **<u>Dead shore</u>** arrangement, the horizontal members, known as the needles are supported by vertical members.
  - a) Horizontal shore
  - b) Flying shore
  - c) Dead shore
  - d) Raking shore
- 25. The **<u>Raking shore</u>** should be preferably Inclined at 45° with the ground.
  - a) Horizontal shore
  - b) Raking shore
  - c) Dead shore
  - d) Vertical shore
- 26. <u>**Tractor**</u> is a self propelled machine which is used mainly to exert a powerful tractive force for pulling other machines.
  - a) Tractor
  - b) Bulldozer
  - c) Angle dozer
  - d) Scraper
- 27. A <u>Bulldozer</u> is very useful equipment and it can be used for construction work like to clear the site of work, to make the land level, etc.
  - a) Scraper
  - b) Grader
  - c) Excavator
  - d) Bulldozer

28. A <u>Bulldozer</u> can be used on wet ground and in all conditions of weather.

- a) Grader
- b) Scraper
- c) Escalator
- d) Bulldozer

29. An Excavator is an oldest type of machine which removes earth.

- a) Escalator
- b) Excavator
- c) Elevator
- d) Bulldozer

30. <u>Power shovel</u> type of excavator carries Shovel at its lower end.

- a) Power shovel
- b) Dragline
- c) Clamshell
- d) Backactor

- 31. **Dragline** type of excavator is used for digging at or below the operating level.
  - a) Skimmer
  - b) Dragline
  - c) Power shovel
  - d) Dredger
- 32. <u>Compaction</u> equipment are used to decrease the porosity of earth and to increase the density and strength of the earth.
  - a) Excavation
  - b) Compaction
  - c) Hauling
  - d) Hoisting
- 33. <u>Trucks</u> are the most commonly used equipment for transportation.
  - a) Dump trucks
  - b) Rollers
  - c) Trucks
  - d) Bulldozers
- 34. Which of the following is not a component of plumbing water supply system?

### a) Washbasin

- b) Water supply and distribution pipes
- c) Valves
- d) Storage tank
- 35. According to the Indian Standard recommendations, a water requirement of <u>135 litres</u> per head per day is assumed for residential buildings.
  - a) 50 litres
  - b) 115 litres
  - c) 135 litres
  - d) 160 litres
- 36. The full form of BIS is \_\_\_\_\_
  - a) Board of Indian Standards
  - b) Bureau of Indian Standards
  - c) Bureau of International Specifications
  - d) Board of International Standards
- 37. <u>Ventilation</u> in a building means the free passage of clean air in a building.
  - a) Habitation
  - b) Protection
  - c) Sanitation
  - d) Ventilation
- 38. The science which deals with the sound insulation in a building is known as Acoustic
  - a) Reverberation
  - b) Transmission
  - c) Acoustic
  - d) Air borne

- 39. Soil Nailing is a technique used to reinforce and strengthen the existing ground.
  - a) Soil Nailing
  - b) Reinforcing
  - c) Acoustic
  - d) Wire mesh
- 40. Soil reinforcing is defined as a technique to improve the engineering characterstics of soil.
  - a) Soil Nailing
  - b) Soil Reinforcing
  - c) Acoustic
  - d) Wire mesh
- 41. <u>Escalators</u> are power driven mechanical service used to transfer people up to short vertical height& used in public places like cinema complex, threaters, marketing malls etc. These have the capacity to move large number of people at a particular time.
  - a) Escalators
  - b) Ventilation
  - c) Staircase
  - d) Elevators
- 42. <u>Elevators</u> are used to transfer the heavy loads from one level to another level & can be operated by using electric motors or hydraulic pump.
  - a) Escalators
  - b) Ventilation
  - c) Staircase
  - d) Elevators
- 43. Choose which one is correct.
  - a) YC fuse
  - b) IC fuse
  - c) TC fuse
  - d) AC fuse
- 44. <u>Fuse</u> are the protectors, these are the safety devices which are used to protect the home appliances like televisions, refrigerators computers with damage by high voltage
  - a) fuse
  - b) Earthing
  - c) Ventilation
  - d) Plumbing
- 45. In a building, to provide ultimate comfort to occupants <u>**HVAC**</u> can be used.
  - a) AC
  - b) HVAC
  - c) Ventilators
  - d) HAC
- 46. Disasters can be broadly termed as  $\underline{2}$  types.
  - a) 2
  - b) 4
  - c) 5
  - d) 3

- 47. Bhubaneswar lies in zone  $\underline{3}$  of Earthquake prone areas.
  - a) 5
  - b) 3
  - c) 4
  - d) 2
- 48. IS 1893-2002 gives details on:
  - a) Seismic strengthening
  - b) Improving earthquake resistance
  - c) Earthquake resistance structures
  - d) Earthquake resistance design
- 49. Earthquake force is a function of Mass
  - a) Mass
  - b) Thickness
  - c) Length
  - d) Breadth

50. Which of the following is not a classification of traps based on their shape?

- a) P-trap
- b) Q-trap
- c) S-trap
- d) W-trap
- 51. Structures built on which land have to withstand greater risk during earthquakes?
  - a) Solid mass
  - b) Loose soil
  - c) Strong rocks
  - d) Unfractured mass
- 52. What should be the type of foundation for concrete and masonry buildings?

# a) Continuous

- b) Discontinuous
- c) Shallow foundation
- d) Isolated
- 53. Which type of roofs gives better resistance against shocks?
  - a) Sloped roofs
  - b) Thached roofs
  - c) Flat roofs
  - d) Straw roofs
- 54. Which of the following need not be avoided for construction of quake resistant buildings?a) Uniform height
  - b) Chimneys
  - c) Heavy weight walls
  - d) Discontinuous foundations

- 55. To avoid shearing, dam has to be placed as far as possible from Faults
  - a) Joints
  - b) Folds
  - c) Intrusions
  - d) Faults
- 56. Earthquakes occur at which portion of plates?

# a) Middle portion

- b) Along the boundaries of plates
- c) Along the equidistant lines of plates
- d) At the centre point of the plates
- 57. The <u>Stone</u> is a bad conductor of heat and it is also non-combustible building material.
  - a) Sandstone
  - b) Granite
  - c) Stone
  - d) Limestone
- 58. It is found that the **Brick** are not seriously affected until very high temperature of 1200°C to 1300°C are reached.
  - a) Plastic
  - b) Limestone
  - c) Sandstone
  - d) Brick
- 59. It is quite evident that the incoming air for ventilation should be <u>cool</u> in summer and <u>warm</u> in winter before it enters the room.
  - a) cool, warm
  - b) warm, cool
  - c) humid, dry
  - d) dry, humid
- 60. In winter, it becomes necessary to supplied slightly **<u>Heated</u>** air to the inside of the building.
  - a) Cool
  - b) Heated
  - c) Humid
  - d) Dehumidified
- 61. Removal of inside air and supply of fresh outside air in a closed room is known as Ventilation
  - a) Ventilation
  - b) Absorption
  - c) Adsorption
  - d) Transmission
- 62. Which of the following is not a property of plastics?
  - a) Plastics are not ductile
  - b) Plastics are organic in nature
  - c) Plastics have good electric insulation properties.
  - d) PVC plastics are inflammable

- 63. Plastics are divided into thermoplastic and thermosetting on the basis of their \_\_\_\_
  - a) Behaviour with respect to heating
  - b) Structure
  - c) Physical properties
  - d) Mechanical properties
- 64. Which of the following statements about thermosetting plastics is not true?
  - a) It is possible to change their shape on heating
  - b) They are durable and strong
  - c) They are available in a variety of colours
  - d) They become rigid on heating
- 65. Which of the following types of plastics have a high modulus of elasticity?

### a) Rigid plastics

- b) Semi-rigid plastics
- c) Soft plastics
- d) Elastomers
- 66. <u>Intermittent</u> type of equipment have intermittent cycles of work.
  - a) Intermittent
  - b) Continuous flow
  - c) Mixed
  - d) Combination
- 67. <u>Continuous flow</u> types of equipment have a continuous flow of work turned out.
  - a) Mixed
  - b) Combined
  - c) Continuous flow
  - d) Intermittent
- 68. Subdivision/layout plan which shall be drawn on a scale of not less than 1:500
  - a) 1:100
  - b) 1:500
  - c) 1:1000
  - d) 1:50
- 69. A <u>Building line</u> usually parallel to the plot boundaries and laid down in each case by the Authority, beyond which nothing can be constructed towards the site boundaries.
  - a) Building line
  - b) Control line
  - c) Property line
  - d) Plot line
- 70. The ratio of the total floor area inclusive of all the floors to the area of the plot on which building stands is known as **<u>Built-up area</u>** 
  - a) Groundage
  - b) Plot area
  - c) Floor area
  - d) Built-up area

- 71. Due to improper ventilation, which gas gets stuck into house and develops dizziness to the occupants.
  - a) Oxygen
  - b) Nitrogen
  - c) Carbon dioxide
  - d) Hydrogen
- 72. The <u>Cement concrete</u> is a mixture of cement, sand, pebbles or crushed rock and water, which, when placed in the skeleton of forms and are allowed to cure, becomes hard like a stone.
  - a) Cement concrete
  - b) Cement slurry
  - c) Cement grouting
  - d) Cement mortar
- 73. Pitched and sloping roofs are suitable for
  - (a) Coastal Regions
  - (b) Plain Regions
  - (c) Covering large areas
  - (d) All of the above

### 74. Now India is divided into <u>4</u> seismic zones.

- a. 5
- b. 3
- c. 6
- d. 4

75. Which IS Code is used for designing a structure considering earthquake loads?

- a) IS 800
- b) IS 875
- c) IS 1893
- d) IS 456
- 76. Which of the following factors does not influence earthquake resistance design?a) geographical location of structure
  - b) wind of location
  - c) site soil
  - d) strength of structure
- 77. Which of the following assumption is correct for earthquake design resistant structure?

# a) Earthquake will not occur simultaneously with wind

- b) Earthquake will occur simultaneously with maximum flood
- c) Earthquake will occur simultaneously with maximum sea waves
- d) Earthquake will occur simultaneously with wind

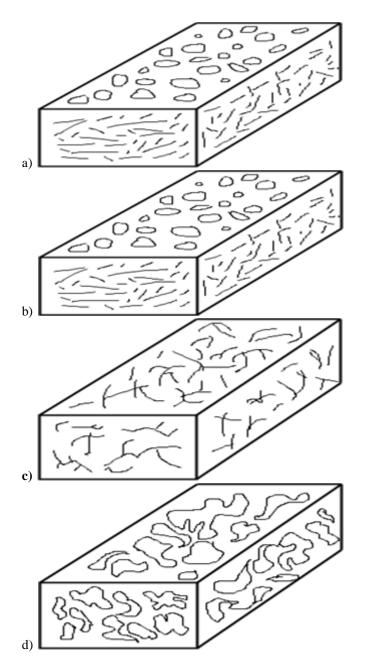
### 78. The earthquake of 7.0 can cause

- a) severe damage
- b) mild jolts
- c) medium damage
- d) no damage

# 79. The process by which buildings are made more resistant to earthquake is the

- a) retrofitting
- b) emanation
- c) soundproof
- d) centrally heating

80. Which of the following structures represents that of a fiber composite?





- 81. FRP stands for:
  - a) Fibre Reinforced Polymer
  - b) Fully Reinforced Polymer
  - c) Fire Resistant Polymer
  - d) Fibre Reconditioned Polymer
- 82. PVC is widely used to make pipes because:
  - a) Cost effective
  - b) Does not react to chemicals
  - c) Easily available
  - d) Easy to transport
- 83. limitations of prefabrication .
  - I) Extra reinforcement is required to take care of handling and erection stresses .
  - II) II) The cracks may develop at the joints between the precart in -site concrete due to shrinkage and temperature stresses . To overcome them extra steel is required across joint.
  - III) III) All of the Above
  - IV) IV) None of the Above
- 84. In order to secure superstructure from an earthquake **<u>BaseIsolation</u>** technique is most preferred and used worldwide.

a)Reinforcementb)BaseIsolationc)EnergyDissipationd) Sesmic Dampers

- 85. <u>Superstructure</u> is the part of building constructed above the plinth level.
  - a) Superstructure
  - b) Substructure
  - c) Foundation
  - d) Plinth
- 86. **Beams** are structural members design to carry and transfer transverse loads across space to support elements.
  - a) Beams
  - b) Columns
  - c) Lintels
  - d) Sills
- 87. In architecture, a **<u>Floor</u>** is generally the lower horizontal surface of a room, and/or the supporting structure underneath it.
  - a) Sill
  - b) Basement
  - c) Ramp
  - d) Floor

88. **Roof** is the top most part of building which provides covering to the entire assembly and the occupants.

- a) Roof
- b) Ceiling
- c) Coping
- d) Parapet wall

- 89. Base isolation technique was first demonstrated in India after the 1993 Killari earthquake
  - a) 2005 Kashmir earthquake
  - b) 1991 Uttarkashi earthquake
  - c) 1993 Killari earthquake
  - d) 1950 Assam earthquake
- 90. What is the purpose of jacketing?
  - a) To increase shear strength
  - b) To increase flexural strength
  - c) Both (a) and (b) are correct
  - d) Both (a) and (b) are incorrect
- 91. What are the techniques used in Global Retrofitting?
  - A. Adding shear wall, Adding infillwall, Adding wing wall, wall Thickening, Mass Reduction & base isolation
  - B. Jacketing of beams, jacketing of columns, Jacketing of beams- column joints, Strengthing individual footings
  - a) Both A and B are correct
  - b) Both A and B are incorrect
  - c) Only A is correct
  - d) Only B is correct
- 92. What are the techniques used in Local Retrofitting?
  - A. Adding shear wall, Adding infillwall, Adding wing wall, wall Thickening, Mass Reduction & base isolation
  - B. Jacketing of beams, jacketing of columns, Jacketing of beams- column joints, Strengthing individual footings
  - a) Both A and B are correct
  - b) Both A and B are incorrect
  - c) Only A is correct
  - d) Only B is correct
- 93. Water cement ratio is the ratio of
  - a) Water to cement by weight
  - b) Water to cement by volume
  - c) Cement to water by weight
  - d) Cement to water by volume

#### 94. At 28 days of curing concrete attains a strength of

- a) 20 to 25%
- b) 60 to 70%
- c) 65 to 80%
- d) 90 to 95%

### 95. Per capita demand of water is calculated in liters

- a) Per person per day
- **b**) Per person per month
- c) Per person per year
- **d**) None of these
- 96. Which of the following can be identified as the objective of water supply scheme?
  - a) Chlorination of water
  - b) Treat water
  - c) Safe water supply
  - d) Ionization of water

- 97. Which of the following indicates the component of a water supply scheme?
  - a) Impure water
  - b) Chlorination of water
  - c) Sub surface water
  - d) Intake of the water
- 98. Surface water can act as a source of water in water supply scheme.
  - a) True
  - b) False
- 99. While considering the design period, which must be given more priority?
  - a) Area of land
  - b) Population
  - c) Usage of water
  - d) Arrangement of pipes

#### 100. The design period of storage reservoir can be given as 10 yr

- a) 50 yr
- b) 20 yr
- c) 30 yr
- d) 10 yr

101. Which type of water is generally used in the treatment of water?

- a) Chlorinated water
- b) Treated water
- c) Raw water
- d) Sulphated water

#### 102. The amount of water required for 1 percent per day is determined as Per capita demand

- a) Daily demand
- b) Monthly demand
- c) Annual demand
- d) Per capita demand

103. The traps are used for preventing foul gas from sewers to back flow in the house.

- a) air freshners
- b) traps
- c) naphthalene balls
- d) phenyl
- 104. In <u>gravity distribution</u> system the source of supply is lake or impounding reservoir at some elevation.a) parallel
  - b) gravity distribution
  - c) pumps distribution
  - d) rain distribution

105. Disinfection of drinking water is done to remove-

- (a) Odour
- (b) Bacterias
- (c) Turbidity
- (d) Colour

106. As per IS :1172-1963, water required per head per day for average domestic purposes is -

- (a) 20litres
- (b) 50 litres
- (c) 135 litres
- (d) 80litres

107. Pick up the incorrect statement from the following, The underground sources of water is from

- (a) Wells
- (b) Springs
- (c) Storage Reserviours
- (d) None of the Above

108. The method of distribution of water is divided into how many types?

- a) 1
- b) 2
- c) 3
- d) 4

109. In which system of water supply, water is available for 24 hours but uneconomically used?

- a) Continuous supply
- b) Fixed supply
- c) Intermittent supply
- d) Low supply
- 110. According to Kuichling's formula, fire demand in litres per minute for a population of *P* thousands, is a. 3182  $\sqrt{P}$ 
  - b. 1136.5 (P/10 + 10) c. 4637  $\sqrt{P}$  [1 - 0.01  $\sqrt{P}$ ] d. 5663  $\sqrt{P}$
- 111. The type of pipe commonly used in water supply distribution schemes, is
  - a. R.C.C. pipes b. Hume pipes **c. Cast iron pipes** d. G.I. pipes

112. Pick up the incorrect statement from the following. The source of surface water is from

a. Streams and riversb. Storage reservoirsc. Tubewellsd. Ponds and lakes

113.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

114. A city supply includes

- a. Domestic water demand
- b. Industrial and commercial water demands
- c. Demand for public uses and fire
- d.All the above

115. Ventilation of house drainage is required toa) relieve the pressure of foul gasesb) dilute the fould air in the drainc) reduce the obnoxious effect of foul aird) all of these

116. In one pipe system of plumbing,

a) only one pipe is providedb) the main pipe is connected directly to the drainage systemc) all of the traps are fully ventilated and connected to the ventilation pipe

d)all of the above

- 117. n one pipe system of plumbing, waste water is carried away from
  - a) bath roomsb) wash basinsc) kitchensd) all of these

118. Which one is incorrect, what are the components of drainage sysytem?

- a) Pipes b) Traps c) **Reservoirs** d) Sanitary fittings
- 119. Electric wiring is a process of connecting cables & wires to the related devices such as fuse switches, lights, fans etc to the main distribution board for continuous power supply.
  - a)Electric wiring
  - b) Water supply
  - c) Both a) abd b) are correct
  - d)Both a) abd b) are not correct
- 120. A <u>Smooth wheeled</u> roller is a multi purpose roller which is used for various purposes and for practically all type of roads.
  - a) Smooth wheeled
  - b) Pneumatic
  - c) Rubber tyred
  - d) Dead weight

121. Effective compaction is not achieved by **Smooth wheeled** rollers.

- a) Rubber tyred
- b) Sheep's foot
- c) Pneumatic
- d) Smooth wheeled

122. Vibratory compactors consist of a vibrating unit mounted on a screed, plate or roller.

- a) Earth rammers
- b) Pounding
- c) Vibrating rollers
- d) Vibratory compactors
- **123.** <u>**Tractor**</u> is a self propelled machine which is used mainly to exert a powerful tractive force for pulling other machines.
  - a) Tractor
  - b) Bulldozer
  - c) Angle dozer
  - d) Scrape
- 124. A **<u>Bulldozer</u>** is very useful equipment and it can be used for construction work like to clear the site of work, to make the land level, etc.
  - a) Scraper
  - b) Grader
  - c) Excavator
  - d) Bulldozer

- 125. <u>Artifical Timber</u> is a wooden material made artifically from solid wastes like sawdust, flyash and other biodegradable wastes etc.
  - a) Artifical Timber
  - b) Wall Cladding
  - c) Acoustic Material
  - d) None of the above

126. Choose the correct option, uses of Artificial timber

A. It is a large range of use in industries as well as domestic purposes.

B. It is used for housing and roofing. And it is used for building of boats and floating devices.

- a) A is correct and B is incorrect
- b) A is incorrect and B is correct
- c) All the above
- d) None of the above

127. When two buildigs are close to each other, they may strike with each other during shaking is known as

- a) Horizontal layout of the buildings
- b) Vertical Layout of the buildings
- c) Adjacency of buildings
- d) None of the above

128. The inside corner of an asymmetrical shape are called as **<u>re-entrant</u>** corners

- a) Asymmetrical corners
- b) re-entrant
- c) None of these
- d) All of these
- 129. A building that does not have symmetry & plan, elevation, geometry mass on load is called **irregular building** 
  - a) irregular building
  - b) regular building
  - c) None of these
  - d) All of these

130. How many types of distribution system of a town are classified?

- a) 3
- b) 4
- c) 5
- d) 1

131. If conduicts installed on roof or wall, It is known as Surface Conduict Wiring

### a) Surface Conduict Wiring

- b) Concealed Conduict Wiring
- c) None of these
- d) All of these
- 132. If conduicts is hidden inside the wall slots with the help of plastering, It is known as <u>Concealed Conduict</u> <u>Wiring</u>
  - a) Surface Conduict Wiring
  - b) Concealed Conduict Wiring
  - c) None of these
  - d) All of these

133. Earth embankments or slopes are commonly required for which of the following purpose?

- a) Railways
- b) Earth dams
- c) Road ways
- d) All of the mentioned

134. Slopes is classified into <u>2</u> types.

- a) 2
- b) 3
- c) 4
- d) 5

135. Geosynthetics includes **8** main product categories.

- a) 6
- b) 8
- c) 9
- d) 10

136. How many steps are involved in a soil investigation?

- a) 3
- b) 6
- c) 5
- d) 2

137. Geomembranes is the largest group of geosynthetics.

- a) Geonets
- b) Geomembranes
- c) Geotextiles
- d) Geogrids

138. Casagrande apparatus is used to test liquid limit of a soil.

- a) Mohr
- b) Casagrande
- c) Otto
- d) Terzaghi

139. What are the characterstics of soil reinforcing techniques?

A. Increase of load bearing capacity of soil

B. Reduce the permeability of soil
a) Both A and B are correct
b) Both A and B are not correct
c) Only A is correct
d) Only B is correct

140. <u>Soil Reinforcing Techniques</u> is a technique to improve the characteristics of the soil and to support or carry more loads

# a) Soil Reinforcing Techniques

- b) R.C.C
- c) Ground Improvement Techniques
- d) None of these above

### 141. How many types of shoring are there?

- a) 2
- b) 3
- c) 4
- d) 9

### 142. How many types of irregularity of structure are there?

- a) 1
- b) 7
- c) 2
- d) 4

143. These bands are **Horizontal** member

- a) Horizontal
- b) Vertical
- c) None of the above
- d) All of the above

144. How many types of bands are there?

- a) 8
- b) 10
- c) 5
- d) 4

145. What are the Characterstics of sesmic performance of the building?

- a) Damping
- b) Ductility
- c) Both a) and b) are correct
- d) None of the above

146. Intermittent type of equipment have intermittent cycles of work.

- a) Intermittent
- b) Continuous flow
- c) Mixed
- d) Combination

147. The **Raking shore** should be preferably Inclined at 45° with the ground.

- a) Horizontal shore
- b) Raking shore
- c) Dead shore
- d) Vertical shore

148. The shaking of earthcrust due to the movement of collision of the techtonic plattes is called earthquake

- a) earthquake
- b) cyclone
- c) volcanic Eruptions
- d) flood

### 149. The first formal seismic code in India is IS 1893

- a) IS 1893
- b) IS 1920
- c) IS 1937
- d) IS 1993

150. Hot bitumen is a flexible material which is commonly used for the damp proofing.

- a) Hot bitumen
- b) Bituminous felts
- c) Mastic asphalt
- d) Metal sheets