

Draughtsman Civil– Semester 3 Module 1 - Planning of Building

Reviewed and updated on: 01st November 2019 Version 1.1

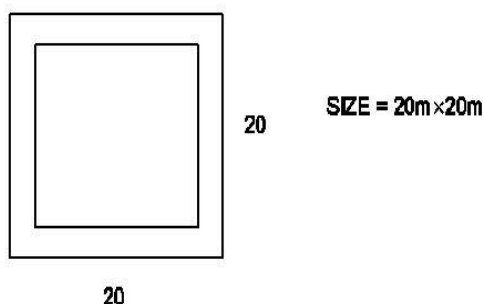
1 : Which of the following is the basic need of a human being?

- A** : Sheet
- B** : Shelter
- C** : Huts
- D** : Tree

2 : Which of the following gives major importance to outside view?

- A** : Aspect
- B** : Prospect
- C** : Grouping
- D** : Lighting

3 : What is the shape of the given plan?



- A** : Square
- B** : Rectangle
- C** : Oblong
- D** : Circle

4 : What is the other name of circulation in the same floor?

- A** : Horizontal circulation
- B** : Vertical circulation
- C** : Zig - Zag circulation
- D** : Winding circulation

5 : Who is having legal interest in land or building?

- A** : Leaser
- B** : Mortgagee
- C** : Mortgager
- D** : Owner

6 : Which of the following shape of plan makes home compact?

- A** : Square
- B** : Rectangle
- C** : Oblong
- D** : Circle

7 : Which of the following standard should be considered in planning?

- A** : IS codes for planning
- B** : ISI
- C** : NBC 2005
- D** : Local building - Bye laws

8 : Who is responsible for providing the legality of the plot?

- A** : Leaser
- B** : Mortgagee
- C** : Mortgager
- D** : Owner

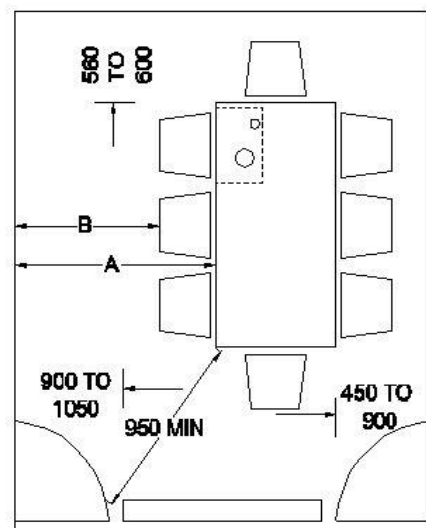
9 : Which room should be situated near kitchen and drawing?

- A** : Bed room
- B** : Living room
- C** : Dining room
- D** : Hall

10 : Which room is provided for learning and reading in residential building?

- A** : Drawing room
- B** : Study room
- C** : Entertainment room
- D** : Work room

11 : What is the name of the room?



- A** : Bed room
- B** : Study room
- C** : Dining room
- D** : Multi purpose room

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12 : How the economy achieved in building?

- A** : Providing simple elevation
- B** : Increasing the storey height
- C** : Increasing steps of stairs
- D** : Utilizing large sized component

13 : What is the name of the useable floor area excluding staircase?

- A** : Circulation area
- B** : Carpet area
- C** : Covered area
- D** : Plinth area

14 : What is the name of the built up area at the floor level?

- A** : Plinth
- B** : Plinth area
- C** : Plinth height
- D** : Plinth level

15 : What is the formula for floor area ratio?

- A** : $(\text{Total area of walls} / \text{Total plot area}) \times 100$
- B** : $(\text{Total area of all floors} / \text{Total area of walls}) \times 100$
- C** : $(\text{Total area of all floors} / \text{Total plot area}) \times 100$
- D** : $(\text{Total plot area} / \text{Total area of all floors}) \times 100$

16 : What should be the distance between building electric supply mains?

- A** : 1.0 - 1.8 m
- B** : 1.0 - 2.0 m
- C** : 1.2 - 2.0 m
- D** : 1.5 - 2.0 m

17 : What is the minimum scale of which the key plan need to be drawn according to NBC - 2005?

- A** : 01:50
- B** : 1:100
- C** : 1:200
- D** : 1:400

18 : Which plan is approved and sanctioned by competent authority?

- A** : Approved plan
- B** : Sanctioned plan
- C** : Key plan
- D** : Site plan

19 : What is the name of the plan which gives location with respect to neighbourhood boundary in

1:10000?

- A** : Site plan
- B** : Key plan
- C** : Layout plan
- D** : Approved plan

20 : What is the another name of dwelling unit?

- A** : Row building
- B** : Residential building
- C** : Commercial building
- D** : Educational building

21 : What is the name of horizontally sliced building viewed from top?

- A** : Plan
- B** : Section
- C** : Elevation
- D** : Sectional elevation

22 : What is the another name for "Sub-divisional plan"?

- A** : Key plan
- B** : Layout plan
- C** : Sanctioned plan
- D** : Approved plan

23 : What is the maximum number of floors that can be allowed in residential building as per NBC 2005?

- A** : 2 Floors
- B** : 3 Floors
- C** : 4 Floors
- D** : 5 Floors

24 : Which of the following IS code is used for fire safety?

- A** : IS 1641 - 1960
- B** : IS 456 - 200
- C** : IS 291 - 1972
- D** : IS 10711 - 1984

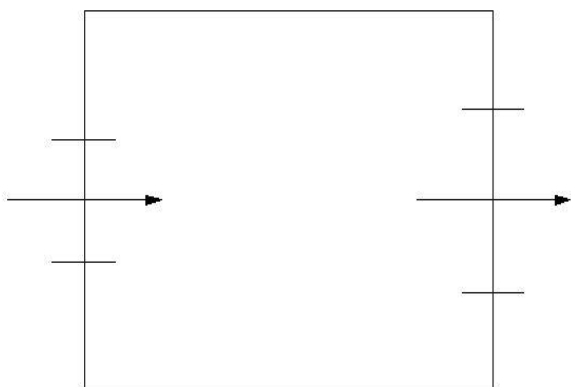
25 : Which of the following is used as escape elements in building for fire safety?

- A** : Lobbies
- B** : Strong room
- C** : Floors
- D** : Outer walls

- 26** : What is the abbreviation for MOEF?
A : Ministry of Ecology and Forest
B : Ministry of Environment and Federation
C : Ministry of Environment and Forest
D : Ministry of Ecology and Fire

- 27** : Which does forest conservation act was passed?
A : 1992
B : 1980
C : 1972
D : 2000

- 28** : What is the name of the figure given below?



- A** : Stack effect
B : Wind effect
C : Mechanical effect
D : Artificial effect

- 29** : Which of the following position of door and type of door shutter offer more privacy to room?
A : Centre door - Single shutter
B : Centre door - Double shutter
C : Corner door - Single shutter
D : Corner door - Double shutter

- 30** : Which of the following room in residential building need more air changes per hour, while comparing to bed room in residential building?
A : Drawing room
B : Master bed room
C : Kitchen
D : Hall

- 31** : If the area of the building is same, which of the following building is cheaper compared to single storey?

- A** : 2 storey building
B : 3 storey building
C : 4 storey building
D : 5 storey building

- 32** : Which of the following is the important advantage of orientation of building?
A : Aesthetic
B : Reduction in energy bills
C : Improved circulations
D : Outdoor projection

- 33** : What is the minimum scale at which a building plan need to be drawn according to NBC 2005?
A : 1:50
B : 1:100
C : 1:200
D : 1:400

- 34** : Which season gives more lighting to the building?
A : Summer
B : Winter
C : Spring
D : Autumn

- 35** : What is the maximum covered area for an Industry?
A : 40% of the site area
B : 50% of the site area
C : 60% of the site area
D : 70% of the site area

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36 : What is the name of the group institutional building was classified?

- A** : Group C
- B** : Group E
- C** : Group H
- D** : Group I

37 : Which type of building comes in group H?

- A** : Hazardous
- B** : Industrial
- C** : Storage
- D** : Business

38 : What is the name of the part parallel between boundary and the building?

- A** : Abut line
- B** : Set back line
- C** : Plot line
- D** : Plinth line

39 : What is the formula for carpet area?

- A** : Total plot area - Circulation area
- B** : Total circulation area - Floor area
- C** : Total floor area - Circulation area
- D** : Total area of all floors - Wall area

40 : What is the full form of FSI?

- A** : Floor Site Index
- B** : Floor Space Index
- C** : Floor Staircase Index
- D** : Floor Storey Index

41 : How many persons require one wash basin in public buildings?

- A** : 100
- B** : 150
- C** : 175
- D** : 200

42 : Which building provides sleeping and cooking facilities?

- A** : Institutional building
- B** : Educational building
- C** : Residential building
- D** : Hotel building

43 : Which is the important room in a residential building W.R.T NBC 2005?

- A** : Kitchen
- B** : Bed room
- C** : Hall
- D** : Drawing room

44 : What is the normal life period of a residential building with concrete roof according to NBC 2005?

- A** : 50
- B** : 75
- C** : 100
- D** : 110

45 : Which group in which custodial institution comes?

- A** : Educational building
- B** : Institutional building
- C** : Assembly building
- D** : Business building

46 : What is the allowable height of riser in public building W.R.T to NBC 2005?

- A** : 12 cm
- B** : 15 cm
- C** : 17 cm
- D** : 19 cm

47 : Which classification does row building comes in?

- A** : Public building
- B** : Residential building
- C** : Educational building
- D** : Institutional building

48 : What is the lead air charges per hour needed in a restaurant kitchen?

- A** : 8
- B** : 10
- C** : 12
- D** : 14

49 : Which classification of the building have highest F.A.R permissible?

- A** : Residential building
- B** : Educational building
- C** : Institutional building
- D** : Mercantile building

50 : What is the permissible F.A.R for commercial building?

- A** : 1.5
- B** : 2
- C** : 2.5
- D** : 3

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51 : Where does laboratories comes in the under ground shopping?

A : Mercantile building

B : Business building

C : Industrial building

D : Educational building

52 : What is the basic detail needed for a design engineer, while designing assembly building?

A : Area of plot

B : Number of fixed seats

C : Location of plot

D : Total floor area

53 : What is the full form of CPU?

- A** : Craft Processing Unit (CPU)
- B** : Code Processing Unit (CPU)
- C** : Central Processing Unit (CPU)
- D** : CD Processing Unit (CPU)

54 : Which year does first micro processor was invented?

- A** : 1970
- B** : 1971
- C** : 1972
- D** : 1973

55 : What is the name of figure?



- A** : Mouse
- B** : Monitor
- C** : Keyboard
- D** : Plotter

56 : What is the full form of CADD?

- A** : Computer Aided designing and Drafting
- B** : Computer Aided Drafting and Drawing
- C** : Computer Aided Drawing and designing
- D** : Computer Aided Drawing

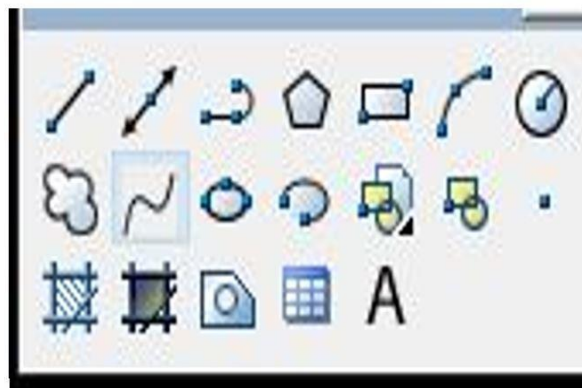
57 : What is the highest dots per inch (DPI) one can print a drawing?

- A** : 800 dpi
- B** : 1000 dpi
- C** : 1200 dpi
- D** : 1400 dpi

58 : What is the full form of GUI?

- A** : Golden User Installation
- B** : Graphical User Installation
- C** : Graphical User Interface
- D** : Geometrical User Interface

59 : What is the name of the tool bar given below?



- A** : Draw
- B** : Modify
- C** : Dimension
- D** : Visual styles

60 : What is the use of function key F3?

- A** : OSNAP
- B** : TABLET
- C** : ISOPLANE
- D** : SAVE AS

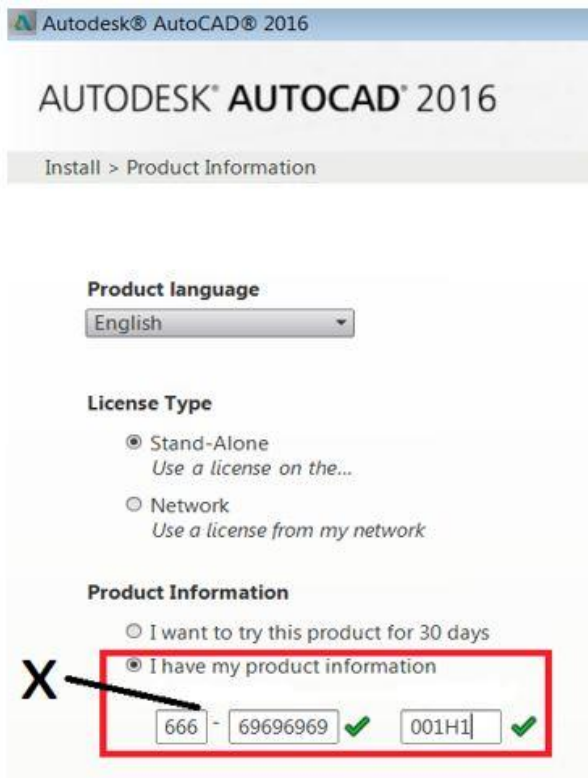
61 : Which of the following software is limited for AutoCAD installation?

- A** : Windows DOS
- B** : Windows 98
- C** : Windows 03
- D** : Windows 10

62 : What is the lowest RAM in which AutoCAD 19 will work?

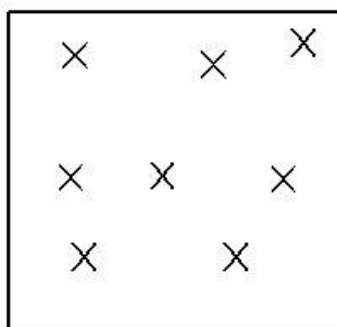
- A** : 1 GB
- B** : 2 GB
- C** : 3 GB
- D** : 4 GB

63 : What is name of the section denoted as 'X'?



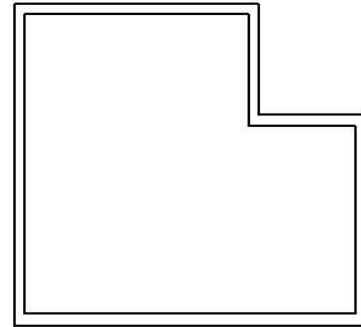
- A : Product key
- B : Auto key
- C : Product number
- D : Serial number

64 : What is the name of the command from the figure given below?



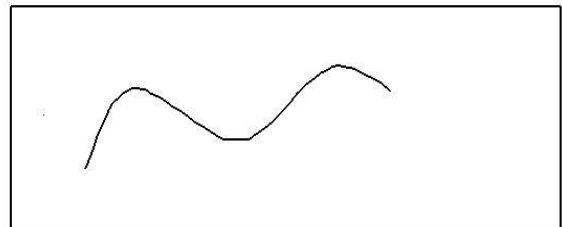
- A : Star command
- B : Array command
- C : Point command
- D : Trim command

65 : What is the name of the command in the figure given below?



- A : Offset
- B : Constraction line
- C : Multi line
- D : P line

66 : What is the name of the command in the figure given below?

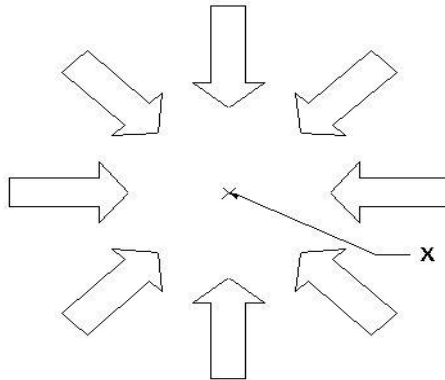


- A : P line
- B : M line
- C : Spline
- D : Poly line

67 : What is the full form of UCS?

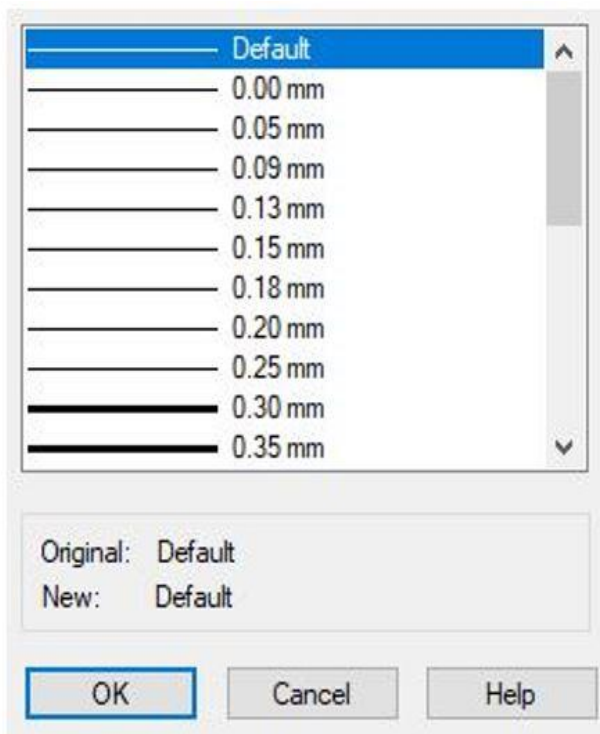
- A : User CAD System
- B : User CADD System
- C : User Co-ordinate System
- D : User Circle System

68 : What is the name of the point marked as 'x'?



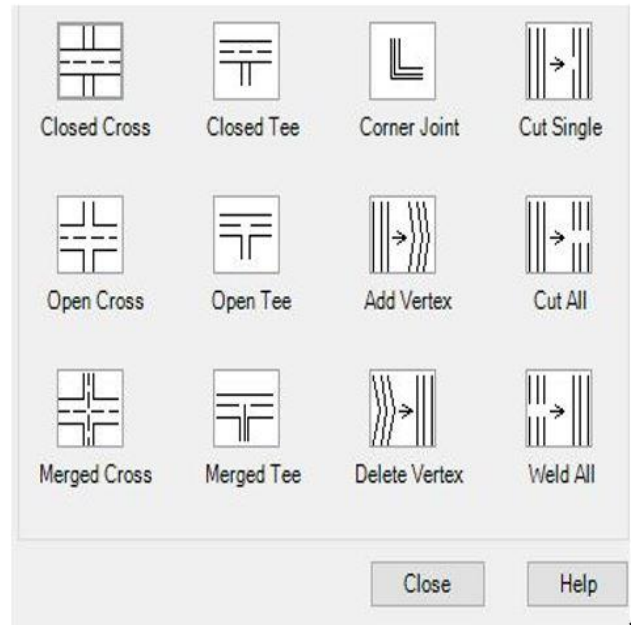
- A : Midpoint of dolar
- B : Midpoint of offset
- C : Centre point of array
- D : Centre point of leader line

69 : What is the name of the tool bar given below?



- A : Modify weight
- B : Line weight
- C : Multi line
- D : Units

70 : What is the name of the tool bar given below?



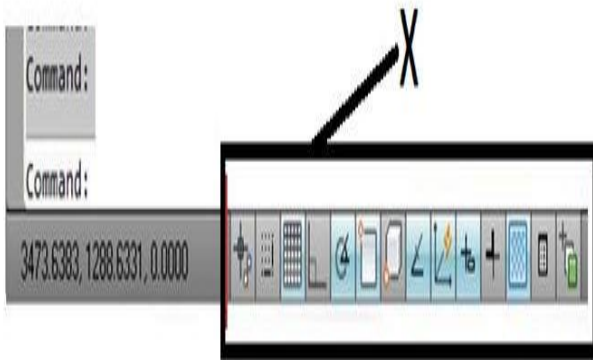
- A : Offset
- B : Multi line
- C : Line width
- D : Line weight

71 : Which command has the options given below?



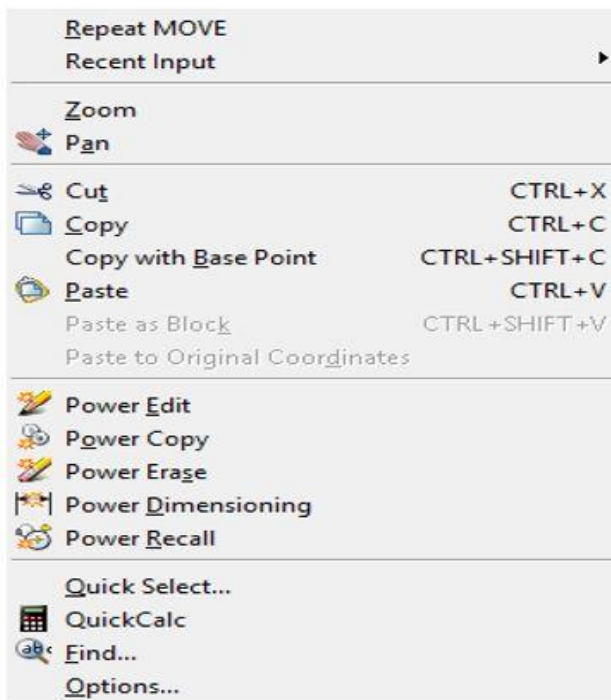
- A : Snap
- B : Pan
- C : Grid
- D : Real time

72 : What is the name of the tool bar marked as 'x'?



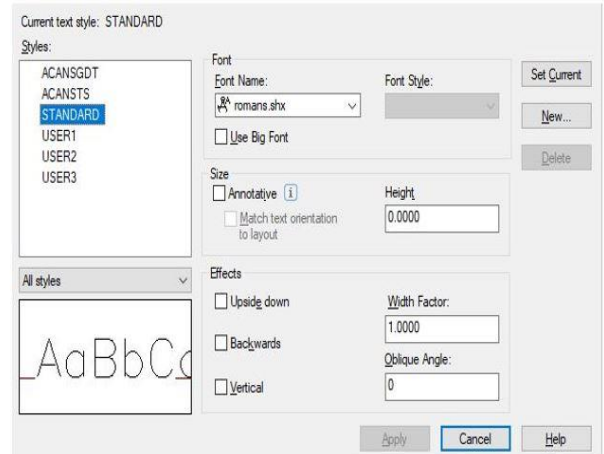
- A** : Task button
- B** : Snap button
- C** : Option button
- D** : Menu button

73 : How this option menu given below opens?



- A** : Left click
- B** : Right click
- C** : Centre click
- D** : Clicking F1

74 : What is the name of the menu bar given below?



- A** : M text
- B** : Text
- C** : Text style
- D** : Text colour

75 : Which shortcut key does the work of ortho?

- A** : F6
- B** : F7
- C** : F8
- D** : F9

76 : Which shortcut key does the work of Redo last action?

- A** : Ctrl + Z
- B** : Ctrl + Y
- C** : Ctrl + C
- D** : Ctrl + X

77 : What is the use of shortcut key 'H'?

- A** : Help
- B** : B hatch
- C** : Hatch
- D** : Hollow block

78 : What is the use of the shortcut key 'M Text'?

- A** : Modify text
- B** : Move text
- C** : Multi text
- D** : Menu text

79 : What is the use of 'Q' shortcut key?

- A** : Quit
- B** : Quick calc
- C** : Save as
- D** : "Q" leader

80 : Which of the following shortcut keys gives quick calc?

- A** : Ctrl + 6
 - B** : Ctrl + 7
 - C** : Ctrl + 8
 - D** : Ctrl + 9
-

81 : Which of the following pointing device is cheaper while comparing the digitizer?

- A** : Key board
 - B** : Puck
 - C** : Mouse
 - D** : Enter key
-

82 : Which of the following commands has one major option?

- A** : Line
 - B** : M line
 - C** : P line
 - D** : Polygon
-

83 : What is the another name for pre-fabricated structures?

- A** : Pre-developed structures
- B** : Modular structures
- C** : High structures
- D** : Site fixing structures

84 : What is the name of the prefabricating method?

- A** : Flow method
- B** : Fixed method
- C** : Stand method
- D** : Hand method

85 : Which prefabricated method the units of moved to various section for process?

- A** : Flow method
- B** : Fixed method
- C** : Stand method
- D** : Vehicle method

86 : What is the name of the concrete, that are prepared at factory and erected at site?

- A** : Pre-stressed concrete
- B** : Post-tensioned concrete
- C** : Pre-casted concrete
- D** : Post-casted concrete

87 : What is the scale used for prefabricated structure?

- A** : IS 15913 - 2011
- B** : IS 15914 - 2011
- C** : IS 15915 - 2011
- D** : IS 15916 - 2011

88 : What is the minimum distance between centres of any two adjacent rivet holes to the nominal diameter of the rivet is £ 25mm?

- A** : Nominal diameter +1.0mm
- B** : Nominal diameter +1.5mm
- C** : Nominal diameter +2.0mm
- D** : Nominal diameter +2.5mm

89 : What is the first stage of prefabricated structure construction?

- A** : Testing of raw materials
- B** : Procurement of raw materials
- C** : Concrete mix design
- D** : Reinforcement preparation

90 : Which part of the prefabricated building structure aim be constructed at site?

- A** : Roof slab
- B** : Foundation
- C** : Main beams
- D** : Fillers

91 : Which system facilitates assembling of minor elements in conventional construction?

- A** : Open pre-fab system
- B** : Partial pre-fab system
- C** : Full pre-fab system
- D** : Closed pre -fab system

92 : What is the name of assembling structural components at site?

- A** : Open pre-fab system
- B** : Partial pre-fab system
- C** : Full pre-fab system
- D** : Closed pre-fab system

93 : Which is the production of housing components using factory mechanisation?

- A** : Prefabrication
- B** : Fabrication
- C** : Construction
- D** : Production

94 : Which system is used with double tee slaps for precast beams and walls?

- A** : Load bearing
- B** : Non load bearing
- C** : Framed structures
- D** : Foundation

95 : Which of the following concrete require transportation for placing?

- A** : In site concrete
- B** : Post tensioned concrete
- C** : Pre cast concrete
- D** : Pre- stressed concrete

96 : Which of the following is the advantage of prefabricated structures?

- A** : Transportation
- B** : Need of heavy duty cranes
- C** : Deformation of joints
- D** : No need of fastening

97 : What is the advantage of prefabricated structure?

- A** : Transportation
 - B** : No need of heavy duty cranes
 - C** : Firm joints
 - D** : Mass production
-

98 : Which section provide one monotitic action between prefabricated units?

- A** : Composite
 - B** : Steel
 - C** : Tensile
 - D** : Compression
-

99 : What is the procedure to attain complete action between stem and flange?

- A** : Laced together
 - B** : Tied together
 - C** : Keyed together
 - D** : Cutted together
-

100 : What is the disadvantage in prefabricated structure?

- A** : Shorter construction time
 - B** : Financial savings
 - C** : Reduced site disruption
 - D** : Transportation
-

Draughtsman Civil– Semester 3 Module 5 - Public building and Earth quake resistant structure

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101 : What is the area of playground for 1000 children?

- A : 0.10 hectare
- B : 0.13 hectare
- C : 0.16 hectare
- D : 0.20 hectare

102 : Which one of the following is the hard land scape?

- A : Plantation
- B : Types of trees
- C : Design of space for people
- D : Terrace gardens

103 : In which portion of tectonic plates, earthquake generally occurs?

- A : Plate boundaries
- B : Divergence plates
- C : Converging plates
- D : Middle portion

104 : Which instrument is used to detect and record seismic waves?

- A : Barograph
- B : Seismograph
- C : Diagraph
- D : Hygrograph

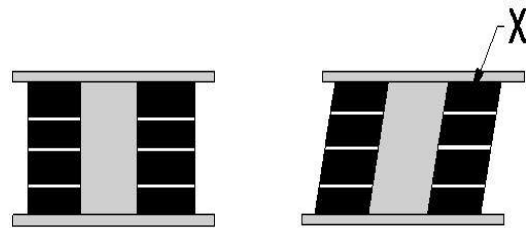
105 : Which is known as hypocenter?

- A : Epicenter
- B : Focus
- C : Focal depth
- D : Epicentral distance

106 : What is the percentage of the structural cost of the building in the additional cost for the earthquake resisting structure?

- A : About 1%
- B : About 2%
- C : About 3%
- D : About 5%

107 : What is the name of the part marked as 'X'?



- A : Attachment plates
- B : Lead plug
- C : Rubber layer
- D : Stiffening plates

108 : What is the minimum distance to be maintained for the door opening from the cross wall?

- A : End of the wall
- B : 300mm
- C : 500mm
- D : 1000mm

109 : What is the minimum thickness for making R.C. Bands?

- A : 25mm
- B : 50mm
- C : 75mm
- D : 100mm

110 : What is the distance between two through stones?

- A : 150 to 300mm
- B : 300 to 450mm
- C : 450 to 600mm
- D : 600 to 750mm

111 : Which one of the following in structure is the most important factors affecting its earthquake performance?

- A : Workability
- B : Serviceability
- C : Flexibility
- D : Responsibility

112 : Which precaution should be taken for site selection to prevent earthquake?

- A : Near unstable embankments
- B : On sloping ground
- C : Columns of different height
- D : Continuity of subsoil

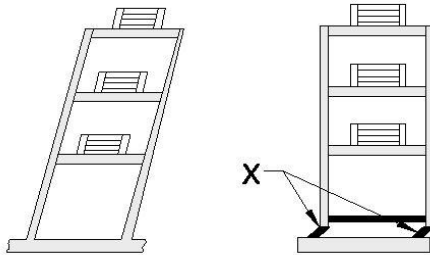
Draughtsman Civil– Semester 3 Module 5 - Public building and Earth quake resistant structure

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113 : Which shape of building plan is safer for earthquake resisting building?

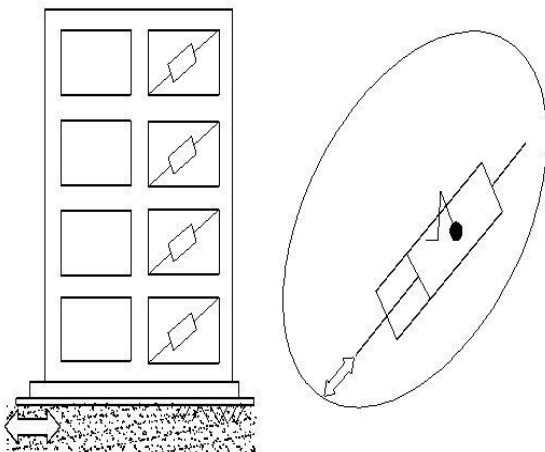
- A** : Square plan
- B** : T- shaped plan
- C** : H- shaped plan
- D** : Plan have length morethan twice the width

114 : What is the name of the part marked as 'X'?



- A** : Isolation bearings
- B** : Fixed base
- C** : Base
- D** : Isolated

115 : What is the name of the figure?



- A** : Isolation bearings
- B** : Viscous damper
- C** : Friction damper
- D** : Yielding damper

116 : Which device act like shock absorbers between the building and its foundation?

- A** : Damper
- B** : Spring
- C** : Base isolation
- D** : Air bag

117 : Which isolation bearings are highly elastic?

- A** : Wood
- B** : Steel
- C** : Rubber
- D** : Bearing pads

118 : Which material is strong in tensile strength?

- A : Cement
- B : Sand
- C : Steel
- D : Water

119 : What kind of material is concrete?

- A : Elasticity
- B : Brittle
- C : Stiff
- D : Malleability

120 : What is the maximum size of particle in fine aggregate?

- A : 2.75 mm
- B : 3.75 mm
- C : 4.75 mm
- D : 5.75 mm

121 : What is the ratio for M15 grade of concrete?

- A : 1:3:6
- B : 1:2:4
- C : 1:1.5:3
- D : 1:1:2

122 : What is the PH value of water is used for concrete?

- A : 2 and 3
- B : 4 and 5
- C : 6 and 8
- D : 9 and 10

123 : What is the maximum absorption limit for coarse aggregate under water for 24 hours?

- A : 3%
- B : 5%
- C : 7%
- D : 9%

124 : When does the probs of slab is removed if the span is more than 4.5 m?

- A : 7 days
- B : 14 days
- C : 21 days
- D : 28 days

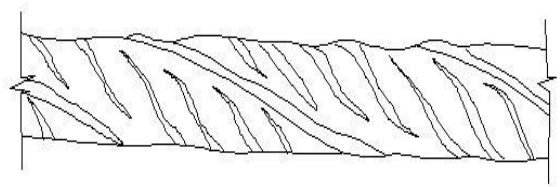
125 : What is the distance between two yokes in column formwork?

- A : 0.50 m
- B : 1.00 m

C : 1.50 m

D : 2.00 m

126 : What is the name of the bar shown in figure?



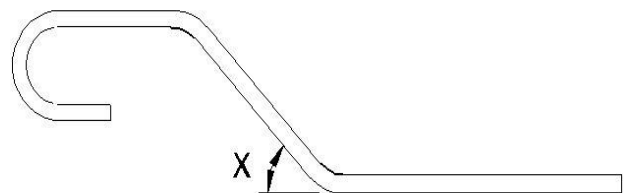
- A : Plain round bar
- B : Twisted bar
- C : Ribbed torsteel
- D : Square bar

127 : What is size marked as 'x'?



- A : 4d
- B : 8d
- C : 9d
- D : 18d

128 : What is the angle marked as 'x'?

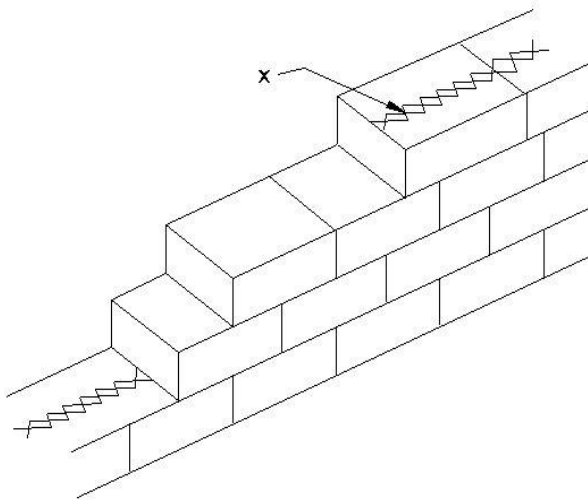


- A : 15°
- B : 30°
- C : 45°
- D : 60°

129 : Which symbols denotes deformed bar?

- A : ϕ
- B : \square
- C : #
- D : @

130 : What is the name of the part marked as 'x'?



- A : Steel plate
- B : Steel bars
- C : Reinforced bars
- D : Mesh reinforcement

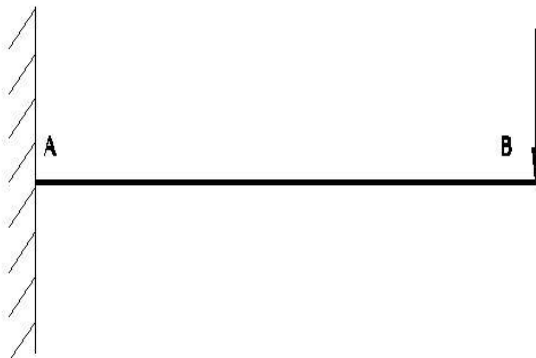
131 : How many days the R.B slab is kept wet?

- A : Two to four weeks
- B : One to two weeks
- C : One week
- D : 3 days

132 : Which type of beam has more than two supports?

- A : Cantilever beam
- B : Overhanging beam
- C : Fixed beam
- D : Continuous beam

133 : What is the name of the beam shown in figure?



- A : Simply supported beam
- B : Cantilever beam
- C : Over hanging beam
- D : Continuous beam

134 : What is the shape of the bending moment diagram over the length of beam carrying a uniformly distributed load?

- A : Linear
- B : Cubical
- C : Circular
- D : Parabolic

135 : What is the name of the load acting at a point?

- A : Point load
- B : Uniformly distributed load
- C : Trapezoidal load
- D : Triangular load

136 : What kind of labour is required for erection of RCC structures compared to steel structures?

- A : Less skilled
- B : Semi skilled
- C : Fully skilled
- D : No skilled

137 : Which of following is the advantage of reinforced concrete?

- A : Low maintenance cost
- B : Low compressive strength
- C : Low yield strength
- D : Low shear strength

138 : Which is the disadvantage of reinforced concrete?

- A : Light weight
- B : Low shrinkage
- C : Low strength
- D : Low maintenance cost

139 : Which material is used to increase the tensile strength in concrete?

- A : Mud
- B : Brick bats
- C : Quarry dust
- D : Steel

140 : What is the grade of concrete for the concrete mix proportion is 1:1.5:3?

- A : M 10
- B : M 15
- C : M 20
- D : M 25

141 : What is the concrete mix proportion for M10?

- A : 1:3:6
- B : 1:2:4
- C : 1:1.5:3
- D : 1:1:2

142 : What is the initial cost of timber formwork compared to steel formwork?

- A : Costly
- B : Moderately
- C : Cheap
- D : Very low

143 : Which part of building, the clear cover 25 mm or dia of bar whichever is more is used?

- A : Beam
- B : Column
- C : Slab
- D : Foundation

144 : What is mass of 10 mm dia of steel bar per meter?

- A : 0.302 kg
- B : 0.395 kg
- C : 0.617 kg
- D : 0.888 kg

145 : Which type of reinforcement 6 mm diameter mild steel bars are used in walls?

- A : Vertical reinforcement
- B : Longitudinal reinforcement
- C : Horizontal reinforcement
- D : Spiral reinforcement

146 : Where the bending moment is always zero?

- A : At supports
- B : At mid span
- C : At 1/5 of span
- D : At 1/7 of span

147 : Which point of contraflexure occurs in the section?

- A : Bending moment is maximum
- B : Bending moment is zero or sign changes
- C : Shear force is maximum
- D : Shear force is minimum

148 : Which condition the cracking occurs in concrete?

- A : Chilling
- B : Windy
- C : Humidity
- D : Milder climate

149 : Which reinforcement is used for work of large dimensions, like massive foundation etc.?

- A : Rolled steel beams
- B : Fabric made by welding
- C : Square mesh
- D : Square bars

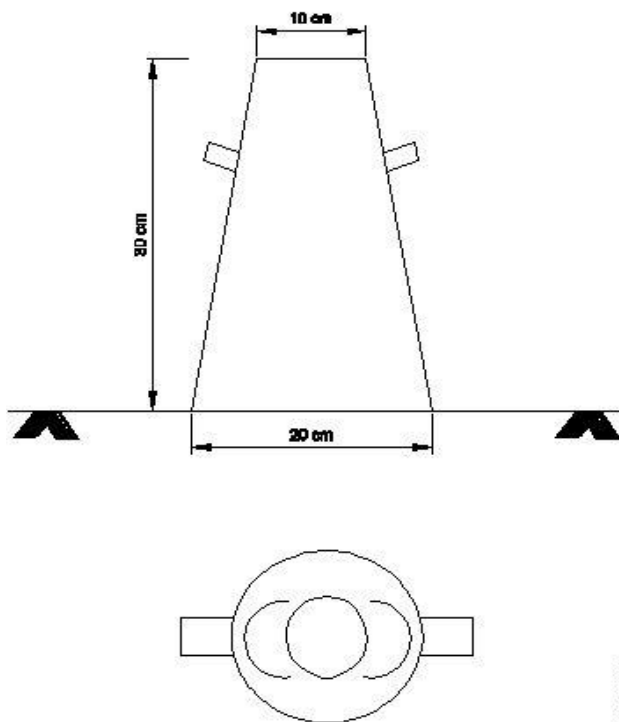
150 : Which material is coated at all the faces of concrete mould?

- A : Water
- B : Sand
- C : Crude oil
- D : Glue

151 : What is the permissible stress for grade Fe 500?

- A : 0.33 fy
- B : 0.44 fy
- C : 0.55 fy
- D : 0.66 fy

152 : Name of the apparatus.



- A : Vicat's needle
- B : Slump cone

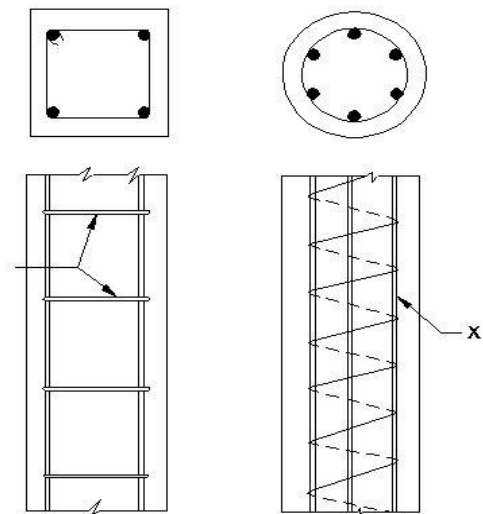
C : Vibrating table

D : Cylindrical moulds

153 : What is the recommended slump for R.C.C work?

- A : 25 to 50 mm
- B : 40 to 50 mm
- C : 80 to 150 mm
- D : 90 to 100 mm

154 : What is the name of the part marked as 'x'?



- A : Lateral ties
- B : Spiral reinforcement
- C : Vertical main steel
- D : Cover

155 : Which RCC member, bridges two or more walls or columns and supports the structural member coming over it?

- A : Beam
- B : Column
- C : Footing
- D : Slab

156 : What is the minimum number of main bars are provided for transverse reinforcement?

- A : Two
- B : Three
- C : Four
- D : Five

157 : Which direction in one way slab the main reinforcement is provided?

- A : Transverse
- B : Length
- C : Width
- D : Depth

158 : What is the maximum diameter of reinforcing bars to the total thickness of slab?

- A : $\frac{1}{5}$
- B : $\frac{1}{7}$
- C : $\frac{1}{8}$
- D : $\frac{1}{10}$

159 : Which slab is supported on all four edges and the ratio of long span to short span is not more than two?

- A : One way slab
- B : Two way slab
- C : Continuous slab
- D : Cantilever slab

160 : Name the reinforcement provided to counteract the tensional stress developed at corners of slab?

- A : Main reinforcement
- B : Torsion reinforcement
- C : Singly reinforcement
- D : Doubly reinforcement

161 : How many vertical bars (minimum number) are provided for circular column?

- A : Four
- B : Six
- C : Eight
- D : Ten

162 : Which of the following method is used for super structure component?

- A : Volumetric or modular construction
- B : Brick slip
- C : Rain screen
- D : Render system

163 : Which of the following option is taken, if the phone line system will be jammed after earth quake?

- A : Text messages
- B : Call loudly
- C : Call through phone
- D : Whats app call

164 : Which of the following operation need to be done during earthquake?

- A : Standing near the window
- B : Collet and put together an emergency kit
- C : Check your gas lines
- D : Cover and hold on under a desk/table

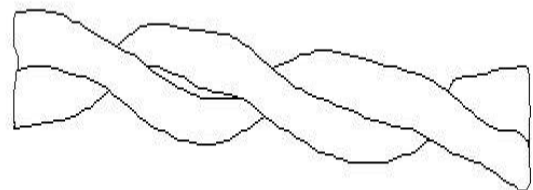
165 : What will be the compressive strength of 15cm cube after 28 days for a ordinary concrete of grade M30?

- A : 30 N/mm²
- B : 36 N/mm²
- C : 40 N/mm²
- D : 53 N/mm²

166 : Which reinforcement strength is preferred in R.C.C?

- A : Low tensile strength
- B : High tensile strength
- C : Bond strength
- D : Compressive strength

167 : What is the name of figure shown?



- A : Twin twisted bar
- B : Ribbed for steel
- C : Grip bar
- D : Plain bar

168 : Which bar the hooks are provided?

- A : Plain bars
- B : Hot rolled deformed bars
- C : Cold twisted bars
- D : Hard - drawn steel wire

169 : What is the percentage reduction of strength for the 6 month old cement?

- A : 20%
- B : 30%
- C : 40%
- D : 50%

170 : What is the total quantity of coarse and fine aggregate for 50kg cement for M15 grade of concrete required?

- A : 625 kg
- B : 480 kg
- C : 330 kg
- D : 250 kg

171 : What is the compressive strength of 150 mm cube at 28 days ordinary concrete of grade M20?

- A : 15 N/mm²
- B : 20 N/mm²
- C : 25 N/mm²
- D : 30 N/mm²

172 : Which type of cement available in three grades should be used for house construction?

- A : Ordinary portland cement
- B : Rapid hardening portland cement
- C : Portland slag cement
- D : High strength ordinary portland cement

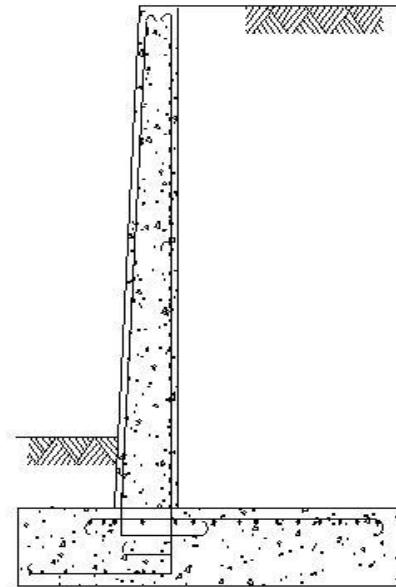
173 : What is the clear cover for foundation slabs and beams?

- A : 15 mm
- B : 25 mm
- C : 40 mm
- D : 50 mm

174 : What is the density of steel?

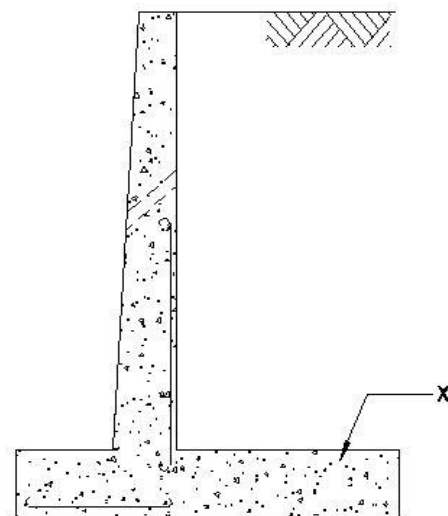
- A : 75.8 q/m³
- B : 78.5 q/m³
- C : 85.7 q/m³
- D : 87.5 q/m³

175 : What is name of the retaining wall?



- A : Gravity retaining wall
- B : Semi gravity retaining wall
- C : Counter fort retaining wall
- D : Cantilever retaining wall

176 : What is the name of the part marked as 'x'?

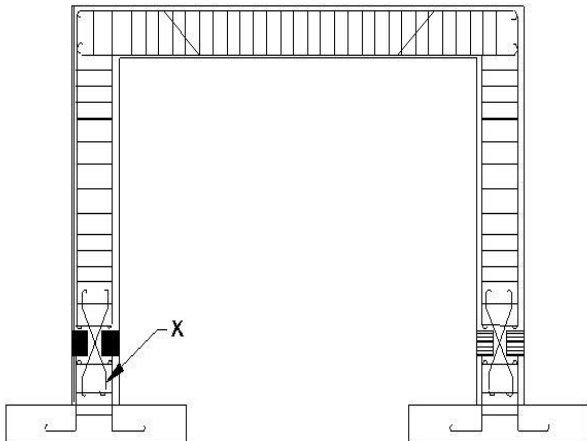


- A : Heel
- B : Toe
- C : Stem
- D : Weep hole

177 : Which structure is constructed for the purpose of retaining earth or other materials like coal, ore, water etc.?

- A : Load bearing wall
- B : Non load bearing wall
- C : Retaining wall
- D : Wing wall

178 : What is the name of the part marked as 'x'?

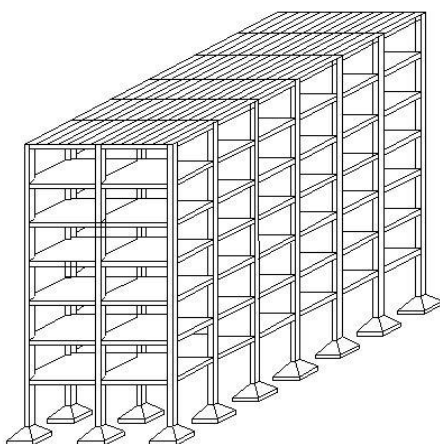


- A : Column support
- B : Bitumen filler
- C : Hinge reinforcement
- D : Foundation

179 : What is the name of the structure in which components such as beam, column and footing are monolithic in design and construction?

- A : Portal frame
- B : Non-portal frame
- C : Rigid frame
- D : Gabled frame

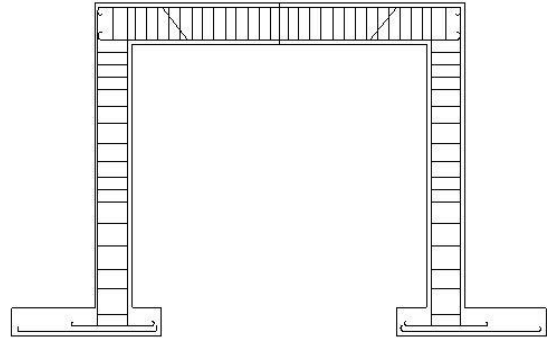
180 : What is name of the structure?



- A : R.C.C framed structure

- B : Rigid frame structure
- C : Braced frame structure
- D : Portal frame structure

181 : What is the name of the frame structure?



- A : Portal frame with hinge base
- B : Portal frame with fixed base
- C : R.C.C framed structure
- D : Portal frame

182 : Which diameter of reinforcement bars are used for heavy foundations, large girders or counterforts?

- A : 20 mm
- B : 25 mm
- C : 32 mm
- D : 40 mm

183 : Which type of mixer used for large quantity of concrete?

- A : Hand mixing
- B : Batch mixing
- C : Tilting drum mixers
- D : Continuous mixer

184 : Where does covering of render is used?

- A : Roof
- B : Floor
- C : Outside of the building
- D : Inside of the building

185 : What is length of one 'U' type hook?

- A : 4φ
- B : 8φ
- C : 9φ
- D : 18φ

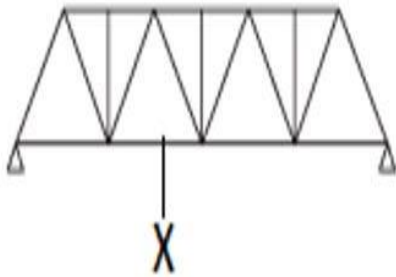
186 : What is the excess length of the one side of the cranked bar?

- A** : 0.212 d
 - B** : 0.414 d
 - C** : 0.616 d
 - D** : 0.818 d
-

187 : What is the weight / m of 12 mm diameter round bar?

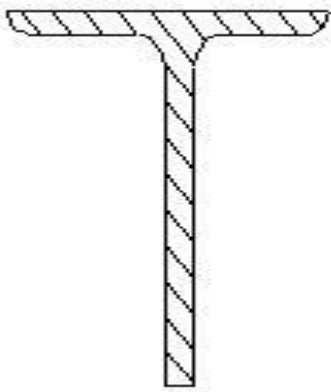
- A** : 0.39 kg/m
 - B** : 0.62 kg/m
 - C** : 0.89 kg/m
 - D** : 1.58 kg/m
-

188 : What is the name of the truss marked as 'x'?



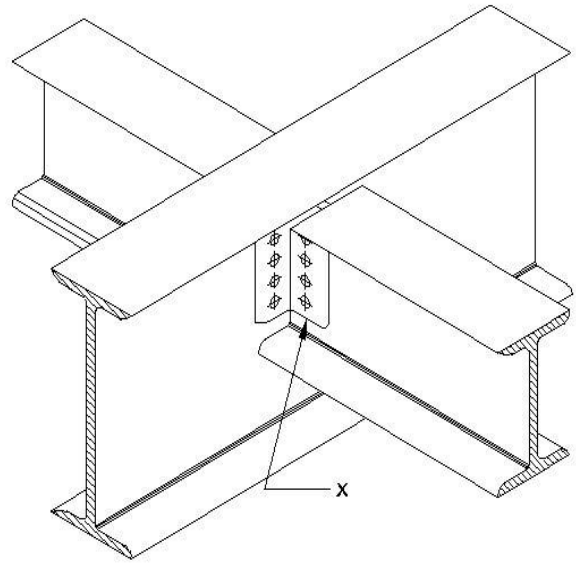
- A : Plate girder railway bridge
- B : Lattice tower
- C : Steel chimney
- D : Warron truss used in bridges

189 : What is the name of the steel section?



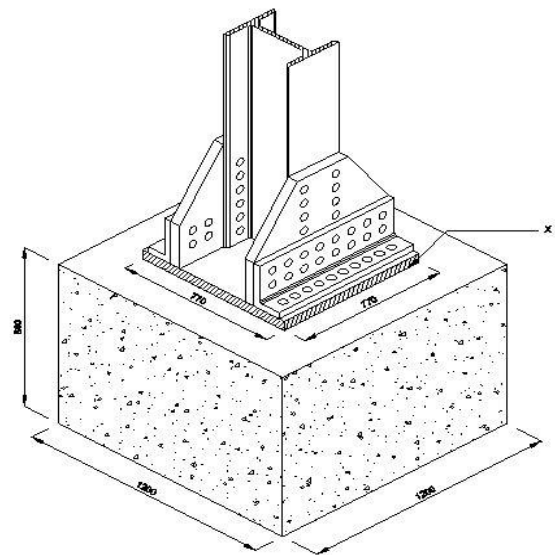
- A : H - section
- B : I - section
- C : T - section
- D : Z - section

190 : What is the name of part marked as 'x'?



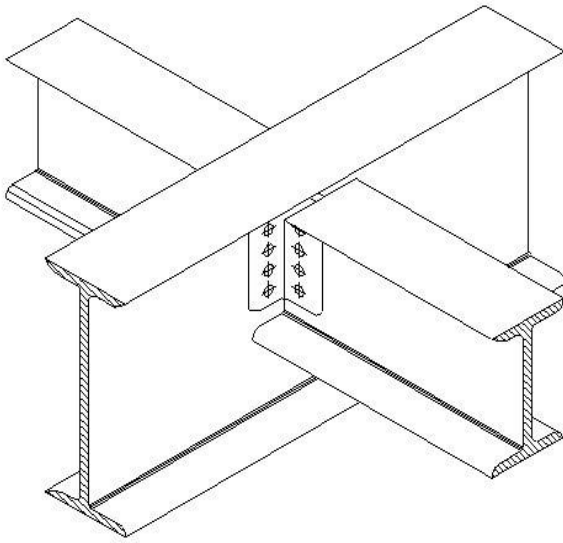
- A : Main beam
- B : Secondary beam
- C : Web cleats
- D : Seat angles

191 : What is the name of the part marked as 'x'?



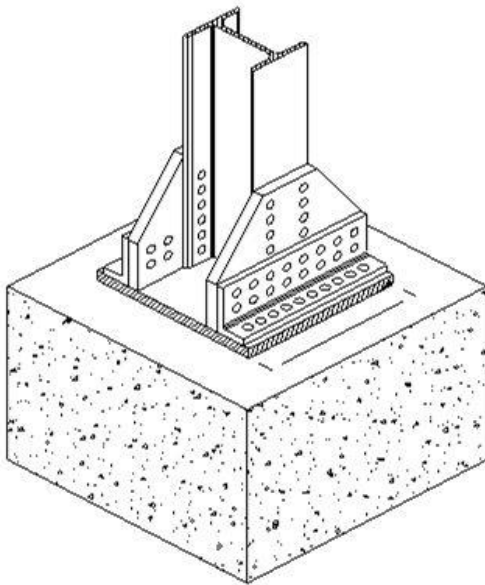
- A : Cement concrete base
- B : Base plate
- C : Cleat angle
- D : Gusset plate

192 : What is the name of the connection?



- A** : Framed connection
- B** : Seated connection
- C** : Column to beam framed connection
- D** : Column to beam seated connection

193 : What is the name of the connection?

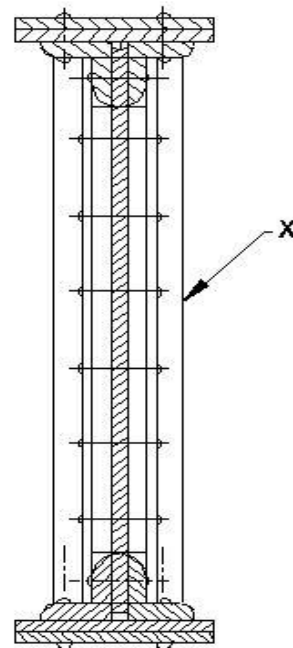


- A** : Framed connection
- B** : Column to beam connection
- C** : Seated connection
- D** : Steel stanchion

194 : Which span the plate girders are used?

- A** : More than 5 m
- B** : More than 10 m
- C** : More than 15 m
- D** : More than 20 m

195 : What is name of the part marked as 'x'?

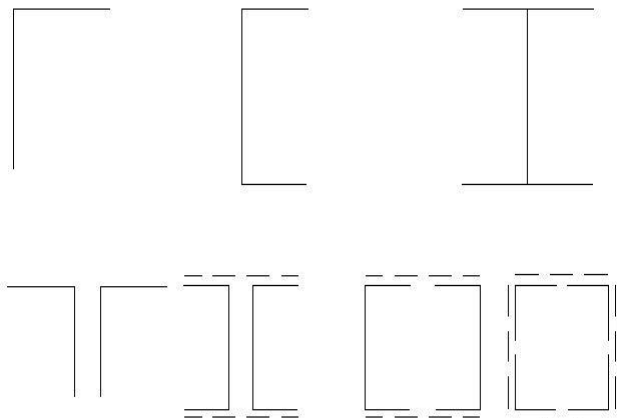


- A** : Clearance
- B** : Flange
- C** : Stiffeners
- D** : Packing plate

196 : Which member carries mainly tensile force?

- A** : Tension
- B** : Beams
- C** : Plates
- D** : Torsion

197 : What is the name of the section?

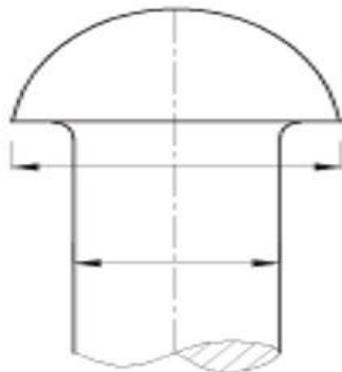


- A** : Tension members
- B** : Compression members
- C** : Torsion members
- D** : Beams

198 : How much the diameter of the hole is larger than the nominal diameter of the rivet if it is less than or equal to 25 mm?

- A : 0.5 mm
- B : 1.0 mm
- C : 1.5 mm
- D : 2.0 mm

199 : What is the name of rivet head?



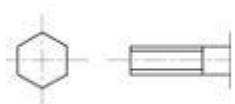
- A : Snap head
- B : Pan head
- C : Ellipsoidal head
- D : Conical head

200 : Which riveted joint consists of two parallel rows and rivets where rivets are just opposite each other?

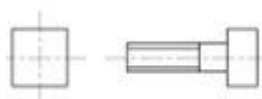
- A : Single riveted lap joint
- B : Double riveted single lap joint
- C : Double riveted single lap joint
- D : Single cover butt joint

201 : Which figures refers the conventional symbol for cylinder screw cross slot?

A :



B :



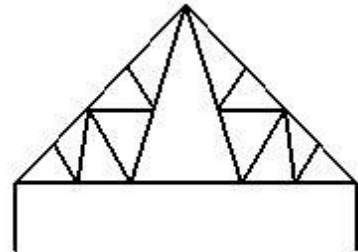
C :



D :



202 : What is the name of the truss?



- A : Fink truss
- B : Fan truss
- C : Compound fan truss
- D : Compound fink truss

203 : What advantage of cold former steel members over reinforced concrete and timber?

- A : Termite - proof and rot proof
- B : Economical
- C : Shrinking and creeping at temperature
- D : Less accurate detailing

204 : What is the minimum distance between centres of any two adjacent rivet holes to the nominal diameter of the rivet?

- A : 1.00 time
- B : 1.50 times
- C : 2.00 times
- D : 2.50 times

205 : What is the main advantage of structural steel?

- A : High strength
- B : Maintenance cost
- C : Slowly erection
- D : Fire proofing cost

Draughtsman Civil– Semester 3 Module 9 - Sewerage system

Reviewed and updated on: 01st November 2019 Version 1.1

206 : What is the name of the water obtained from tube well?

- A : Surface water
- B : Sub-surface water
- C : Ran-off
- D : Potable water

207 : What is the full form of P.H.E.?

- A : Public Health Engineering
- B : Plumbing Heating Electrical
- C : Public Health Emergencies
- D : Peer Health Educations

208 : What is the name of the liquid flowing in sewer?

- A : Sewer
- B : Sewage
- C : Sewerage
- D : Storm water

209 : What is the name of the water coming out of the kitchen, bathroom, wash basin?

- A : Garbage
- B : Sullage
- C : Sewage
- D : Discharge

210 : Which factor does sanitary sewage quantity directly depends on?

- A : Rate of water supply
- B : Area
- C : Population
- D : Precipitation

211 : Which type of sewer system are preferred in India?

- A : Partial
- B : Combined
- C : Direct
- D : Separate

212 : Which device is used to prevent sewer gased from entering the building?

- A : Filter
- B : Trap
- C : Ventilator
- D : Vacuum pump

213 : What is the angle between the drains and inspection manhole?

- A : 45°
- B : 90°

C : 135°

D : 180°

214 : Which pipeline is laid in buildings to take out the sewage under the ground?

- A : Steps
- B : Barrel
- C : Down tank
- D : Sewer

215 : Which material is made by PVC pipes?

- A : Steel
- B : Plastic
- C : Copper
- D : Silver

216 : Which type of trap is used in Indian water closet?

- A : S trap
- B : P trap
- C : U trap
- D : Gully trap

217 : What is the first stage in sewage treatment process?

- A : Sedimentation
- B : Screening
- C : Filtration
- D : softening

218 : What is the term for water inside trap which prevents gas from entering?

- A : Drain water
- B : Water seal
- C : Waste water
- D : Trap safety

219 : What is the name of the appurtenance that are constructed at suitable intervals?

- A : Manholes
- B : Catch basin
- C : Pumps
- D : Sewer appurtenance

220 : What is the type of manhole having a depth greater than 1.5 m is called?

- A : Straight manhole
- B : Deep manhole
- C : Shallow manhole
- D : Normal manhole

Draughtsman Civil– Semester 3 Module 9 - Sewerage system

Reviewed and updated on: 01st November 2019 Version 1.1

221 : What is the nominal shape of septic tank?

- A** : Square
- B** : Rectangle
- C** : Circular
- D** : Oval

222 : Which material is used to make manhole cover?

- A** : Cast iron
- B** : Cement
- C** : Wood
- D** : Steel

223 : What is the name for all kinds of liquid waste of a building?

- A** : Rubbish
- B** : Garbage
- C** : Ashes
- D** : Sewage

224 : Which plumbing system is common in India?

- A** : One pipe system
- B** : Two pipe system
- C** : Single stack system
- D** : Single stack partially ventilated

225 : Which pipe system of plumbing work soil and waste pipe are separated?

- A** : One pipe system
- B** : Two pipe system
- C** : Separate system
- D** : Combined system

226 : How many chambers are there in a septic tank?

- A** : 2
- B** : 3
- C** : 4
- D** : 5

227 : What should be the minimum diameter of the connecting pipe in the septic tank?

- A** : 60mm
- B** : 100mm
- C** : 300mm
- D** : 700mm

228 : What is the maximum spacing of manhole sewer size upto 0.3 mf?

- A** : 20 m
- B** : 30 m

C : 45 m

D : 75 m

229 : Which type of pump should be selected in order to pump the sewage from a septic tank to the water treatment system?

- A** : Vertical slump pump
- B** : Progressive cavity pump
- C** : Centrifugal pump
- D** : Screw pump

230 : How does the intensity of rain is expressed?

- A** : cm/minute
- B** : cm/hour
- C** : cm/day
- D** : cm/week

231 : Which gas is mainly produced in septic tank?

- A** : Oxygen
- B** : Nitrogen
- C** : Hydrogen
- D** : Hydrogen sulphide

232 : What is the period for sludge digestion in normal conditions?

- A** : 10 days
- B** : 20 days
- C** : 30 days
- D** : 60 days

233 : Which sewer resist sulphide corrosion?

- A** : Brick sewer
- B** : Cast iron sewer
- C** : R.C.C. sewer
- D** : Lead sewer

234 : What is the average temperature of sewage in India?

- A** : 10°C
- B** : 15°C
- C** : 20°C
- D** : 25°C

235 : What is the design of sewage treatment?

- A** : 5-10 years
- B** : 15-20 years
- C** : 30-40 years
- D** : 40-50 years

236 : What is the extension for 3D modelling file?

- A** : 0.3d
- B** : 0.3dm
- C** : 0.3m
- D** : 0.3dmo

237 : Which command allows you to change 2D drawing into 3D model?

- A** : 3D modelling
- B** : Extrude
- C** : C plan
- D** : Ortho

238 : What is the full form of WCS?

- A** : Western Co- ordinate System
- B** : World Co- ordinate System
- C** : Wide Co -ordinate System
- D** : Wrong Co-ordinate System

239 : How many types of 3D modelling are in AutoCad?

- A** : 1
- B** : 2
- C** : 3
- D** : 4

240 : How many types of surfaces are in surface modelling?

- A** : 1
- B** : 2
- C** : 3
- D** : 4

241 : Which command allows you to change the direction and origin of construction plane?

- A** : Plane
- B** : Splane
- C** : C- plane
- D** : O- plane

242 : What is the shortcut for grid command?

- A** : F6
- B** : F7
- C** : F8
- D** : F9

243 : What is the shortcut for polar?

- A** : F8
- B** : F9
- C** : F10
- D** : F11

244 : What is the key for 3D OSNAP?

- A** : F1
- B** : F2
- C** : F3
- D** : F4

245 : Which key is used to access shortcut command in IBM compatible computer?

- A** : Ctrl
- B** : Alt
- C** : Ctrl + Alt
- D** : Tab

246 : What is the command used to toggle between isometric planes?

- A** : Ctrl + E
- B** : Ctrl + F
- C** : Ctrl+ G
- D** : Ctrl + H

247 : What is the shortcut for design centre palatte?

- A** : Ctrl +1
- B** : Ctrl + 2
- C** : Ctrl+ 3
- D** : Ctrl + 4

248 : What is the shortcut to cancel the last command selected?

- A** : Ctrl +]
- B** : Ctrl + [
- C** : Ctrl + }
- D** : Ctrl + ,

249 : What is the shortcut for rendering an image?

- A** : RS
- B** : RSP
- C** : RP
- D** : RW

250 : What is the shortcut for rendering a specified part of drawing?

- A** : RB
- B** : RC
- C** : RD
- D** : RP

ANSWERS :

1:B; 2:B; 3:A; 4:A; 5:D; 6:A; 7:D; 8:D; 9:C; 10:B; 11:C;
12:A; 13:B; 14:B; 15:C; 16:C; 17:D; 18:B; 19:B; 20:B;
21:A; 22:B; 23:B; 24:A; 25:A; 26:C; 27:B; 28:B; 29:D;
30:C; 31:A; 32:B; 33:B; 34:A; 35:C; 36:A; 37:C; 38:B;
39:C; 40:B; 41:A; 42:C; 43:B; 44:C; 45:C; 46:B; 47:B;
48:C; 49:D; 50:B; 51:B; 52:B; 53:C; 54:B; 55:C; 56:A;
57:C; 58:C; 59:A; 60:A; 61:D; 62:C; 63:D; 64:C; 65:C;
66:C; 67:C; 68:C; 69:B; 70:B; 71:B; 72:C; 73:C; 74:C;
75:C; 76:B; 77:C; 78:C; 79:C; 80:C; 81:C; 82:C; 83:B;
84:C; 85:A; 86:C; 87:D; 88:B; 89:B; 90:B; 91:B; 92:C;
93:A; 94:A; 95:C; 96:D; 97:D; 98:A; 99:C; 100:D;
101:B; 102:C; 103:A; 104:B; 105:B; 106:D; 107:C;
108:C; 109:C; 110:D; 111:C; 112:D; 113:A; 114:A;
115:B; 116:C; 117:C; 118:C; 119:B; 120:C; 121:B;
122:C; 123:B; 124:B; 125:B; 126:C; 127:A; 128:C;
129:C; 130:D; 131:A; 132:A; 133:B; 134:D; 135:A;
136:A; 137:A; 138:C; 139:D; 140:C; 141:A; 142:C;
143:A; 144:C; 145:B; 146:A; 147:B; 148:B; 149:A;
150:C; 151:C; 152:B; 153:C; 154:C; 155:A; 156:A;

157:C; 158:C; 159:B; 160:B; 161:B; 162:A; 163:A;
164:D; 165:A; 166:B; 167:A; 168:A; 169:B; 170:C;
171:B; 172:A; 173:D; 174:B; 175:D; 176:A; 177:C;
178:C; 179:A; 180:A; 181:B; 182:D; 183:D; 184:C;
185:C; 186:B; 187:C; 188:D; 189:C; 190:C; 191:B;
192:A; 193:D; 194:D; 195:C; 196:A; 197:B; 198:C;
199:A; 200:B; 201:D; 202:D; 203:A; 204:D; 205:A;
206:B; 207:A; 208:B; 209:B; 210:C; 211:B; 212:B;
213:D; 214:D; 215:B; 216:B; 217:B; 218:B; 219:A;
220:B; 221:B; 222:A; 223:D; 224:B; 225:B; 226:A;
227:B; 228:B; 229:C; 230:B; 231:D; 232:C; 233:D;
234:C; 235:C; 236:B; 237:B; 238:B; 239:C; 240:B;
241:C; 242:B; 243:C; 244:D; 245:B; 246:A; 247:B;
248:A; 249:C; 250:B;

