

**QID: 01** - Air permeability method is used in which of the following test of cement?

**Options:**

- 1) Compressive strength test
- 2) Fineness test
- 3) Soundness test
- 4) Slump test

**Correct Answer:** Fineness test

**QID: 02** - The main purpose of the soundness test of the cement is to determine the \_\_\_\_.

**Options:**

- 1) change in volume of cement after setting
- 2) strength
- 3) fineness
- 4) time taken to harden

**Correct Answer:** change in volume of cement after setting

**QID: 03** –

What is the target mean strength (N/mm<sup>2</sup>) of the M30 grade concrete, if the standard deviation is 5.0?

**Options:**

- 1) 21.75
- 2) 30
- 3) 38.25
- 4) 40.25

**Correct Answer:** 38.25

**QID: 04** - Which of the following method is used to make the timber fire resistance?

**Options:**

- 1) Coating with tar paint.
- 2) Pumping creosote oil into timber at high pressure.
- 3) Seasoning process.
- 4) Soaking it in ammonium sulphate.

**Correct Answer:** Soaking it in ammonium sulphate.

**QID: 05** - In which of the following process, plug mill is used?

**Options:**

- 1) Burning of bricks
- 2) Drying of bricks
- 3) Moulding of clay
- 4) Preparation of clay

**Correct Answer:** Preparation of clay

**QID: 06** - According to the IS specifications, initial setting time of the ordinary Portland cement should be \_\_\_\_.

**Options:**

- 1) 10 minutes
- 2) 30 minutes
- 3) 6 hours
- 4) 10 hours

**Correct Answer:** 30 minutes

**QID: 07** - Which of the following is the main reason to provide frog in the bricks?

**Options:**

- 1) Print manufacturer's name.
- 2) Form keyed joint between brick and mortar.
- 3) Improve thermal insulation
- 4) Reduce the weight of brick.

**Correct Answer:** Form keyed joint between brick and mortar

**QID: 08** - Which of the following is used as the vehicle in the enamel paints?

**Options:**

- 1) Linseed oil
- 2) Mustard
- 3) Varnish
- 4) Water

**Correct Answer:** Varnish

**QID: 09** –

If one cement bag has 0.035 m<sup>3</sup> volume of cement, the number of bags required for one tonne of cement is.....

**Options:**

- 1) 10
- 2) 12
- 3) 15
- 4) 20

**Correct Answer:** 20

**QID: 10** - Which of the following is fused together to prepare the high alumina cement?

**Options:**

- 1) Bauxite and limestone
- 2) Bauxite, limestone and gypsum
- 3) Limestone, gypsum and clay
- 4) Limestone, bauxite, gypsum, clay and chalk

**Correct Answer:** Bauxite and limestone

**QID: 11** - Accuracy in the measurement of the volume in cubic meter should be near to \_\_\_\_.

**Options:**

- 1) 0.001
- 2) 0.01
- 3) 0.02
- 4) 0.1

**Correct Answer:** 0.01

**QID: 12** - Deduction for total length of the central line at the corner where two walls meet is \_\_\_\_.

**Options:**

- 1) half of thickness of wall
- 2) no deduction
- 3) thickness of wall
- 4) twice of the thickness of wall

**Correct Answer:** no deduction

**QID: 13** - Which of the following is estimated by using a bar bending schedule?

**Options:**

- 1) Brick work
- 2) Concrete work
- 3) Earthwork
- 4) Steel work

**Correct Answer:** Steel work

**QID: 14** - Which of the following is measured in square meter?

**Options:**

- 1) Cornice
- 2) Concrete work
- 3) Shuttering
- 4) Steel reinforcement bar

**Correct Answer:** Shuttering

**QID: 15** - Which of the following statements are the **CORRECT** for estimation of plastering?

- 1) For opening up to 0.5 square meters, no deduction is made.
- 2) For opening exceeding 0.5 square meters and up to 3 square meters, deduction is made for one face.
- 3) For opening up to 3 square meters, deduction is made for both faces.
- 4) For ends of beams, no deduction is made.

**Options:**

- 1) 1 and 4
- 2) 1, 2 and 4
- 3) 1, 3 and 4
- 4) 3 and 4

**Correct Answer:** 1, 2 and 4

**QID: 16** - Chowkhat or frame of the door is measured in \_\_\_\_\_.

**Options:**

- 1) cubic meter
- 2) meter
- 3) quintal
- 4) square meter

**Correct Answer:** cubic meter

**QID: 17** - Calculate the preliminary estimate for a building having a total carpet area of 500 square meters. Extra provision as 10% of the carpet area is provided for walls and verandah. The plinth area rate is Rs. 1,200 per square meter.

**Options:**

- 1) 60000
- 2) 540000
- 3) 600000
- 4) 660000

**Correct Answer:** 660000

**QID: 18** - Calculate the volume of earth work for an embankment of length L and width B. The mean depth of the

embankment is D and side slope is S:1. Using midsectional area method

**Options:**

1)  
 $B \times D \times L$

2)  
 $(B + B + sD) \times D \times L$

3)  
 $(B + B + sD) \times D \times L / 2$

4)  
 $(BD + sD^2) \times L$

**Correct Answer:**

$(BD + sD^2) \times L$

**QID: 19** - Calculate the quantity of the sand required for 8 cubic meter brick work with cement mortar (1 : 3).

**Options:**

- 1) 1.38
- 2) 1.5
- 3) 1.8
- 4) 2.4

**Correct Answer:** 1.8

**QID: 20** - Calculate the capitalized value of a building having annual rent of Rs. 20,000 and highest rate of interest is 5%.

**Options:**

- 1) 1000
- 2) 21000
- 3) 220000
- 4) 400000

**Correct Answer:** 400000

**QID: 21** - Plumb bob lines at two different places in plane surveying are \_\_\_\_.

**Options:**

- 1) cut at the center of the earth
- 2) inclined
- 3) parallel to each other
- 4) perpendicular to each other

**Correct Answer:** parallel to each other

**QID: 22** - A curve whose radius varies from infinity to a certain value is called \_\_\_\_.

**Options:**

- 1) compound curve
- 2) circular curve
- 3) reverse curve
- 4) transition curve

**Correct Answer:** transition curve

**QID: 23** - What is the representative fraction for a scale of 10 cm = 20 km?

**Options:**

- 1) 1 cm = 2 km
- 2) 1 cm = 20,000 m
- 3) 1:2
- 4) 1: 200,000

**Correct Answer:** 1: 200,000

**QID: 24** - The line which is used to collect the details of the objects in an area is called \_\_\_\_\_.

**Options:**

- 1) base line
- 2) check line
- 3) main line
- 4) tie line

**Correct Answer:** tie line

**QID : 125** –

Calculate true bearing of a line, if magnetic bearing of the line is S 60° E and magnetic declination is 5° eastward.

**Options:**

- 1) N 55° E
- 2) N 65° E
- 3) S 55° E
- 4) S 65° E

**Correct Answer:**

- S 55° E

**QID: 26** - Calculate the total correction (m) required, if a line measured using 20 m chain is 2380 m. Actual length of the chain is 20.2 m.

**Options:**

- 1) 22.6
- 2) 23.56
- 3) 23.8
- 4) 476

**Correct Answer:** 23.8

**QID: 27** - The least count of a theodolite is \_\_\_\_\_.

**Options:**

- 1) 1 degree
- 2) 2 minutes
- 3) 2 seconds
- 4) 20 seconds

**Correct Answer:** 20 seconds

**QID: 28** - Calculate the corrected staff reading at point A, if the staff reading is taken from an instrument which is set at a distance of 1.5 km from the point A 3.46 m.

**Options:**

- 1) 3.28
- 2) 3.3
- 3) 3.4 3
- 4) 3.48

**Correct Answer:** 3.3

**QID: 29** - Calculate the intersect angle (degree) for the anallactic telescope.

**Options:**

- 1) 0.467
- 2) 0.573
- 3) 0.592
- 4) 0.598

**Correct Answer:** 0.573

**QID: 30** - Which of the following statements are **CORRECT** for contour map?

- 1) Parallel contour shows uniform slope.
- 2) Very closed contour shows steep slope.
- 3) Very closed contour shows flat area.
- 4) Two contours at different elevation cut at right angle.

**Options:**

- 1) 1, 2 and 4
- 2) 1 and 2
- 3) 1, 3 and 4
- 4) 2 and 4

**Correct Answer:** 1 and 2

**QID: 31** - What is the terminal velocity (m/s) for a 4 g particle which is falling in the water with projected area of 5 sq. cm? The coefficient of drag is given as 0.47.

**Options:**

- 1) 0.58
- 2) 5.2
- 3) 7.5
- 4) 10

**Correct Answer:** 0.58

**QID: 32** - The coefficient of curvature for well graded soil lies between \_\_\_\_\_.

**Options:**

- 1) 1 to 2
- 2) 1 to 3
- 3) 1 to 5
- 4) 5 to 7

**Correct Answer:** 1 to 3

**QID: 33** - The coefficient of uniformity for well graded sand must be greater than \_\_\_\_\_.

**Options:**

- 1) 4
- 2) 5
- 3) 6
- 4) 10

**Correct Answer:** 6

**QID: 34** - Casagrande's apparatus is used to determine \_\_\_\_\_.

**Options:**

- 1) liquid limit
- 2) plastic limit
- 3) shear strength
- 4) shrinkage limit

**Correct Answer:** liquid limit

**QID: 35** - On increasing temperature, the viscosity of gas \_\_\_\_\_.

**Options:**

- 1) Decreases
- 2) First increases and then rapidly decrease
- 3) Increases
- 4) Not affected by temperature

**Correct Answer:** increases

**QID: 36** –

If the 90% volume of iceberg is immersed in the water and only 10% volume is above the water surface. What is the density of the iceberg, the density of sea water is given as 1025 kg/m<sup>3</sup>?

**Options:**

- 1) 900 kg/m<sup>3</sup>
- 2) 922.5 kg/m<sup>3</sup>
- 3) 950 kg/m<sup>3</sup>
- 4) 1000 kg/m<sup>3</sup>

**Correct Answer:**

922.5 kg/m<sup>3</sup>

**QID: 37** - The head developed by the centrifugal pump is 40 m while operating at the speed of 750 rpm. If the rated capacity is given as 50 cumec, what is the specific speed of centrifugal pump?

**Options:**

- 1) 150
- 2) 300
- 3) 333
- 4) 500

**Correct Answer:** 333

**QID: 38** - Surface tension for an ideal fluid is \_\_\_\_\_.

**Options:**

- 1) Depends on temperature
- 2) One
- 3) Infinite
- 4) Zero

**Correct Answer:** Zero

**QID: 39** - Which of the following is not true about density of the gases?

**Options:**

- 1) Proportional to pressure.
- 2) Inversely proportional to temperature.

3) Inversely proportional to volume.

4) Do not depend on temperature and pressure.

**Correct Answer:** Do not depend on temperature and pressure.

**QID: 40** - The stable equilibrium is achieved in the floating body when \_\_\_\_\_.

**Options:**

- 1) Center of gravity is below the center of buoyancy
- 2) Metacenter is above the center of gravity
- 3) Metacenter is below the center of gravity
- 4) Metacentric height is zero

**Correct Answer:** Metacenter is above the center of gravity

**QID: 41** - What is the value of friction factor, if the diameter of pipe is 50 cm and roughness height is 0.25 cm?

**Options:**

- 1) 0.0003
- 2) 0.003
- 3) 0.01002
- 4) 0.03035

**Correct Answer:** 0.03035

**QID: 42** - What is the head loss in pipe due to friction over the length of 30 km, if the diameter of pipe is 80 cm and velocity of flow is 30 cm/s? Take friction factor 0.032.

**Options:**

- 1) 4.0 m
- 2) 4.5 m
- 3) 5.5 m
- 4) 10 m

**Correct Answer:** 5.5 m

**QID: 43** - The range of Froude number for the weak jump is \_\_\_\_\_.

**Options:**

- 1) 1.0 to 1.7
- 2) 1.7 to 2.5
- 3) 2.5 to 4.5
- 4) 4.5 to 9.0

**Correct Answer:** 1.7 to 2.5

**QID: 44** - What is the velocity (m/s) with which elementary wave can travel upstream, if the velocity of flow is 2 m/s and depth of flow in channel is 1 m?

**Options:**

- 1) 1.132
- 2) 2
- 3) 3.132
- 4) 5.132

**Correct Answer:** 1.132

**QID: 45** - Which one is the best method of reclamation of the alkaline soil?

**Options:**

- 1) Addition of gypsum to soil.

- 2) Addition of gypsum to soil and leaching.  
3) Leaching.  
4) Providing good drainage system.

**Correct Answer:** Addition of gypsum to soil and leaching.

**QID: 46 –**

The intensity of rainfall for successive one hour period of a 6 hours storm are 2,6,8,9,7 and 3 cm/hr. The runoff is 4cm/hr. Calculate the  $\phi$  - index (cm/hr)

**Options:**

- 1) 2.5
- 2) 3.5
- 3) 4.6
- 4) 7.6 7

**Correct Answer:** 3.5

**QID: 47 -** The intermediate sight distance is equal to \_\_\_\_\_.

**Options:**

- 1) Overtaking sight distance
- 2) Stopping sight distance
- 3) Twice of stopping sight distance
- 4) Twice of stopping sight distance

**Correct Answer:** twice of stopping sight distance

**QID: 48 -** Calculate the equivalent radius of the resisting section of 20 cm thick slab, if the ratio of the radius of wheel load distribution to the thickness of the slab is 0.5.

**Options:**

- 1) 8
- 2) 10.16
- 3) 20
- 4) 23.66

**Correct Answer:** 10.16

**QID: 49 -** Which of the following is responsible for the corrosion of concrete sewers?

**Options:**

- 1) Chlorine
- 2) Oxygen
- 3) Nitrogen
- 4) Septic conditions

**Correct Answer:** Septic conditions

**QID: 50 -** Which of the following is responsible for the depletion of ozone layer in the upper atmosphere?

**Options:**

- 1) Carbon dioxide
- 2) Chlorofluorocarbons
- 3) Hydrogen peroxide
- 4) Oxides of nitrogen

**Correct Answer:** Chlorofluorocarbons

**QID: 51 -** Live loads, with time can vary in:-

**Options:**

- 1) Magnitude
- 2) Position
- 3) Neither position nor magnitude
- 4) Position as well as magnitude

**Correct Answer:** Position as well as magnitude

**QID: 52 -** Impact load results from which type of effects of loads applied?

**Options:**

- 1) Static
- 2) Dynamic
- 3) Static and dynamic
- 4) Neither static nor dynamic

**Correct Answer:** Dynamic

**QID: 53 -** Which type of drainage system will collect the rainwater?

**Options:**

- 1) Primary
- 2) Secondary
- 3) Tertiary
- 4) Primary and tertiary

**Correct Answer:** Primary

**QID: 54 -** Moment at a hinge will be:-

**Options:**

- 1) Infinity
- 2) Zero
- 3) Depends upon acting forces
- 4) None of these

**Correct Answer:** Zero

**QID: 55 -** For the validity of principle of superposition, materials should behave in which manner?

**Options:**

- 1) Linear- elastic
- 2) Non-linear -elastic
- 3) Non-linear- inelastic
- 4) Linear- inelastic

**Correct Answer:** Linear- inelastic

**QID: 56 -** If 4 reactions are acting on a beam, then the system is:-

**Options:**

- 1) Unstable & indeterminate
- 2) Stable & indeterminate
- 3) Stable & determinate
- 4) Can't say

**Correct Answer:** Can't say

**QID: 57 -** Which of the following statements is true?

- A. If a truss consists of a non-triangular element, then it will essentially be unstable.
- B. In the above cases, instability is the most probable occurrence, but there are a lot of examples which are unstable.

**Options:**

- 1) Only A
- 2) Only B
- 3) Both A and B
- 4) None of these

**Correct Answer:** Only B

**QID: 58** - Which of the following statements is true?

- A. A roller is provided at end of a bridge truss to allow thermal expansion.  
B. A roller provides freedom of deformation in horizontal plane in case of thermal expansion.

**Options:**

- 1) Only A
- 2) Only B
- 3) Both A and B
- 4) None of these

**Correct Answer:** Both A and B

**QID: 59** - Trusses and frames are different as:-

**Options:**

- 1) Trusses can bend, frames can't
- 2) Both can bend
- 3) None of them can bend
- 4) Trusses can't but frame can

**Correct Answer:** Trusses can't but frame can

**QID: 60** - Given that J is no. of joints. B and R are no. of members and no. of reactions. If  $B = 5$ ,  $R = 4$  and  $J = 4$ , then the truss is:-

**Options:**

- 1) Statically determinate
- 2) Statically indeterminate
- 3) Stable
- 4) Unstable

**Correct Answer:** Statically indeterminate

**QID: 61** - What is the ideal water-cement ratio to be used while hand mixing?

**Options:**

- 1) 0.4-0.5
- 2) 0.5-0.6
- 3) 0.6-1
- 4) 1.6-2

**Correct Answer:** 0.5-0.6

**QID: 62** - As water cement ratio increases, \_\_\_\_\_ also increases.

**Options:**

- 1) Compressive strength
- 2) Tensile strength
- 3) Bleeding
- 4) Workability

**Correct Answer:** Workability

**QID: 63** - Ready mix plant and central mix plant differ in:

**Options:**

- 1) Transportation
- 2) Setting time
- 3) Properties

- 4) Water addition

**Correct Answer:** Water addition

**QID: 64** - Compacting of concrete is done to:

**Options:**

- 1) Place concrete on flat surface
- 2) Remove air bubbles
- 3) Place concrete on sloping surface
- 4) Introduce air bubbles

**Correct Answer:** Remove air bubbles

**QID: 65** - Which of the following statements is true?

- A. A gap of 0.3m is to be maintained between cement bag and wall, while storing cement.  
B. A gap 100 cm is to be maintained between cement bag and wall, while storing cement.

**Options:**

- 1) Only A
- 2) Only B
- 3) Both A and B
- 4) None of these

**Correct Answer:** Only A

**QID: 66** - Which of the following statements is true?

- A. Impermeability is a property of fresh concrete.  
B. Impermeability is a not property of fresh concrete.  
C. Impermeability is nothing to with concrete at all.

**Options:**

- 1) Only A
- 2) Only B
- 3) Only C
- 4) None of these

**Correct Answer:** Only A

**QID: 67** - M15 concrete is used for:

**Options:**

- 1) Dams
- 2) Foundation
- 3) R .C.C
- 4) Mass concreting works

**Correct Answer:** Foundation

**QID: 68** - Tensile strength of concrete is found out using:

**Options:**

- 1) CTM
- 2) Gradual tensile test
- 3) Split tensile test
- 4) Radial tensile test

**Correct Answer:** Split tensile test

**QID: 69** - A slump of 50-100mm can be used for:

**Options:**

- 1) Mass concreting
- 2) Strip footing

- 3) Trench fill  
4) Beams

**Correct Answer:** Beams

**QID: 70** - Before plastering, the surface has to be:

**Options:**

- 1) Rough  
2) Smooth  
3) Cemented  
4) Watered

**Correct Answer:** Rough

**QID: 71** - Wood surface requires \_\_\_\_\_ coats of plastering.

**Options:**

- 1) 2  
2) 3  
3) 1  
4) None of these

**Correct Answer:** 1

**QID: 72** - For the construction of the retaining structures, the type of concrete mix to be used is

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

**Options:**

- 1) Only A  
2) Only B  
3) Only C  
4) Only D

**Correct Answer:** Only C

**QID: 73** - For preparing ordinary concrete, what is the quantity of water used?

**Options:**

- 1) 5% by weight of aggregates plus 20% of weight of cement  
2) 10% by weight of aggregates plus 10% of weight of cement  
3) 5% by weight of aggregates plus 30% of weight of cement  
4) 30% by weight of aggregates plus 10% of weight of cement

**Correct Answer:** 5% by weight of aggregates plus 30% of weight of cement

**QID: 74** - If the various concrete ingredients i.e. cement, sand, aggregates are in the ratio of 1:3:6, the grade of concrete is

**Options:**

- 1) M100  
2) M150  
3) M200  
4) M300

**Correct Answer:** M100

**QID: 75** - For which of the following is an ideal warehouse is provided?

**Options:**

- 1) Water proof masonry walls

2) Water proof roof

3) Few windows which remain generally closed

4) All of these

**Correct Answer:** All of these

**QID: 76** - If the internal dimensions of a ware house are 15 m x 5.6 m and the maximum height of piles is 2.70 m, then what is the maximum number of bags to be stored in two piles?

**Options:**

- 1) 1500  
2) 2000  
3) 2200  
4) 3000

**Correct Answer:** 3000

**QID: 77** - Which of the following statements is true?

**Options:**

- 1) The weight of ingredients of concrete mix, is taken in kilograms  
2) Water and aggregates are measured in liters  
3) The finished concrete is measured in cubic meters  
4) All of these

**Correct Answer:** All of these

**QID: 78** - For concreting tunnel linings, transportation of concrete is done by which of the following?

**Options:**

- 1) Pans  
2) Wheel borrows  
3) Containers  
4) Pumps

**Correct Answer:** pumps

**QID: 79** - \_\_\_\_\_ is used to construct very thin, hard and strong surface

**Options:**

- 1) Reinforced Cement Concrete  
2) Post-Stressed Concrete  
3) Ferro-Cement  
4) None of these

**Correct Answer:** Ferro-Cement

**QID: 80** - How many methods of ferro-cementing are there?

**Options:**

- 1) 3  
2) 2  
3) 4  
4) 6

**Correct Answer:** 3

**QID: 81** - The effective width of a column strip of a flat slab that is taken into consideration?

**Options:**

- 1) One-fourth the width of the panel  
2) Half the width of the panel

- 3) Radius of the column  
4) Diameter of the column  
**Correct Answer:** half the width of the panel

**QID: 82 –**

If  $W$  is the uniformly distributed load on a circular slab of radius  $R$  fixed at its ends, the maximum positive radial moment at its center is

- 1)  $\frac{3WR^2}{16}$   
2)  $\frac{2WR^2}{16}$   
3)  $\frac{WR^2}{16}$

**Options:**

- 1) [1] Only  
2) [2] Only  
3) [3] Only  
4) Zero

**Correct Answer:** [3] Only

**QID: 83 -** For initial estimate for a beam design, the width is assumed

**Options:**

- 1) 1/15th of the span  
2) 1/20th of the span  
3) 1/25th of the span  
4) 1/30th of the span

**Correct Answer:** 1/30th of the span

**QID: 84 -** The thickness of the topping of a ribbed slab, varies between

**Options:**

- 1) 3 cm to 5 cm  
2) 5 cm to 8 cm  
3) 8 cm to 10 cm  
4) 12 cm to 15 cm

**Correct Answer:** 5 cm to 8 cm

**QID: 85 -** For a ribbed slab

**Options:**

- 1) Clear spacing between ribs shall not be greater than 4.5 cm  
2) Width of the rib shall not be less than 7.5 cm  
3) Overall depth of the slab shall not exceed four times the breadth of the rib  
4) All option are correct

**Correct Answer:** All option are correct

**QID: 86 -** Which of the following statements is true?

**Options:**

- 1) On an absolutely rigid foundation base the pressure will be more at the edges of the foundation

2) On an absolutely rigid foundation base the pressure will be uniform

3) On an absolutely rigid foundation base the pressure will not be uniform

4) On an absolutely rigid foundation base the pressure will be zero at the center of the foundation

**Correct Answer:** On an absolutely rigid foundation base the pressure will not be uniform

**QID: 87 -** According to I.S.: 456, 1978 the thickness of reinforced concrete footing on piles at its edges is kept less than

**Options:**

- 1) 20 cm  
2) 30 cm  
3) 40 cm  
4) 50 cm

**Correct Answer:** 30 cm

**QID: 88 -** If the diameter of longitudinal bars of a square column is 16 mm, the diameter of lateral ties should not be less than

**Options:**

- 1) 4 mm  
2) 5 mm  
3) 6 mm  
4) 8 mm

**Correct Answer:** 5 mm

**QID: 89 -** Maximum strain theory for the failure of a material at the elastic limit is known as

**Options:**

- 1) Guest's or Tresca's theory  
2) St.Venant's theory  
3) Rankine's theory  
4) Haig's theory

**Correct Answer:** St.Venant's theory

**QID: 90 -** Gradually applied static loads do not change with time their

**Options:**

- 1) Magnitude  
2) Direction  
3) Point of application  
4) All options are correct

**Correct Answer:** All options are correct

**QID: 91 -** The thickness of slabs and beams must be measured to the nearest:-

**Options:**

- 1) 0.001 m  
2) 0.005 m  
3) 0.01 m  
4) 0.05 m

**Correct Answer:** 0.005 m



**QID: 92** - A composite beam is composed of two equal strips one of brass and other of steel. If the temperature is raised

**Options:**

- 1) Steel experiences tensile force
- 2) Brass experiences compressive force
- 3) Composite beam gets subjected to a couple
- 4) All of these

**Correct Answer:** All of these

**QID: 93** - A linear force-deformation relation is obtained in materials

**Options:**

- 1) Having elastic stress- strain property
- 2) Having plastic stress- strain property
- 3) Which are rigid elastic materials
- 4) None of these

**Correct Answer:** None of these

**QID: 94** - In a structure, why are the cables and wires are generally used?

**Options:**

- 1) To resist shear stress
- 2) As compression member
- 3) As flexural member
- 4) None of these

**Correct Answer:** None of these

**QID: 95** - The ability of a material to absorb energy till the elastic limit is known as

**Options:**

- 1) Ductility
- 2) Malleability
- 3) Elasticity
- 4) None of these

**Correct Answer:** None of these

**QID: 96** - If a material has identical properties in all directions, It is said to be

**Options:**

- 1) Homogeneous
- 2) Elastic
- 3) Isotropic
- 4) None of these

**Correct Answer:** isotropic

**QID: 97** - If all the dimensions of a prismatic bar are double, then the maximum stress produced in it under its weight will

**Options:**

- 1) Decrease
- 2) Increase to two times
- 3) Increase to three times
- 4) None of these

**Correct Answer:** None of these

**QID: 98** - The ratio of the length of the column to the minimum radius of gyration of the cross sectional area of the column is known as

**Options:**

- 1) Slenderness ratio
- 2) Buckling ratio

3) Crippling ratio

4) Compressive ratio

**Correct Answer:** slenderness ratio

**QID: 99** - In a built-up section carrying tensile force, the flanges of two channels are turned outward

**Options:**

- 1) To simplify the transverse connections
- 2) To minimize lacing
- 3) To have greater lateral rigidity
- 4) All option are correct

**Correct Answer:** to have greater lateral rigidity

**QID: 100** - A tension member, if subjected to possible reversal of stress due to wind, the slenderness ratio of the member should not exceed

**Options:**

- 1) 180
- 2) 200
- 3) 250
- 4) 350

**Correct Answer:** 350