

Q1 According to the relevant I.S code, the weight of the timber is to be reckoned at a moisture content of

- (a) zero
- (b) 4%
- (c) 8%
- (d) 12%

Q2 The strength of timber is maximum when load applied is

- (a) parallel to grain
- (b) perpendicular to grain
- (c) inclined at 45 to grain
- (d) inclined at 60 to grain

Q3 The nail diameter should not be more than (t = least thickness of the wooden member to be connected)

- a. $T / 6$
- b. $T / 8$
- c. $T / 10$
- d. $T / 12$

Q4 The expansion and shrinkage of plywoods are comparatively very low as

- (A) They Are Held In Position By Adhesives
- (B) They Are Glued Under Pressure
- (C) Plies Are Placed At Right Angles To Each Other
- (D) They Are Prepared From Veneers

Q5 Seasoning of timber is required to

- (a) soften the timber
- (b) harden the timber
- (c) straighten the timber
- (d) remove sap from the timber

Q7 The modulus of elasticity of timber is about

- (a) $0.5 \text{ to } 1.0 \times 10^4 \text{ N/mm}^2$
- (b) $1.0 \text{ to } 1.5 \times 10^4 \text{ N/mm}^2$
- (c) $1.5 \text{ to } 2.0 \times 10^4 \text{ N/mm}^2$

(d) 2.0 to 2.5×10^4 N/mm²

Q8 During the conversion of timber by sawing, in order to obtain strong timber pieces, the cut should be made by

- (a) Ordinary sawing
- (b) Tangential sawing
- (c) Quarter sawing
- (d) Radial sawing

Q9 A timber column is made up of two individual members with longitudinal axes parallel, separated at the ends and middle points of their length by blocking, and joined at the ends by timber connectors. Such a column is called.

- (a) Built-up column
- (b) Composite column
- (c) Spaced column
- (d) Flitched column

Q10 The moisture content in structural timber should be

- (a) less than 5%
- (b) 5 to 10%
- (c) 10 to 20%
- (d) 15 to 25%

Q12 Consider the following methods of preservation of timber:

1. Dipping
2. Brushing or spraying
3. Pressure impregnation

The correct sequence in decreasing order of the effectiveness of these methods of preservation is

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

Q13 Radial splits in timber originating from 'Bark' and narrowing towards the 'Pith' are known as

- (a) Heart shakes
- (b) Star shakes
- (c) Cup shakes
- (d) knots

Q14 On application of external stress on timbers, it behaves like

- (a) An elastic material
- (b) Non-elastic material
- (c) Viscoelastic material
- (d) Non - viscoelastic material

Q15 The ratio of tangential shrinkage to radial shrinkage of wood due to reduction in moisture content is

- (a) In the range from 3.1 to 5.1
- (b) In the range from 2 to 3
- (c) In the range from 1 to 2
- (d) Less than or equal to 1

Q16 **Assertion (A)** : Trees which have broad leaves woods, while trees having needle-like leaves, broadly evergreen are classified as soft wood.

Reason (R) : The term hard wood and soft wood in relation to a species of trees do not necessarily indicate relative hardness or density.

Q17 Timber can be made reasonably fire-resistant by

- (a) soaking it in Ammonium Sulphate
- (b) coating with Tar plant
- (c) pumping creosote oil into timber under high pressure
- (d) seasoning process

Q18 Consider the following methods of preservation of timber;

1. Pressure application
2. Brush application
3. Dipping
4. Open tank application

The correct sequence of these methods in the 32. increasing order of their effectiveness is

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

Q19 The maximum deflection in timber beams or joints should not be greater than

- (a) span/300
- (b) span/325
- (c) span/360
- (d) span/380

Q20 Assertion (A) : Timbers used for engineering construction are derived from deciduous trees.

Reason (R) : Deciduous trees yield hard wood while conifers yield soft wood.