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CHAPTER

Industrial Roof Truss

Q.1 The self-weight of a roof truss (N/m^2) may be obtained by

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| (a) $(l + 5) \times 5$ | (b) $\left(\frac{l}{3} + 5\right) \times 10$ |
| (c) $(l - 5) \times 5$ | (d) $\left(\frac{l}{3} - 5\right) \times 10$ |

Q.2 For economical spacing of roof truss, if l , p , r are the cost of truss, purlin and roof coverings respectively, then

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| (a) $l = p + r$ | (b) $l = 2p + r$ |
| (c) $l = p + 3r$ | (d) $l = p + 2r$ |

Q.3 The minimum recommended rise of trusses with GI sheets is

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| (a) 1 in 4 | (b) 1 in 5 |
| (c) 1 in 6 | (d) 1 in 8 |

Q.4 Which one of the following is matched correctly?

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| (a) Pratt truss | Large span |
| (b) Warren truss | Small span |
| (c) Quadrangle truss | Medium pitch |
| (d) North light truss | Ventilation |

Q.5 The wind load on a steel truss for an industrial building will depend upon

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| (a) location of the structure |
| (b) shape of the structure |

(c) shape and height of the structure
 (d) location, shape and height of the structure

Q.6 Steel members subjected to which of the following forces are most close to the assumption made in the analysis of a roof truss?

1. Axial forces
2. Moments
3. Shears

Which of the above statement is correct?

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|-------------|-------------|
| (a) Only 1 | (b) Only 2 |
| (c) 1 and 2 | (d) 1 and 3 |

Q.7 Live load for roof trusses should not be less than

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|---------------------------|--------------------------|
| (a) 0.2 kN/m^2 | (b) 0.4 kN/m^2 |
| (c) 0.75 kN/m^2 | (d) 1.5 kN/m^2 |

Q.8 The partial safety factors for dead load and wind load for a roof truss for limit state of strength are respectively

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|-----------------|-----------------|
| (a) 1.0 and 1.5 | (b) 1.5 and 1.5 |
| (c) 1.2 and 1.5 | (d) 1.2 and 1.2 |

Q.9 The partial safety factors for dead load and live load for a roof truss for limit state of serviceability are respectively

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|-----------------|-----------------|
| (a) 1.0 and 1.5 | (b) 1.2 and 1.0 |
| (c) 1.0 and 1.0 | (d) 1.2 and 1.5 |



Answers Industrial Roof Truss

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|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. (b) | 2. (b) | 3. (c) | 4. (c) | 5. (d) | 6. (a) | 7. (b) | 8. (b) | 9. (c) |
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