

## Tracks Fastenings

Q.1 Pick the correct statement.

- (a) Rails are directly laid over hard wooden sleepers and fixed with spikes
- (b) Adzing is done on hard wooden sleeper
- (c) Bearing plates are used on soft wooden sleepers
- (d) All of the above

Q.2 Which of the following statement is correct?

- (a) Fish plate is fitted at the underside of the rail head
- (b) Fish plates are fitted on the top of the rail boot
- (c) Fish plates are fitted on the web of the rail section
- (d) Cross-section of rails are of fish plate

Q.3 At a rail joint, the end of adjoining rails, are connected with a pair of fish plates and

- (a) 2 fish bolts
- (b) 4 fish bolts
- (c) 6 fish bolts
- (d) 8 fish bolts

Q.4 Fish plate is in contact with rail at

- (a) web of rail
- (b) fishing plane
- (c) head of rail
- (d) foot of rail

Q.5 The speed factor or impact factor is given by

- (a)  $\frac{V}{18.2\mu^{1/3}}$
- (b)  $\frac{V}{18.2\mu^{1/2}}$
- (c)  $\frac{V}{9.1\mu^{1/3}}$
- (d)  $\frac{V}{9.1\mu^{1/2}}$

Q.6 Consider the following statements

- 1. Advance starter signal is the last stop signal of semaphore type for an outgoing train

- 2. TACV is a high speed transit vehicle which is suspended on a cushion of air and floats or an inverted T-shaped concrete guided rail
- 3. The dead end of a railway line is provided with a barrier called buffer stop

The correct statements is/are

- (a) both 1 and 2
- (b) both 1 and 3
- (c) only 3
- (d) 1, 2 and 3

Q.7 The warning signal is

- 1. placed on the same post of the semaphore signal
- 2. placed 1.8 to 2.1 m below the semaphore signal
- 3. painted yellow

The correct answer is

- (a) both 1 and 2
- (b) only 3
- (c) both 2 and 3
- (d) 1, 2 and 3

Q.8 A welded rail joint is generally

- (a) supported on a sleeper
- (b) supported on a metal plate
- (c) suspended
- (d) None of these

Q.9 For laying the railway track, materials required are

- 1. Rails
- 2. Fish Plates
- 3. Fish Bolts
- 4. Bearing Plates

The quantities required for one kilometre of Broad Gauge track will be

- | (1)     | (2) | (3) | (4) |
|---------|-----|-----|-----|
| (a) 154 | 308 | 308 | 154 |
| (b) 154 | 308 | 616 | 154 |
| (c) 77  | 154 | 308 | 77  |
| (d) 168 | 336 | 672 | 168 |

## Answers Tracks Fastenings

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

## Explanations Tracks Fastenings

5. (b)

$$\text{Impact factor} = \frac{V}{18.2\sqrt{\mu}}$$

where

V = speed in kmph

 $\mu$  = modulus of track in kg/cm<sup>2</sup>

7. (d)

The warning signal is placed on the same post of the semaphore signal at 1.8 to 2.1 m below semaphore signal. It is painted yellow and exhibits a yellow or amber colour at night instead of red colour.

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