Multiple Choice Questions (MCQs) with Answers:

1. Which of the following is NOT a type of rail?
   a) Bullhead rail
   b) Vignoles rail
   c) Girder rail
   d) Clip rail
   Answer: d) Clip rail
   Explanation: Clip rail is not a type of rail; it refers to a fastening system used to secure rails to sleepers.
2. What is the primary purpose of welding rails in railway track construction?
   a) To increase rail gauge
   b) To reduce tractive effort
   c) To eliminate gaps between rails
   d) To decrease rail density
   Answer: c) To eliminate gaps between rails
   Explanation: Welding rails eliminates gaps between rails, providing a smoother surface for train wheels to travel on.
3. Rail creep refers to:
   a) The tendency of rails to move longitudinally
   b) The process of rail corrosion
   c) Rails becoming too brittle due to extreme temperatures
   d) The formation of cracks in rails
   Answer: a) The tendency of rails to move longitudinally
   Explanation: Rail creep is the gradual movement of rails in the direction of travel due to thermal expansion and contraction.
4. Which of the following is NOT a type of sleeper?

a) Concrete sleeper
b) Steel sleeper
c) Wooden sleeper
d) Brick sleeper
Answer: d) Brick sleeper
Explanation: Brick sleepers are not commonly used in railway track construction; concrete, steel, and wooden sleepers are more common.

5. The primary function of rail fastenings is to:
   a) Increase the weight of rails
   b) Secure rails to sleepers
   c) Reduce friction between rails and wheels
   d) Absorb vibrations from passing trains
   Answer: b) Secure rails to sleepers
   Explanation: Rail fastenings are used to secure rails firmly to sleepers, ensuring stability and safety of the track.
6. Which of the following materials is commonly used as ballast?
   a) Concrete
   b) Asphalt
   c) Sand
   d) Gravel
   Answer: d) Gravel
   Explanation: Gravel is a commonly used material for ballast due to its ability to provide drainage and stability to the track.
7. What is the purpose of check rails in railway track construction?
   a) To prevent derailments
   b) To increase train speed
   c) To reduce wear and tear on rails

d) To improve passenger comfort

Answer: a) To prevent derailments

Explanation: Check rails are used to prevent derailments by guiding train wheels back onto the track in case of lateral movement.

8. Which of the following is NOT a method of plate laying in railway track construction?
   a) Continuous welded rail
   b) Double-shoulder joint
   c) Hooked fishplate
   d) Grooved rail
   Answer: d) Grooved rail
   Explanation: Grooved rail is not a method of plate laying; it refers to a type of rail profile.
9. What is the primary purpose of material trains in railway track construction?
   a) To transport passengers
   b) To carry construction materials to the track site
   c) To inspect and maintain railway tracks
   d) To provide emergency services
   Answer: b) To carry construction materials to the track site
   Explanation: Material trains transport construction materials like rails, sleepers, ballast, etc., to the track site for maintenance or construction purposes.
10. Relaying of track refers to:
    a) Replacing worn-out sleepers
    b) Repairing cracks in rails
    c) Reconstructing the entire railway track
    d) Installing new rail fastenings
    Answer: c) Reconstructing the entire railway track
    Explanation: Relaying of track involves removing and replacing the entire railway

track, including rails, sleepers, ballast, and fastenings, due to wear and tear or other maintenance needs.

11. Which of the following is NOT a type of rail fastening?
    a) Fish plate
    b) Chain keys
    c) Rail clip
    d) Anchor bolt
    Answer: d) Anchor bolt
    Explanation: Anchor bolts are not typically used as rail fastenings; they are more commonly used in structural applications to secure heavy machinery or equipment.
12. What is the main purpose of bearing plates in railway track construction?
    a) To reduce friction between rails and sleepers
    b) To distribute loads from rail fastenings to sleepers
    c) To increase the height of rail tracks
    d) To absorb vibrations from passing trains
    Answer: b) To distribute loads from rail fastenings to sleepers
    Explanation: Bearing plates are used to distribute the loads from rail fastenings evenly across the sleepers, enhancing stability and reducing wear.
13. Which of the following is NOT a requirement of good ballast?
    a) High density
    b) Ability to drain water
    c) Resistance to crushing
    d) Low cost
    Answer: d) Low cost
    Explanation: While cost-effectiveness is desirable, it is not a primary requirement of good ballast. Other factors like high density, drainage ability, and resistance to

crushing are more important.

14. What is the purpose of spikes in railway track construction?
    a) To provide lateral stability to rails
    b) To absorb shocks from passing trains
    c) To secure rails to sleepers
    d) To reduce noise pollution
    Answer: c) To secure rails to sleepers
    Explanation: Spikes are used to secure rails firmly to wooden sleepers, preventing lateral movement and ensuring track stability.
15. Which of the following is NOT a type of railway track gauge?
    a) Standard gauge
    b) Narrow gauge
    c) Broad gauge
    d) Vertical gauge
    Answer: d) Vertical gauge
    Explanation: Vertical gauge is not a term used in railway track construction. Standard, narrow, and broad gauges refer to the distance between the rails.
16. What is the purpose of chain keys in railway track construction?
    a) To join two rails end-to-end
    b) To adjust the alignment of rails
    c) To prevent rail creep
    d) To secure rails to sleepers
    Answer: a) To join two rails end-to-end
    Explanation: Chain keys are used to join two rails end-to-end, maintaining alignment and continuity of the track.
17. Which of the following is NOT a factor affecting the wear and tear of rails?
    a) Train speed

b) Axle load

c) Track curvature

d) Ambient temperature

Answer: d) Ambient temperature

Explanation: Ambient temperature does not directly affect the wear and tear of rails; factors like train speed, axle load, and track curvature have more significant impacts.

18. What is the primary purpose of check rails in railway track construction?

a) To reduce noise pollution

b) To guide train wheels back onto the track

c) To increase train speed

d) To provide lateral stability to rails

Answer: b) To guide train wheels back onto the track

Explanation: Check rails are positioned to guide train wheels back onto the track, preventing derailments and ensuring safety.

19. Which of the following materials is NOT commonly used as ballast?

a) Concrete

b) Gravel

c) Steel

d) Crushed stone

Answer: c) Steel

Explanation: Steel is not commonly used as ballast; materials like gravel, crushed stone, and concrete are more commonly used due to their ability to provide stability and drainage.

20. What is the purpose of relaying track in railway maintenance?

a) To adjust the track alignment

b) To replace worn-out components

c) To increase train speed

d) To reduce noise pollution

Answer: b) To replace worn-out components

Explanation: Relaying track involves replacing worn-out components like rails, sleepers, and ballast to maintain track integrity and safety.