

1). What is the cooling rate of carbon steel during the annealing?

- (A) 75°C to 100°C / hr.
- (B) 80°C to 100°C / hr.
- (C) 125°C to 150°C / hr.
- (D) 100°C to 150°C / hr.

Correct Answer: D

2). Which process refines the structure of steel component?

- (A) Tempering
- (B) Annealing
- (C) Hardening
- (D) Normalising

Correct Answer: D

3). What is known as 0.84% carbon steel?

- (A) Cementite
- (B) Ferrite
- (C) Pearlite steel
- (D) Hypereutectoid

Correct Answer: C

4). What is used to achieve faster rate of cooling in the quenching process?

- (A) Oil
- (B) Air
- (C) Water
- (D) Brine solution

Correct Answer: D

5). Which material is soft and ductile but relatively weak?

- (A) Ferrite
- (B) Cementite
- (C) Pearlite
- (D) Hypereutectoid

Correct Answer: A

6). Which process is adapted to add cutting ability and wear resistance on steel?

- (A) Tempering
- (B) Annealing
- (C) Normalising
- (D) Hardening

Correct Answer: D

7). Which heat treatment process improves the machinability and ductility of the material?

- (A) Annealing
- (B) Hardening

- (C) Tempering
- (D) Normalizing

Correct Answer: A

8). What is the soaking time allowed for 10 mm thickness steel during hardening?

- (A) 7 minutes
- (B) 6 minutes
- (C) 5 minutes
- (D) 8 minutes

Correct Answer: C

9). Which heat treatment process affects the strength, toughness and ductility of steel?

- (A) Tempering
- (B) Hardening
- (C) Annealing
- (D) Normalising

Correct Answer: B

10). What is carried out to produce a brighter and smoother deposit in electroplating?

- (A) High current density
- (B) Low voltage
- (C) High voltage
- (D) Low current density

Correct Answer: A

11). Which method of surface hardening is done in a heated salt bath?

- (A) Flame hardening
- (B) Gas carburizing
- (C) Pack carburizing
- (D) Liquid carburizing

Correct Answer: D

12). What is the purpose of annealing?

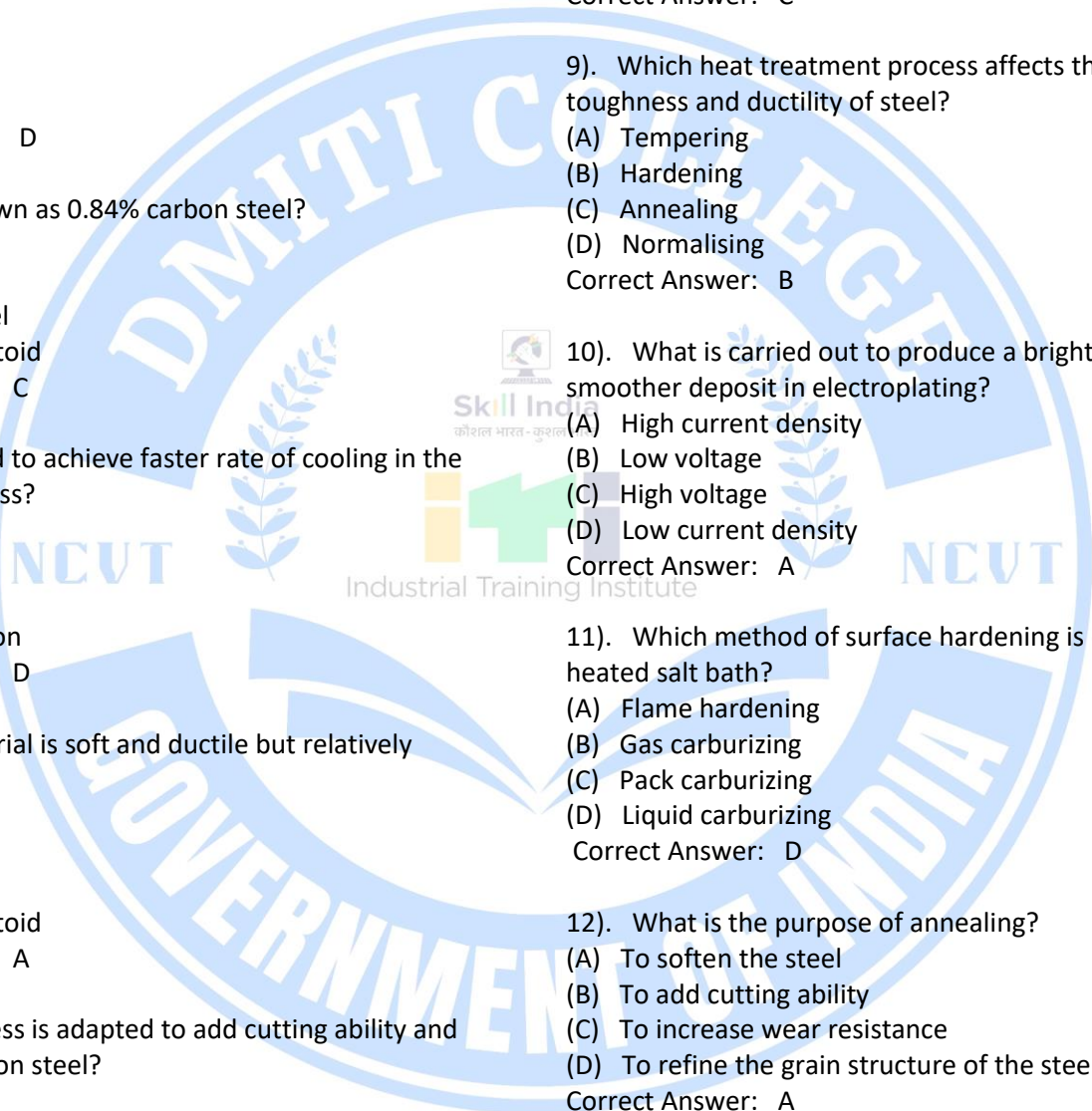
- (A) To soften the steel
- (B) To add cutting ability
- (C) To increase wear resistance
- (D) To refine the grain structure of the steel

Correct Answer: A

13). What is the effect of tempering on cutting tool?

- (A) Regulates the toughness
- (B) Increases the hardness
- (C) Increases the ductility
- (D) Improves the machinability

Correct Answer: A



14). What is the tempering color of taps and shear blades?

- (A) Pale straw
- (B) Dark blue
- (C) Reddish
- (D) Brown

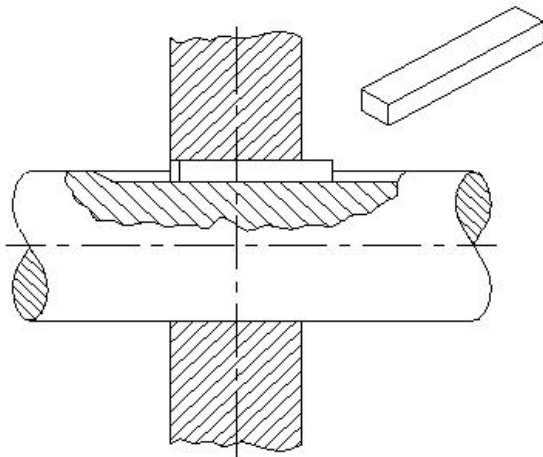
Correct Answer: D

15). What is the effect of hardening high carbon steel?

- (A) Improves the shock resistance
- (B) Improves the malleability
- (C) Adds the cutting ability
- (D) Improves the ductility

Correct Answer: C

16). What is the name of the key shown in the figure?



- (A) Parallel sunk key
- (B) Gib head key
- (C) Wood ruff key
- (D) Tapper sunk key

Correct Answer: A

17). What is the name of the structure if hot steel is rapidly cooled?

- (A) Ferrite
- (B) Austenite
- (C) Martensite
- (D) Pearlite

Correct Answer: C

18). Which structure of steel contain 0% carbon?

- (A) Ferrite
- (B) Pearlite
- (C) Austenite
- (D) Cementite

Correct Answer: A

19). Which metallic coating is done by rolling the layers of metal on to base metal?

- (A) Spraying
- (B) Cladding
- (C) Enameling
- (D) Molten metal bath

Correct Answer: B

20). What is the purpose of normalizing?

- (A) For adding cutting ability
- (B) For developing high hardness
- (C) To increase wear resistance
- (D) To remove stress and strain

Correct Answer: D

