

Duration: 180 Mins

Total Marks: 14

Q.ID: ITISKILL5621SK

1. What is the process of heat treatment?

- A) The process of heating and cooling to change the structure and properties
- B) The process of cooling to measure the dimensions
- C) The process of heating and bending as per our requirement
- D) The process of heating to change the dimensions

Answer: A) The process of heating and cooling to change the structure and properties

2. What is colour of a metal piece when heated to 250 Degree C while doing the tempering process?

- A) Brown
- B) Purple
- C) Blue
- D) Pale

Answer: A) Brown

3. How much time is allowed normally in soaking zone for a 10mm thick metal piece while hardening?

- A) 15 minutes
- B) 20 minutes
- C) 5 minutes
- D) 10 minutes

Answer: C) 5 minutes

4. Which is the suitable nitriding process for all alloyed and unalloyed steels?

- A) Nitriding in Quenching tank
- B) Silver nitriding
- C) Nitriding in salt-bath
- D) Gas nitriding

Answer: C) Nitriding in salt-bath

5. What is the name of the heat treatment process, where the metal is heated and quenched in water or oil?

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

Answer: B) Hardening

6. What are the various stages of heat treatment?

- A) Quenching, Cooling and Heating
- B) Heating, Cooling and Quenching
- C) Soaking, Quenching and Cooling
- D) Heating, Soaking and Quenching

Answer: D) Heating, Soaking and Quenching

7. Which process steel is heated in a carbonaceous atmosphere for the penetration of carbon?

- A) Induction hardening
- B) Nitriding
- C) Case hardening
- D) Carburising

Answer: D) Carburising

8. Which is a kind of surface hardening process?

- A) Nitriding
- B) Tempering
- C) Cementite
- D) Ferrite

Answer: A) Nitriding

9. What are the various types of heat treatment processes?

- A) Hardening, Soaking, Painting and Packing
- B) Tempering, Cooling, Packing and Solling
- C) Annealing, Normalising, Hardening and Tempering
- D) Normalising, Heating, Cooling and Painting

Answer: C) Annealing, Normalising, Hardening and Tempering

10. Which process produce equilibrium conditions?

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

Answer: C) Annealing and Normalising

11. What is the name of the structure formed, if a steel is heated for about 723 Degree C?

- A) Austenite
- B) Martensite
- C) Ferrite
- D) Cementite

Answer: A) Austenite

12. What is the purpose of tempering a steel?

- A) To increase the brittleness
- B) To remove the ductility
- C) To reduce the brittleness
- D) To increase the hardness

Answer: C) To reduce the brittleness

13. Which heat treatment process is done to refine the grain structure of the steel?

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

Answer: D) Normalising

14. What is the name of heat treatment process done to relieve strain and stress?

- A) Tempering
- C) Hardening

- B) Annealing
- D) Normalising

Answer: B) Annealing
