

Duration: 45 Mins

Total Marks: 14

Q.ID: ITISKILL4054UO

1. 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

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

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

Answer: D) Hardening

3. Which is a kind of surface hardening process?

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

Answer: C) Nitriding

4. What is the purpose of tempering a steel?

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

Answer: B) To reduce the brittleness

5. What is the process of heat treatment?

- A) The process of heating to change the dimensions 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 and cooling to change the structure and properties

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

6. Which process produce equilibrium conditions?

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

Answer: D) Annealing and Normalising

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

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

Answer: D) Carburising

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

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

Answer: D) 5 minutes

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

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

Answer: D) Annealing, Normalising, Hardening and Tempering

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

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

Answer: A) Brown

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

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

Answer: D) Normalising

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

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

Answer: B) Nitriding in salt-bath

13. What are the various stages of heat treatment?

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

Answer: B) Heating, Soaking and Quenching

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

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

Answer: A) Annealing