

Duration: 45 Mins

Total Marks: 14

ID: ITISKILL4054UO

Student Name: _____

Roll No: _____

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

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

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

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

3. 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

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

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

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

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

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

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

7. 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

8. What is the process of heat treatment?

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

9. Which process produce equilibrium conditions?

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

10. 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

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

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

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

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

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

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

14. Which is a kind of surface hardening process?

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