

Student: Krushna dadaso koli

Score: 11/14 (78.57%)

Code: 8717

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

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

**C) Annealing and Normalising**

D) Normalising and Tempering

2. What is the process of heat treatment?

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

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

- A) Case hardening  
 B) Nitriding  
**C) Carburising (Correct)**  
 D) Induction hardening (Incorrect)

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

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

3. What are the various stages of heat treatment?

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

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

- A) Hardening (Correct)**  
 B) Normalising and Tempering  
 C) Annealing  
 D) Tempering

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

- A) Cementide  
 B) **Austenite (Correct)**  
 C) Martensite  
 D) Ferrite (Incorrect)

11. Which is a kind of surface hardening process?

- A) Cementide  
 B) Ferrite  
**C) Nitriding (Correct)**  
 D) Tempering

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

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

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

- A) 5 minutes (Correct)**  
 B) 10 minutes  
 C) 15 minutes  
 D) 20 minutes

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

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

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

- A) Blue  
 B) **Brown (Correct)**  
 C) Purple  
 D) Pale

7. Which process produce equilibrium conditions?

- A) Annealing and Hardening (Incorrect)  
 B) Normalising and Tempering

14. What is the purpose of tempering a steel?

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