

Student: Shubham Maledar

Score: 12/17 (70.59%)

Code: 4037

1. Which affects the centre of gravity of the object?

- A) Weight
C) Density
B) Mass
D) Shape (Incorrect)

2. What is the name of the point at which all the weight of the body concentrated?

- A) Initial point
C) Centroid
B) Centre of gravity (Correct)
D) Central point

3. Where the centre of gravity of a circle lies?

- A) At its centre (Correct)
C) Any where on its circumference
B) Any where on its radius
D) Any where on its diameter

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

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

5. What is the process of heat treatment?

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

6. What are the various stages of heat treatment?

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

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

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

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

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

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

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

10. Which process produce equilibrium conditions?

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

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

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

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

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

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

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

14. Which is a kind of surface hardening process?

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

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

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

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

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

17. 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