

Which of the following property will be enhanced in fine grained structure?

- A. Ductility
- B. Corrosion resistance
- C. Creep resistance
- D. Hardness

ANSWER: A

The Lower Critical Temperature in °C, in iron-carbon phase diagram is?

- A. 1539
- B. 1493
- C. 723
- D. 1175

ANSWER: C

The temperature in °C of eutectoid reaction in iron-carbon phase diagram is?

- A. 1120
- B. 723
- C. 910
- D. 820

ANSWER: B

The Upper Critical Temperature in °C, in iron-carbon phase diagram varies between?

- A. 650, 550 and 1150
- B. 825, 675 and 1325
- C. 910, 723 and 1140
- D. 1150, 1425 and 820

ANSWER: C

Which of the following property will be more in coarse grain structure?

- A. Ductility
- B. Corrosion resistance
- C. Hardness
- D. Toughness

ANSWER: B

The percentage of carbon at eutectic point in Fe-C phase diagram is?

- A. 2.1
- B. 4.3
- C. 0.83
- D. 0.02

ANSWER: B

The percentage of carbon at eutectoid point in Fe-C phase diagram is?

- A. 2.1
- B. 4.3
- C. 0.83
- D. 0.02

ANSWER: C

The percentage of carbon at peritectic point in the Fe-C phase diagram is?

- A. 2.1
- B. 4.3
- C. 0.83
- D. 0.18

ANSWER: D

The eutectoid mixture of $\alpha + \text{Fe}_3\text{C}$ is known as?

- A. Ferrite
- B. Pearlite
- C. Cementite
- D. Austenite

ANSWER: B

The BCC structure of Fe-C solid solution is known as?

- A. Ferrite
- B. Cementite
- C. Pearlite
- D. Austenite

ANSWER: A

The FCC structure of Fe-C solid solution is known as?

- A. Ferrite
- B. Cementite
- C. Pearlite
- D. Austenite

ANSWER: D

Which of the following is soft in nature?

- A. Coarse pearlite
- B. Fine pearlite
- C. Bainite
- D. Martensite

ANSWER: A

Which of the following is hardest in nature?

- A. Coarse pearlite
- B. Fine pearlite
- C. Bainite
- D. Martensite

ANSWER: D

Which of the following iron carbon mixture, is the product of furnace cooling?

- A. Coarse pearlite
- B. Fine pearlite
- C. Bainite
- D. Martensite

ANSWER: A

Which of the following iron carbon mixture, is the product of cooling in water?

- A. Coarse pearlite
- B. Fine pearlite
- C. Bainite
- D. Martensite

ANSWER: D

Which of the following iron carbon mixture, is the product of air cooling?

- A. Coarse pearlite
- B. Fine pearlite
- C. Bainite
- D. Martensite

ANSWER: B

For steel, which one of the following properties can be enhanced upon annealing?

- A. Hardness
- B. Toughness
- C. Ductility
- D. Resilience

ANSWER: C

In Annealing, cooling is done in which of the following medium?

- A. Air
- B. Water
- C. Oil
- D. Furnace

ANSWER: D

In normalizing, cooling is done in which of the following medium?

- A. Air
- B. Water
- C. Oil
- D. Furnace

ANSWER: A

Mild steel surface can be converted into high carbon steel by which of the following heat treatment?

- A. Annealing
- B. Normalizing
- C. Case hardening
- D. Nitriding

ANSWER: C

Upon annealing, eutectoid steel converts to which of the following?

- A. Pearlite
- B. Cementite

C. Austenite
D. Martensite
ANSWER: A