

- 3B.** “Tool steels require multiple tempering treatments.” Explain the statement.
With suitable heat treatment cycle explain the standard heat treatment for tool steel dies. **5**
- 4A.** “Induction hardening is known as skin effect.” Explain the statement.
Explain the following:
i) Electrical steel ii) Austenitic stainless steel **5**
- 4B.** “Maraging steel has high strength, hardness and formability.” Justify the statement.
With suitable heat treatment cycle explain the standard heat treatment for 25% Ni – Maraging steel. **5**
- 5A.** “Nitriding is the last heat treatment to be given to the steel.” Explain the statement.
Write short notes on:
(i) Nitriding of 4310 steel. (ii) Flame hardening of 1340 steel **5**
- 5B.** “Age hardening requires sloping solvus solubility line in that alloy system.”
Justify the statement. With part of phase diagram and heat treatment cycle explain Age hardening treatment for Al7075 alloy. **5**