

Unit-1

Multiple Choice Questions (MCQs)

1. Which process is used to produce metal components by pouring molten metal into a mould?
 - a) Forging
 - b) Casting
 - c) Welding
 - d) Rolling
2. The pattern is used in casting to:
 - a) Melt metal
 - b) Shape the mould cavity
 - c) Cool the casting
 - d) Remove impurities
3. Which material is commonly used for making patterns?
 - a) Sand
 - b) Wood
 - c) Water
 - d) Clay
4. The extra material provided on a pattern for finishing is called:
 - a) Shrinkage allowance
 - b) Machining allowance
 - c) Draft allowance
 - d) Distortion allowance
5. Which furnace is commonly used in foundries for melting cast iron?
 - a) Blast furnace
 - b) Cupola furnace
 - c) Electric arc furnace
 - d) Induction furnace
6. The gating system is used to:
 - a) Cool the casting
 - b) Guide molten metal into the mould
 - c) Remove defects
 - d) Shape the pattern
7. Which defect is caused by trapped gases in casting?
 - a) Blow holes
 - b) Shrinkage
 - c) Crack
 - d) Warping
8. Sand used for moulding must have:
 - a) High strength
 - b) Permeability
 - c) Refractoriness
 - d) All of the above

9. Draft allowance is provided to:
 - a) Increase strength
 - b) Remove pattern easily from mould
 - c) Reduce weight
 - d) Improve surface finish
10. Which method uses a crucible for melting metal?
 - a) Cupola melting
 - b) Crucible melting
 - c) Electric melting
 - d) Induction melting

◆ Fill in the Blanks

1. The process of shaping metal by pouring molten metal into a mould is called _____.
2. The replica used to form a mould cavity is called _____.
3. _____ allowance is given to compensate metal shrinkage.
4. The channel through which molten metal enters the mould is called _____.
5. The furnace used for melting cast iron in foundries is _____ furnace.
6. The property of sand that allows gases to escape is called _____.
7. Small holes caused by gas entrapment are called _____.
8. _____ allowance helps in easy removal of pattern.
9. The container used to melt metal in crucible melting is called _____.
10. The system that controls the flow of molten metal is called _____ system.