

Register No.:

557

April 2024

*Time – Three hours*  
*(Maximum Marks: 100)*

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.  
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. Define metal casting process.
2. What is the use of core?
3. What is mould material?
4. Draw a neat sketch of a typical sand mould.
5. Draw and show the components of a gating system.
6. What is padding?
7. Classify pressure die casting process.
8. Write the fluxes used for Aluminium melting.
9. What is 'Rat tail' ?
10. List out the factors affecting salvage of casting.

PART – B

11. (a) Draw and explain a flow chart for production of sand castings.  
(Or)  
(b) Explain the various steps involved in pattern making and list out the tools used for it.
12. (a) Explain the size and shape of sand grains and their influence on properties.  
(Or)  
(b) With a neat sketch explain the operation of jolt squeezing machine.
13. (a) Draw a neat sketch of all types of parting line gates.  
(Or)  
(b) With neat sketch describe the various methods used to promote directional solidification.
14. (a) Explain the Gravity die casting with a neat sketch.  
(Or)  
(b) Explain the removal of fins and other unwanted projections from castings.
15. (a) List out sand expansion defects and explain with neat sketches.  
(Or)  
(b) Explain with sketches about dust control and dust extraction in foundries.

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