

Name and surname:

No:

**Marmara University - Engineering Faculty**  
**Department of Metallurgical and Materials Engineering**  
**MSE 432 – Foundry Technology (Final)**

**Q.1** a) List “SandAdditives”. b) Explain Clays. c) Explain their effect on green compression strength.

**Q.2** Explain “Cold and Hot Chamber Die Casting Processes”.

**Q.3** Explain “Expanded Polystyrene (EPS) Molding Processes”.

**Q.4** Explain “Carbon Equivalence” and “Degree of Saturation”. (And its effect on solidification of cast irons and microstructures).

**Q.5** Explain refinement of hypereutectic and hypoeutectic Al-Si Alloys and its effect on mechanical properties.

**Q.6** Explain microstructures of ductile, gray, and compacted cast irons. How can you control the matrix structure.