

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain the following :-

(a) Testing of sand.

(b) Salvaging of Casting.

Q.4 What is the function of additives in moulding sands? Explain the effect of various additives used on moulding sands.

Q.5 Explain the following:-

(a) Core material properties

(b) Physical inspection of casting

Q.6 Explain short blasting with neat sketch. What are the advantages and disadvantages of shot blasting?

Q.7 Define pattern. What is the common material used for pattern making?

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4th Sem. / Found. & Forg.

Subject : Foundry Technology-I

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Define the term foundry.

b) What is mould?

c) List two advantages of using metal as the pattern material.

d) What is shrinkage allowance?

e) What is the function of Ram-up core?

f) What is loam sand?

g) What is the function of pin rammer and slick?

h) What is clay?

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- i) What is pouring basin?
- j) What is the function of parting line gates?
- k) Define shatter index?
- l) What is colour coding for pattern?
- m) What is refractoriness?
- n) Define the term "Gating System".
- o) What is gate cutter?
- p) What is fettling?
- q) What is the function of chits?
- r) What are the main core binders?

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) What are the common allowances provided on the pattern?
 - ii) Describe various pattern making tool.
 - iii) Explain cores, its essential qualities and its

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function.

- iv) How are the binders classified?
- v) What is the various type of mould?
- vi) Explain the following:-
 - (a) Permeability (b) Cohesiveness
- vii) Explain the various properties of sand.
- viii) What are shell moulds?
- ix) What is bench moulding? When it is used?
- x) What is meant by green strength as applied to moulding sand?
- xi) Explain any one method of melting.
- xii) What is directional solidification?
- xiii) What do you mean by Core Knock out?
- xiv) Write short note on:-
 - (a) Venting (b) Cleaning of Casting
- xv) Explain sand reclamation.

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