

xiv) What is importance of positioning of feeders?

xv) What do you understand by double shrinkage allowance?

SECTION-C

Note: Long answer type questions. Attempt any three questions. $3 \times 10 = 30$

Q.3 Explain different types of core boxes used in making cores with neat sketches in detail.

Q.4 Explain various types of pattern allowances used in making pattern with neat sketch.

Q.5 Explain construction & working of pressure die casting in detail.

Q.6 Explain construction & working of gravity die casting in detail.

Q.7 (a) Write four applications of Metallic pattern.
(b) Write four requirements of feeders.

(40)

(4)

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No. of Printed Pages : 4

Roll No.

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5th Sem. / Mech. (Foundry & Forging)

Subject : Pattern & Die Engg.

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. $(15 \times 2 = 30)$

Q.1 a) What is core drying?

b) What is mounting of die?

c) Which colour is used for surfaces to be machined in patterns?

d) What is self core?

e) What is function of core print?

f) Write any two materials used for making cores.

g) What is flogging?

h) What is chipping hammer?

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- i) What is function of sprue in casting process?
 - j) What is core shifting?
 - k) What is importance of master pattern?
 - l) What is function of chill?
 - m) What is function of finisher?
 - n) What is importance of finishing of core?
 - o) What is drag?
 - p) What is function of feeder?
 - q) What is parting line?
 - r) What is function of edger?
- ii) What are laddles? List different types & draw any one.
 - iii) Explain closed die for press forging with neat sketch.
 - iv) Explain procedure of making plastic pattern.
 - v) Why allowances are required to be given while making pattern?
 - vi) Write four applications of wooden pattern.
 - vii) Write four functions of gating system.
 - viii) Explain the importance of pattern colour coding.
 - ix) Write short note on extrusion die.
 - x) Explain principle of pressure die casting.
 - xi) Explain the procedure of making pattern layout.
 - xii) Differentiate between Top & Bottom gating.
 - xiii) Why is directional solidification necessary & how it helps in the production of sound castings?

SECTION-B

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

- Q.2 i) What important considerations a pattern maker has to make for selecting a particular material for a pattern?

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(3)

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