

SECTION-C

No. of Printed Pages : 4

Roll No.

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

- Q.3 Assume any components to be made through blanking operation. Design & draw a blanking tool for the same.
- Q.4 Draw and design any piercing tool.
- Q.5 Design a progressive tool by assuming suitable operations and data.
- Q.6 Explain the working principle of presses. Describe in detail hand press and hydraulic press.
- Q.7 Take a utility component and explain in detail the design & drawing of Bending tool.

3rd Sem. / T&d CNC (6th Sem.) CAD/CAM(6th)

Subject : Press Tool DN & DRG

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 a) What is mass production?
b) What is a press tool?
c) What do you understand by piercing operation?
d) Define Notching operation.
e) Define Forming operation.
f) What is curling?
g) Define embossing.
h) What is the function of punch?
i) What are the function of bushes?
j) What is blanking tool?

- k) Define progressive tool.
- l) What is angular clearance?
- m) Define shear angle.
- n) What is the significance of grain direction?
- o) What do you understand by strip guidance?
- p) What is piloting?
- q) Write the two industrial applications of sheet metal components.
- r) What is the function of accumulator in hydraulic press?

SECTION-B

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

- Q.2 i) Write short notes on following with diagrams.
- a) Cutting dies
 - b) Piercing tools
- ii) Differentiate between construction of trimming & shaving tool.

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- iii) Differentiate between bending operation & curling operation.
- iv) Justify the selection of tools for various elements of press tools.
- v) Give specification of presses.
- vi) Explain the terms:
 - a) Land b) Die life
- vii) What are the principle of grain direction?
- viii) Explain how will you calculate shear force?
- ix) Differentiate between Hydraulic & pneumatic press.
- x) Explain concept of strip layout.
- xi) List important elements of press tools.
- xii) Write short note on Notching Tool.
- xiii) Give functions of Die plate and Guiding plate.
- xiv) Differentiate between cutting clearance and Angular clearance.
- xv) Explain the concept & principle of non cutting operation.

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