

2112E116

**BACHELOR OF VOCATION**  
**Automotive Component Manufacturing**  
**Subject: Introduction to Press Tools, Dies & Moulds**  
**Subject Code: LBME-207**  
**Semester: Fourth**  
**December 2021**  
**Theory (External): 35 Marks**  
**Time: 03 Hours**

**SECTION -B (ESSAY TYPE QUESTIONS)**  
**(5x5=25 Marks)**

1. Discuss the different sheering operations performed on sheet metal.
2. Explain the deep Drawing process and discuss its applications.
3. Explain in details "what important factors to be considered for selection of press".
4. Describe solid forming die and block and pad forming die. What is the field of application of each and in what respect they differ?
5. Describe compound Dies with neat sketch and its uses.
6. Describe the locating pins with sketches. Explain its benefits.
7. Discuss the coining and embossing process and its applications.
8. Differentiate between blanking and piercing dies. What special precaution should be taken while designing piercing punch?

===END OF PAPER===

**Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

**Roll Number**

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**SECTION -A (SHORT/OBJECTIVE TYPE QUESTIONS)**

(10x1=10 Marks)

- A. In bending operation, the metal takes shape of.....  
(a) Die  
(b) Punch  
(c) Average of two  
(d) Could take any shape
- B. In piercing operation, the clearance is provided on.....  
(a) Die  
(b) Punch  
(c) Half on die and half on punch  
(d) May be provided on any member
- C. Angular clearance provided on dies is of the order of...  
(a)  $5^\circ$  to  $10^\circ$   
(b)  $3^\circ$  to  $5^\circ$   
(c)  $1/2^\circ$  to  $1^\circ$   
(d)  $0.1^\circ$  to  $0.5^\circ$
- D. Tool life is most affected by machine.....  
(a) Cutting speed  
(b) Tool geometry  
(c) Feed and depth  
(d) Microstructure of material being cut
- E. It is required to reduce a slab directly to strip in one pass. Which of the following rolling mills can do this function?  
(a) Two high mill  
(b) Three high mill  
(c) Four high mill  
(d) Planetary mill
- F. In which type of extrusion process, the movement of the extruded product is in the direction opposite to that of the deforming force.  
(a) Direct  
(b) Forward  
(c) Backward  
(d) Die extrusion
- G. In blanking operation, the angle of shear is provided on.....  
(a) Die  
(b) Punch  
(c) Both on punch and die  
(d) Not provided at all
- H. Metallic cans are usually mass produced by the following process  
(a) Embossing  
(b) Coining  
(c) Spinning  
(d) drawing
- I. In machine tools, chatter is due to.....  
(a) Free vibrations  
(b) Random vibrations  
(c) Forced vibrations  
(d) Self-excited vibrations
- J. In bending operation, the metal takes shape of.....  
(a) Die  
(b) Punch  
(c) Average of two  
(d) Could take any shape