

BACHELOR OF VOCATION
Tool and Die Manufacturing
Subject: Introduction to Press Tools, Dies & Moulds
Subject Code: CBME-205
Semester: Third
January 2021
Theory (External): 35 Marks
Time: 03 Hours

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										

SECTION –A (SHORT/OBJECTIVE TYPE QUESTIONS)

(10x1=10 Marks)

- A In piercing operation, the clearance is provided on
- Punch
 - Die
 - Half on the punch and half on die
 - Either on punch or die
- B Punching a number of holes in a sheet is known as
- Perforating
 - Parting
 - Notching
 - Lancing
- C Production of contours in flat blanks is termed as
- | | |
|----------------|-------------|
| a) Blanking | b) Piercing |
| c) Perforating | d) Punching |
- D Upset forging
- Causes a steadily applied pressure instead of impact force
 - Is used to force the end of a heated bar into a desired shape
 - Is a forging operation in which two halves of rotating die open and close rapidly while impacting the end of the heated tube or shell is a forging method for reducing the diameter of a bar and in the process making it longer
 - None of the above
- E Leaving a tab without removing any material is known as
- | | |
|----------------|------------|
| a) Perforating | b) Parting |
| c) Notching | d) Lancing |

- F Which of the following die can perform multiple operations such as blanking, punching etc.
- a) Simple die
 - b) Progressive die
 - c) Compound die
 - d) Impact die
- G The operation of straightening a curved sheet metal is known as
- a) Drawing
 - b) Squeezing
 - c) Coining
 - d) Planishing
- H Metallic cans are usually mass produced by the following process
- a) Embossing
 - b) Coining
 - c) Spinning
 - d) Drawing
- I The important mechanical property of a material for extrusion purposes is
- a) Continuity
 - b) Ductility
 - c) Elasticity
 - d) Plasticity
- J The method to calculate the bending pressure involves
- a) Bending method
 - b) Length of bend
 - c) Thickness of stock material
 - d) All of the above

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

- Q1 Classify the press tools and mention their applications.
- Q2 Sketch the various elements of a typical press tool.
- Q3 Enumerate the differences between progressive tool and combined tool.
- Q4 Discuss various techniques and applications of a trimming operation.
- Q5 Name and explain any three press tool non-cutting operations.
- Q6 Classify the dies and explain their uses in press tools.
- Q7 Write short notes on any of the two topics given below:
(a) Functions of moulds
(b) Stripper plates
- Q8 Differentiate between blanking, piercing and shaving operations.

*******END OF THE PAPER*******