

- Q.29 Explain the various steps performed in press working operations.
- Q.30 Give the process of material feeding and slide feeding.
- Q.31 Explain the process of estimation of sheet materials, tool materials and machine hours through process planning.
- Q.32 Give the standard procedure for storage of press tools.
- Q.33 Explain the tool material specification and composition of main tool materials.
- Q.34 What is 3-2-1 principle of location?
- Q.35 Explain the Taylor's principle for designing plain limit gauges.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Enlist integrated operations which can be performed on Press Tool. Explain any two in detail with diagram.
- Q.37 Describe fine blanking operation. Explain the main constructional features, various tolerances and design features for the press tool for fine blanking operations.
- Q.38 Explain the construction of open jig and closed jig with diagram.

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2nd Year / Advance Diploma in Tool and Die Making Subject:- Tool Design Theory - I (Press Tools, Jigs & fixtures)

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 As the clearance increases, the punch force required?
a) Decreases
b) Increases
c) Remains same
d) First increases and then decreases
- Q.2 Which of the following die can perform multiple operations such as blanking, punching, notching etc?
a) Simple dies b) Progressive dies
c) Compound die d) Impact dies
- Q.3 Which of the following act as a support for tool die block
a) punch holder b) punch
c) die shoe d) stops
- Q.4 Which of the following is a type of die
a) Simple die b) progressive die
c) compound die d) All of above

- Q.5 Which of the following die is not the type of cutting die in the metal cutting operations
- Squeezing Die
 - Blanking Die
 - Piercing Die
 - Notching
- Q.6 Removing the pieces from the edge in shearing operations is known as
- perforating
 - parting
 - notching
 - lancing
- Q.7 Angular clearance provided on dies is of the order of _____
- 5° to 10°
 - 3° to 5°
 - $1/2^{\circ}$ to 1°
 - 0.1° to 0.5°
- Q.8 A good lubricant for thread cutting operations is
- white lead
 - water soluble oil
 - mineral lard oil
 - emulsified oil
- Q.9 Which of the following is not correct about fixtures?
- It is used to hold the work
 - It is used to position the work the work
 - It assures high accuracy of parts
 - It is used to guide the cutting tool
- Q.10 Which of the following is not used to measures the plain plug gauges if the tolerance less than 0.025 mm?
- Bench micrometer
 - Diameter measuring machine
 - Hand micrometer
 - High magnification dial comparator

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Describe press.
- Q.12 What is plastic deformation?
- Q.13 Describe stripping and ejection.
- Q.14 Describe multi station die.
- Q.15 Define clearance.
- Q.16 Define press tonnage.
- Q.17 Define safety.
- Q.18 Write the use of component drawing.
- Q.19 Describe work sheet.
- Q.20 Define minimum material condition.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Enlist the uses of press tools.
- Q.22 Write a short note on integrated operations.
- Q.23 What are main elements of a press tool and give their function also.
- Q.24 Explain the working of progressive die.
- Q.25 Write the steps performed in non cutting dies.
- Q.26 Write a short note on die life.
- Q.27 What are the points to be considered while selecting press or press tool operations.
- Q.28 What are the main features of press for fine blanking operation?