

N.B.

1. Attempt any four questions including Q.1 which is compulsory.
2. Figures to the right indicate full marks.
3. Assume suitable data if required.

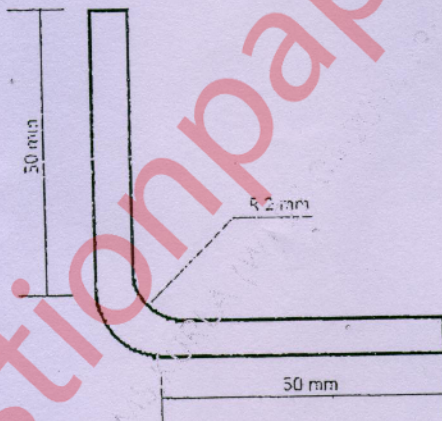
Q.1 Explain any four of the following.

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- a) Define spring back in bending. Explain methods of overcoming spring back.
- b) Write advantages & limitations of standard mould system.
- c) What is meant by clearance applied to jigs & fixtures?
- d) Write the functions & requirements of dielectric fluid.
- e) Differentiate between general purpose machines & special purpose machines.

Q. 2 a) Determine length of the part before bending for the component shown in figure. The thickness of the sheet is 2 mm.

6



b) Explain following press working operations.

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i) Perforating ii) lancing iii) nibbling

c) What is strip layout? Explain various factors which will influence it.

8

Q.3 a) Explain with suitable sketches, the various indexing devices.

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b) What is diamond pin? How & when it is used?

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d) Explain any two quick acting clamps.

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Q.4 a) What is transfer line? Write its classification, advantages & limitations.

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b) Write short note on flexible manufacturing.

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c) Explain abrasive jet machining process with principle, working, process parameters and applications.

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Q.5a) Explain ejector system. Also explain any one ejection technique.

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b) Write the principles of pin locations.

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c) Explain working & construction of progressive die.

5

Q.6 a) Explain the term undercut molding. Explain the concepts of split mould with suitable example.

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b) Explain agile manufacturing

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