

- Q.8 Design a suitable milling fixture to cut a key way of size 3x3 mm on a solid shaft of 30 mm diameter and 100mm length.

Q.9 Write the procedure steps for designing a plus gauge with go and not go side. Assuming suitable dimensions draw the same.

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4th Sem, **Branch :** Mech./T&D/CNC/CAD/CAM
Subject : Jigs, Fixtures & Gauges - Design & Drawing

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note : Attempt any 5 questions. (5x8=40)

- Q.1 Explain interchangeability in mass production.
How jigs and fixtures help in achieving it?
 - Q.2 Explain different types of locating devices used for locating a work piece.
 - Q.3 Draw a neat sketch of a box type jig and name the parts.
 - Q.4 Explain any grinding fixture with neat sketch?
 - Q.5 Explain the role of Limit gauges in mass production with examples.
 - Q.6 Explain plug, ring and snap gauge in detail.

SECTION-B

Note: Long answer type question. Attempt any two parts. (30x2=60)

- Q.7** Design and draw a drilling jig for drilling 8 holes of 10mm diameter on PCD of 80 mm dia. The circular MS plate consist of 120 mm dia & 30mm thickness.