

22439

23242

3 Hours / 70 Marks

Seat No.

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- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: **10****
- a) Define Forgeability.
 - b) Draw the neat labelled sketch of simple die used in press machines.
 - c) Enlist any four press parts used in Automobiles.
 - d) State the principle of resistance welding.
 - e) State any four advantages of CNC machines.
 - f) Write the meaning of
 - i) G04
 - ii) M04
 - g) Enlist the surface cleaning processes used in automobiles.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Enlist different forging hand tools.
 - b) Explain Deep Drawing Operation with neat labelled sketch.
 - c) Explain process of Seam Welding with neat sketch.
 - d) Describe Absolute Co-ordinate system with suitable example.
- 3. Attempt any THREE of the following:** **12**
- a) Differentiate between Open Die Forging and Closed Die Forging.
 - b) Explain with neat sketch
 - i) Lancing
 - ii) Blanking
 - c) Explain the working of Progressive Die with neat sketch.
 - d) Explain MIG Welding process with neat sketch.
- 4. Attempt any THREE of the following:** **12**
- a) Explain with neat sketch, forging sequence for double ended open spanner.
 - b) Differentiate between Soldering and Brazing.
 - c) Write the detailed classification of Welding Process.
 - d) Explain the process of Electroplating with neat sketch.
 - e) Draw axes with proper notation for turning centre and CNC milling machine.
- 5. Attempt any TWO of the following:** **12**
- a) Draw neat labelled sketch of standard Die set components.
State functions of
 - i) Pilot
 - ii) Stripper
 - b) Explain with neat sketch
 - i) Lapping
 - ii) Buffing
 - c) State the meaning of insert specification given below,
C N M G 12 04 08

6. Attempt any TWO of the following:

12

- a) Prepare the Part Program for the workpiece shown in Fig. No. 1

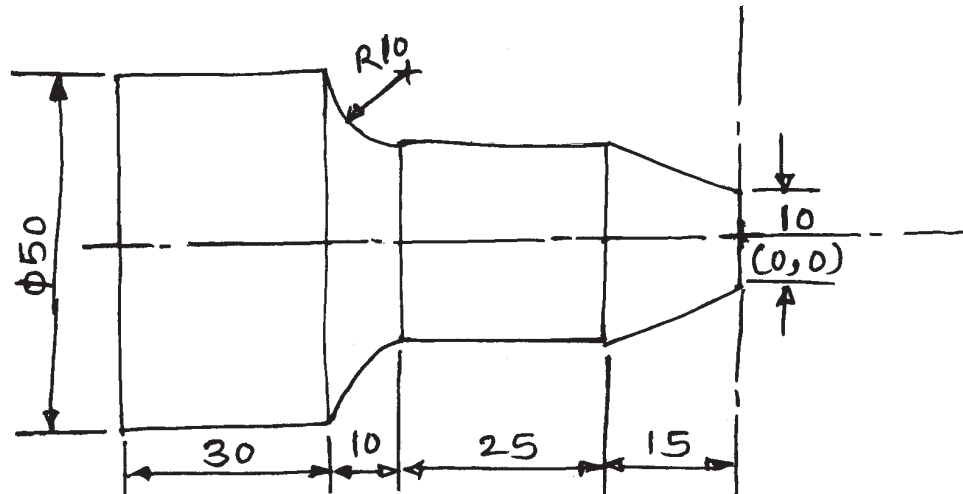


Fig. No. 1

- b) Prepare the Part Program for the job shown in Fig. No. 2.

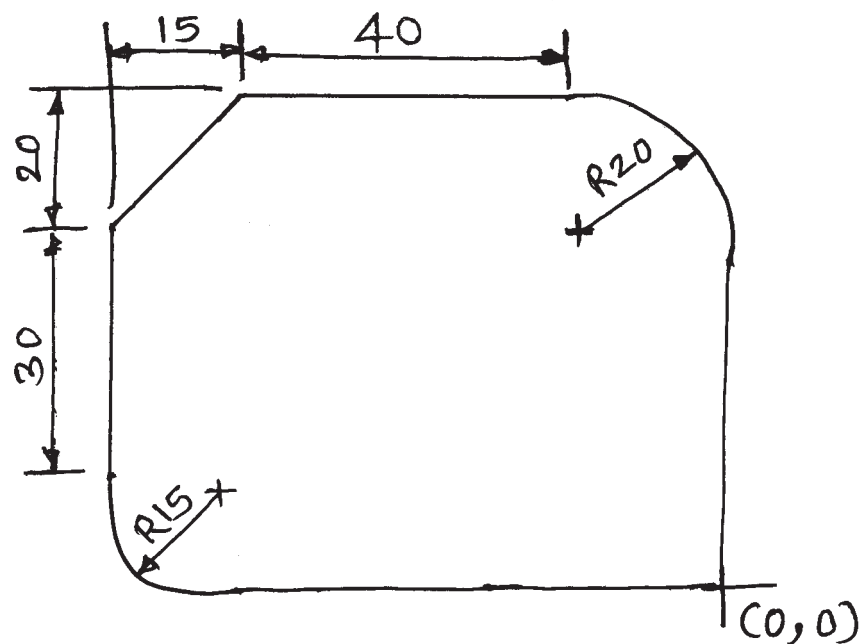


Fig. No. 2

- c) Prepare the Part Program for the workpiece shown in Fig. No. 3

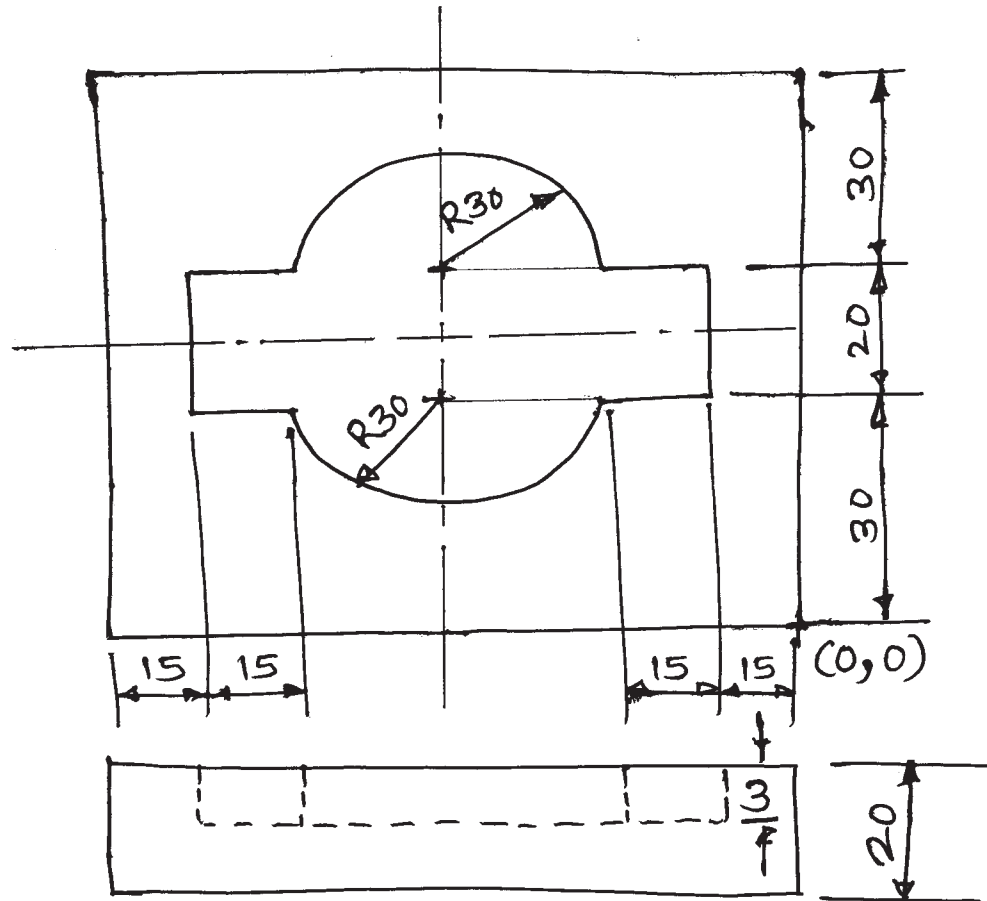


Fig. No. 3