



**2.** Draw the symbol for the following :

(a) Position

(b) Flatness

(c) Coaxiality

(d) Cylindricity

(e) Profile of any line

**3.** Write the surface roughness values for the following :

(a) Die-casting

(b) Shaping

(c) Extrusion

(d) Reaming

(e) Lapping

**4.** Indicate the meaning of following symbols/specifications :

(a) Hex bolt  $M20 \times 1.5 \times 75$  NN, IS : 1364-S-4.5

(b) Countersunk Screw  $M5 \times 15$ , IS : 1365-4.8

(c) Splines  $6 \times 23 \times 26$ , IS : 2327

(d) Taper key  $12 \times 8 \times 50$ , IS : 2292

(e) O-Ring, 10/2.5, Viton

**PART—B**

**Instructions :** (1) Answer *any one* question.  
 (2) Each question carries **forty** marks.

**5.** Study the given assembly drawing of the eccentric shown in Figure 1 : 20+5+5+5+5=40

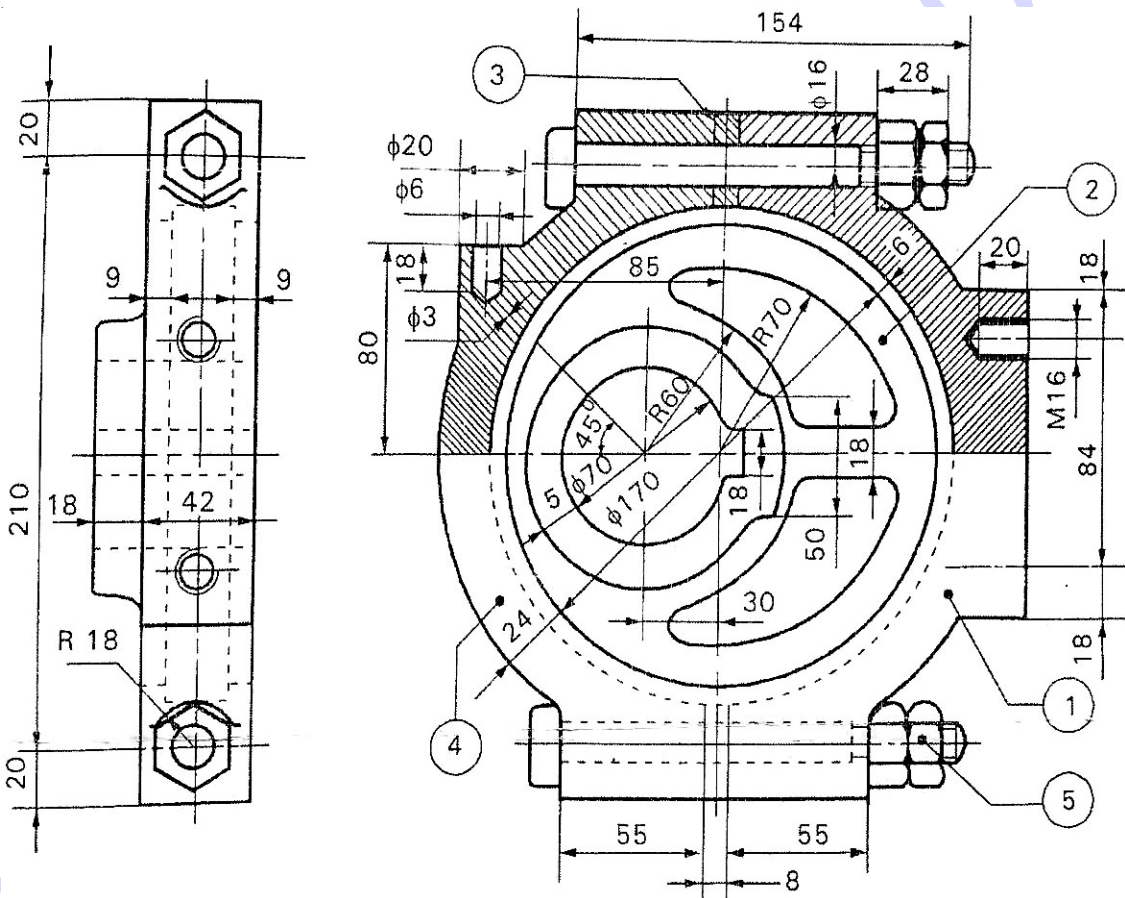


Fig. 1

Part No.	Name	Qty.
1	Strap	1
2	Sheave	1
3	Shim	2
4	Strap	1
5	Bolt with nut	2

- \* (a) Draw the component drawings.
- (b) Apply suitable tolerances and fits.
- (c) Apply suitable geometrical tolerances to components.
- (d) Show the surface roughness symbols.
- (e) Prepare the process sheet for strap

6. Study the given assembly drawing of foot step bearing shown in Figure 2 :

20+5+5+5+5=40

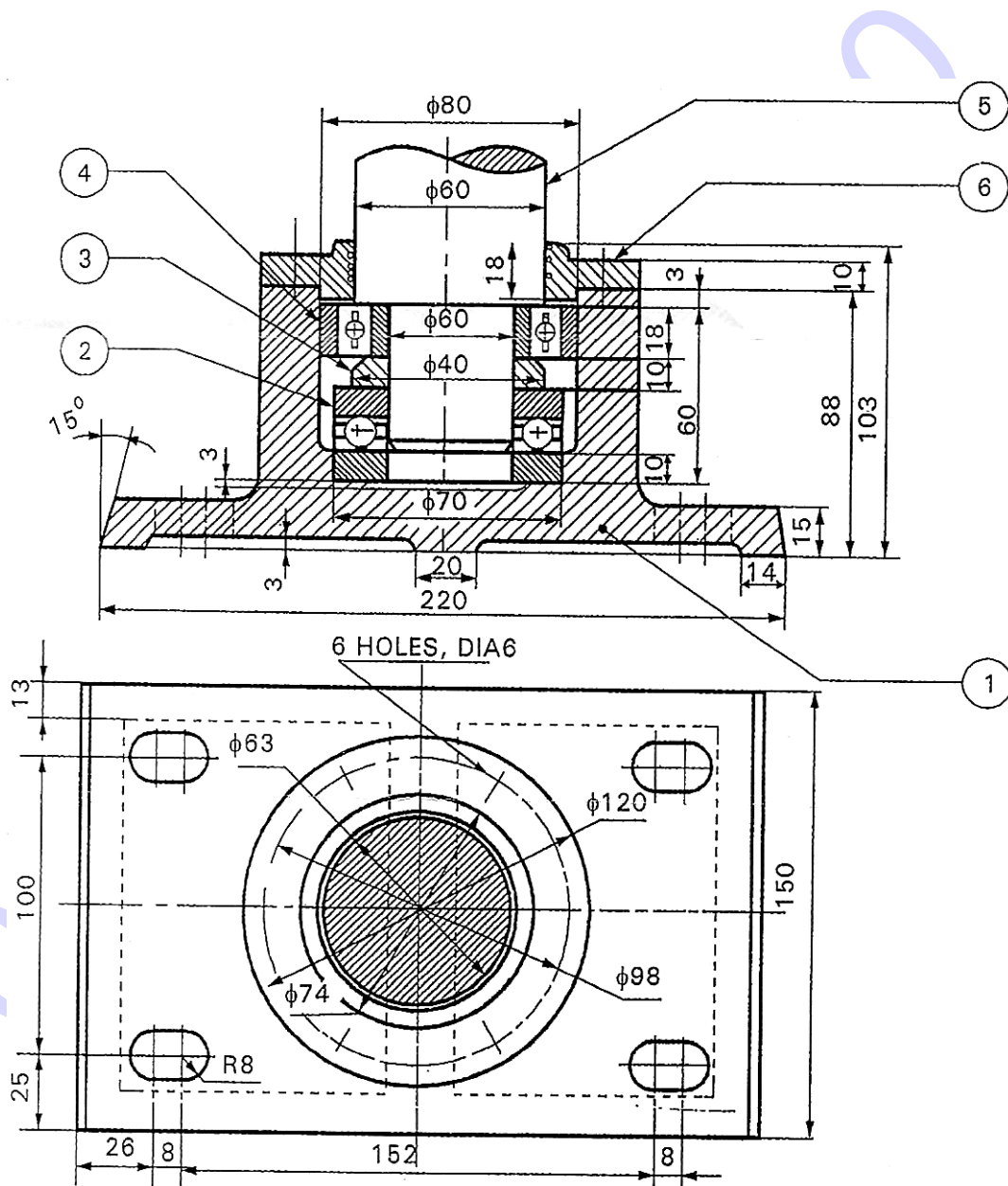


Fig. 2

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<i>Part No.</i>	<i>Name</i>	<i>Qty.</i>
1	Base	1
2	Thrust ball bearing	1
3	Spacer	1
4	Ball Bearing	1
5	Shaft	1
6	Cover	1

- (a) Draw the component drawings.
- (b) Apply suitable tolerances and fits.
- (c) Apply suitable geometrical tolerances to components.
- (d) Show the surface roughness symbols.
- (e) Prepare the process sheet for cover.

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