с14-м-407

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BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV-2016

DME—FOURTH SEMESTER EXAMINATION

PRODUCTION DRAWING PRACTICE

Time : 3 hours]

[Total Marks : 60

PART—A

5×4=20

Instructions : (1) Answer **all** questions.

- (2) Each question carries **five** marks.
- (3) Draw neatly with proportionate dimensions.
- (4) Use of production drawing tables is allowed.
- Calculate the value of the hole tolerance, shaft tolerance, minimum allowance, maximum allowance and type of fit for the assembly 40 H7/g6.
- Write the surface roughness values for the following manufacturing processes :
 - (a) Lapping
 - (b) Reaming
 - (c) Drilling
 - (d) Forging
 - (e) Die casting

3. Explain the following designations :

- (a) Hex bolt M20 × 1.5×75 IS : 1364-S-4.6
- (b) Fe 410 CuK
- (c) Taper Key 12 × 8 × 50, IS : 2292
- **4.** List various reprographic methods for reproducing engineering drawings.

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2+1+2=5

Instructions : (1) Answer any one question.

(2) Each question carries forty marks.

5. Study the given assembly drawing of the crank shown in Fig. 1 :

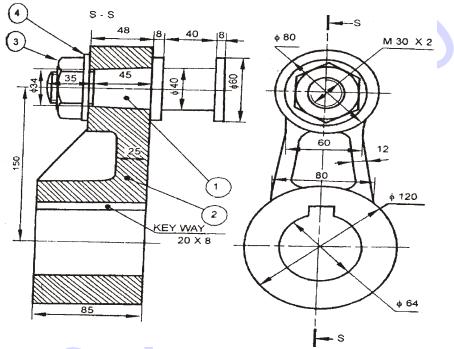


Fig. 1

Parts List

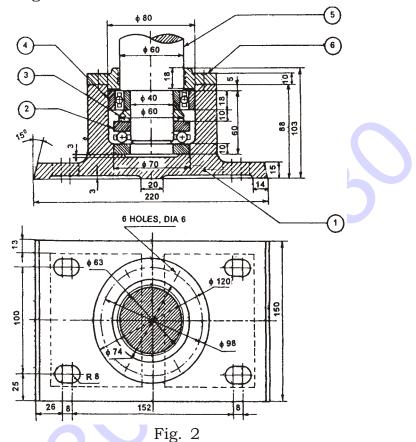
Part List	Name	Qty.
1	Crank pin	1
2	Crank	1
3	Nut	1
4	Washer	1

- (a) Draw the component drawings.
- (b) Apply suitable tolerances and fits.
- (c) Apply suitable geometrical tolerances to components.
- (d) Prepare the process sheet for crank pin.
- (e) Show the surface roughness symbols.
- (f) List out the materials of the components. 20+5+4+5+4+2=40

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



Parts list

Part No.	Name	Qty.
1	Base	1
2	Thrust ball bearing	1
3	Spacer	1
4	(Radial) 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) Prepare the process sheet for cover.
- (e) Show the surface roughness symbols.
- (f) List out the materials of the components. 20+5+4+5+4+2=40

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