

CO9-M-407

3507

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2016 DME—FOURTH SEMESTER EXAMINATION

PRODUCTION DRAWING

Time: 3 hours] [Total Marks: 60

PART—A

 $5 \times 4 = 20$

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

- (2) Each question carries **five** marks.
- **1.** Write the toleranced dimensions of a shaft and hub assembly of size 150 mm to give a fit of H7-P6. What is the type of fit?
- **2.** Draw the conventional symbols for the following:
 - (a) Square on shaft
 - (b) Straight Knurling
 - (c) Internal screw threads
 - (d) Bevel gear
 - (e) Semi elliptical leaf spring with eyes
- **3.** Draw the symbols for following:
 - (a) Parallelism

(b) Symmetry

(c) Coaxiality

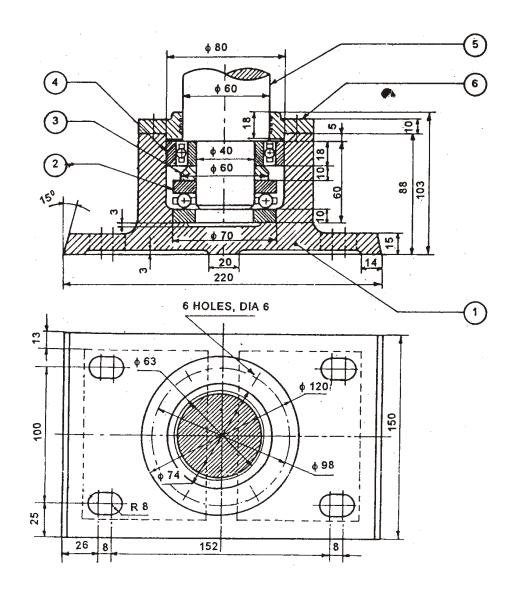
(d) Position

(e) Cylindricity

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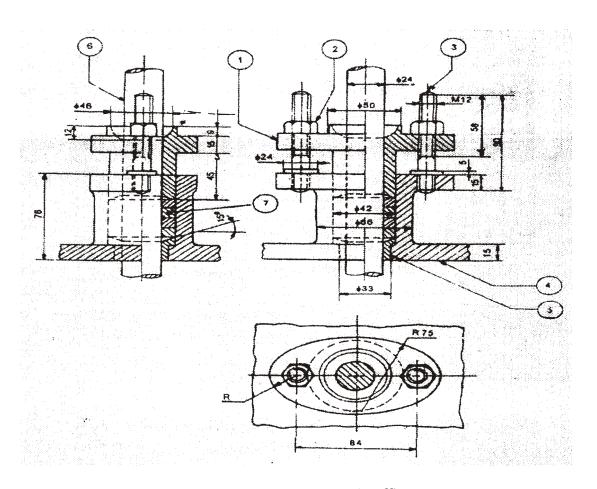
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| 4. | Wri | te the surface roughness values for the following : | |
|-------|-----|---|---|
| | (a) | Planing | |
| | (b) | Reaming | |
| | (c) | Extrusion | |
| | (d) | Die-casting | |
| | (e) | Lapping | |
| | | | |
| | | DADT D | |
| T4- | 4 | PART—B | 0 |
| Insti | uct | ions: (1) Answer any one question.(2) Each question carries forty marks. | |
| | | (3) Choose suitable scale. | |
| | | | |
| 5. | Stu | dy the assembly drawing (Page 3) of single tool post: $30+5+5=4$ | 0 |
| | (a) | Draw the component drawings selecting suitable tolerances for parts 1, 3 and 6. | r |
| | (b) | Prepare the process sheet for spacer. | |
| | (c) | Recommend surface roughness values on parts 1 and 3. | |
| | | | |
| 6. | Stu | dy the given assembly drawing (Page 4) of stuffing box : 30+7+3=4 | 0 |
| | (a) | Draw the component drawings selecting suitable tolerance for parts 1, 2, 3, 5. | |
| | (b) | Prepare the process sheet for 'Gland'. | |
| | (c) | Write the material list for all parts. | |
| /350 | 7 | 2 [Contd. | |



FOOT-STEP BEARING

| Part No. | Name | Qty. |
|----------|---------------------|------|
| 1 | Base | 1 |
| 2 | Thrust ball bearing | 1 |
| 3 | Spacer | 1 |
| 4 | Ball bearing | 1 |
| 5 | Shaft | 1 |
| 6 | Cover | 1 |



Stuffing Box

| Part No. | Name | Qty. |
|----------|-------|------|
| 1 | Gland | 1 |
| 2 | Nut | 2 |
| 3 | Stud | 2 |
| 4 | Body | 1 |
| 5 | Bush | 1 |
| 6 | Shaft | 1 |

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