

C14-M-407

4483

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2018 DME—FOURTH SEMESTER EXAMINATION

PRODUCTION DRAWING PRACTICE

Time: 3 hours] [Total Marks: 60

PART—A

 $5 \times 4 = 20$

- **Instructions:** (1) Answer **all** questions.
 - (2) Each question carries **five** marks.
 - (3) Draw the following neatly with proportionate dimensions.
 - (4) Use of production drawing tables is allowed.
 - 1. The dimensions of a shaft and hole are given below

+0.010+0.020-0.005-0.022

Shaft 50 Hole 50

Find (a) hole tolerance. (b) shaft tolerance. (c) minimum allowance.

(d) maximum allowance and (e) type of fit for the assembly.

1+1+1+1+1

- **2.** Draw the comprehensive symbol of surface roughness and indicate all the elements on it. 5
- **3.** Explain the following designations:

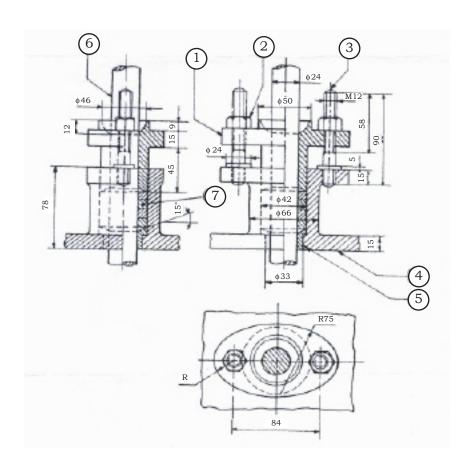
1+1+1+2

- (a) Fe 410 Cu K
- (b) Fe 470W
- (c) X10 Cr 18 Ni 9 S3
- (d) Hex bolt M20×1.5×7.5NL-IS 1364-S-4.6

/4483 1 [Contd... **PART—B** 40

Instruction: (1) Answer any one of the following questions.

- **5.** Study the given assembly drawing of the Stuffing Box shown in figure : 20+5+4+5+4+2
 - (a) Draw the component drawings.
 - (b) Apply suitable tolerances and fits.
 - (c) Apply suitable geometrical tolerances to components.
 - (d) Prepare the process sheet for Gland.
 - (e) Show the surface roughness symbols.
 - (f) List out the materials of the components.

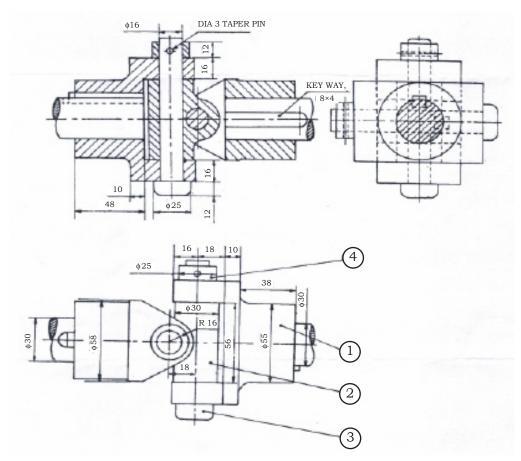


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Parts list:

Part No.*	Name	Qty
1.	Gland	1
2.	Nut	2
3.	Stud	2
4.	Body	1
5.	Bush	1
6.	Shaft	1
7.	Packing	1

- **6.** Study the given assembly drawing of the Universal Coupling shown in figure : 20+5+4+5+4+2
 - (a) Draw the component drawings.
 - (b) Apply suitable tolerances and fits.
 - (c) Apply suitable geometrical tolerances to components.
 - (d) Prepare the process sheet for Gland.
 - (e) Show the surface roughness symbols.
 - (f) List out the materials of the components.



Parts list:

Part No.*	Name	Qty
1.	Fork	2
2.	Centre block	1
3.	Pin	2
4.	Coller	2

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