



C09-M-407

3507

BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2014
DME—FOURTH SEMESTER EXAMINATION
PRODUCTION DRAWING

Time : 3 hours]

[Total Marks : 60

PART—A

5×4=20

- Instructions** : (1) Answer **all** questions.
(2) Each question carries **five** marks.
(3) Use of production drawing tables are allowed.

1. Determine the following for $80 H_7m_6$:
 - (a) Hole tolerance
 - (b) Shaft tolerance
 - (c) Min clearance
 - (d) Max clearance
 - (e) Type of fit
2. Draw the conventional symbols for the following :
 - (a) Splined shaft
 - (b) Cylindrical tension spring
 - (c) Diamond knurling
 - (d) Seam weld
 - (e) Backing weld


* 3. Write the meaning of the following symbols w.r.t. surface finish/ characteristics :

(a) 

(b) 

(c) 

(d) 

(e) 

4. Write the meaning of the following :

(a) Hexagon Fit Bolt M20 × 70, IS:3640-S-8·8

(b) Oil Seal A 25 × 40 × 7, IS:5129

(c) Castle Nut M20, IS:2232-B-4

(d) Stud A M10 × 30, IS:1862-P-4·6

(e) Countersunk Screw M5 × 15, IS:1365-4·8

PART—B

30+5+5=40

- Instructions :** (1) Answer *any one* question.
(2) Each question carries **forty** marks.
(3) Choose suitable scale.

5. Study the given assembly drawing of Drill Jig (Fig. 1) in Page 3 :

(a) Draw the component drawings selecting suitable tolerances and fits.

(b) Prepare the process sheet for Part No. 3 (Jig Plate).

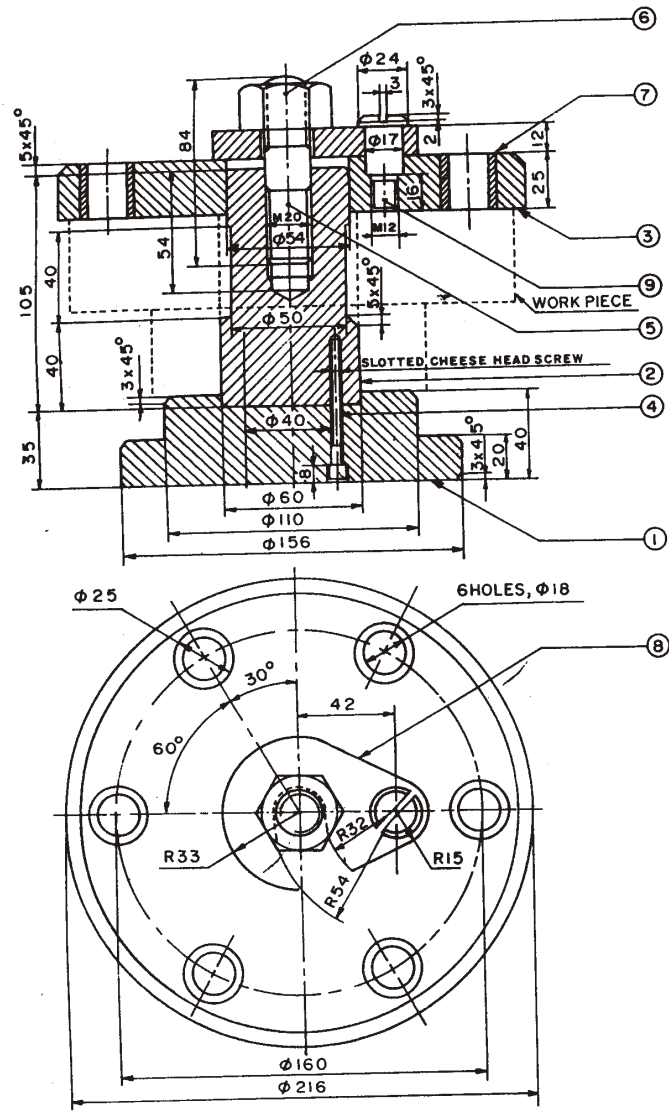
(c) Indicate the surface finish and characteristics wherever necessary.

6. The assembled drawing of a Lathe Tail Stock is given in Fig 2 (Page 4) :

(a) Prepare the component drawings of all components except 6 and 7, and indicate the necessary tolerances and fits.

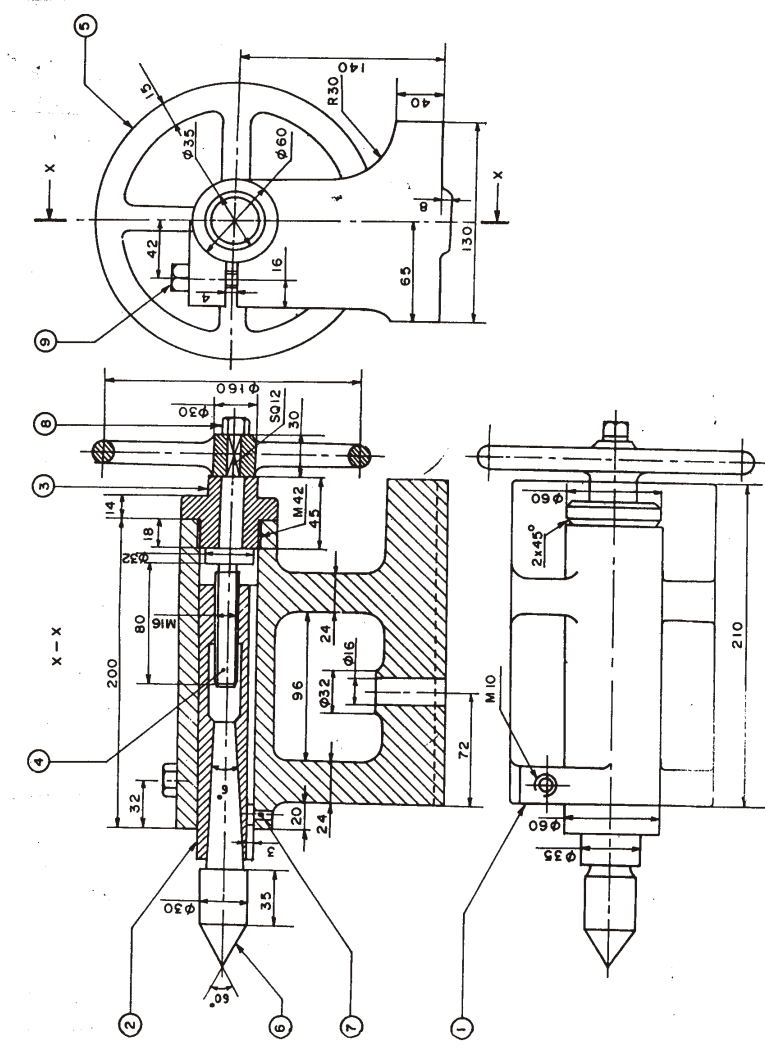
(b) Prepare process sheet for Part No. 2 (Barrel).

(c) Mention the surface finish and characteristics wherever necessary.



Parts No.	Name	Material	Quantity
1	Base Plate	CI	1
2	Stem	MS	1
3	Jig plate	CI	1
4	Screw	MS	3
5	Stud	MS	1
6	Nut	MS	1
7	Bush	Case Hardened alloy steel	6
8	Latch washer	MS	1
9	Screw	MS	1

Fig. 1



Part No.	Name	No. Off
1	Body	1
2	Barrel	1
3	Cap	1
4	Spindle	1
5	Hand Wheel	1
6	Centre	1
7	Feather	1
8	Lock nut	1
9	Hex. Head Screw	1

Fig. 2
