

C20-M-407

7460

BOARD DIPLOMA EXAMINATION, (C-20) JUNE/JULY—2022

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.
- (3) Draw the following neatly with proportionate dimensions.
- (4) Use of production drawing tables is allowed.
- 1. Calculate the values of clearance/interference, hole tolerance and shaft tolerance for the assemblies with a basic size of 40 mm and tolerances indicated (a) 120 H7/S6 and (b) 40 G7/h6.
- 2. Draw the symbols for the following geometrical tolerance characteristics:
 - (a) Profile of any line
 - (b) Cylindricity
 - (c) Profile of any surface
 - (d) Flatness
 - (e) Circularity

/7460 1 [Contd...

www.manaresults.co.in

(b) Reaming (c) Drilling (d) Diecasting (e) Forging 4. Write the meaning of the following designations: (a) Fe 520 L (b) X10Crl8Ni9S3 (c) Hex Screw M8×30- IS: 1364— P- 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155		(a)	Lapping	
 (d) Diecasting (e) Forging 4. Write the meaning of the following designations: (a) Fe 520 L (b) X10Crl8Ni9S3 (c) Hex Screw M8×30- IS: 1364- P- 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155 		(b)	Reaming	
 (e) Forging 4. Write the meaning of the following designations: (a) Fe 520 L (b) X10Crl8Ni9S3 (c) Hex Screw M8×30- IS: 1364- P- 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155 		(c)	Drilling	
 4. Write the meaning of the following designations: (a) Fe 520 L (b) X10Crl8Ni9S3 (c) Hex Screw M8×30- IS: 1364- P- 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155 		(d)	Diecasting	
(a) Fe 520 L (b) X10Crl8Ni9S3 (c) Hex Screw M8×30- IS: 1364– P– 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155		(e)	Forging	
(b) X10Cr18Ni9S3 (c) Hex Screw M8×30- IS: 1364– P– 8-8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155	4.			
(c) Hex Screw M8×30- IS: 1364— P- 8·8 (d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155				
(d) Solid Taper Pin 10×60, IS: 6688 (e) Snap Head Rivet 6×25, IS: 2155				
(e) Snap Head Rivet 6×25, IS: 2155		(c)	Hex Screw M8×30- IS: 1364– P– 8·8	
		(d)	Solid Taper Pin 10×60, IS: 6688	
/7460 2 [Contd		(e)	Snap Head Rivet 6×25, IS: 2155	
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
/7460 2 [Contd				
	/7460	ماد	2	[Contd

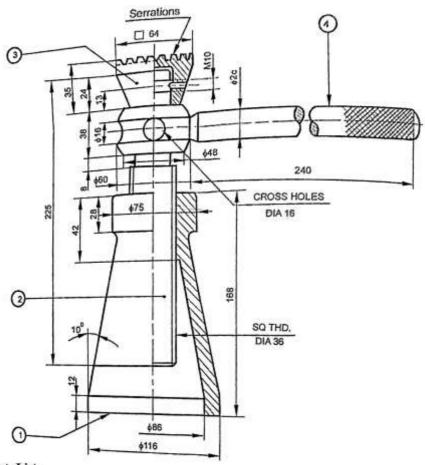
Write the surface roughness values for the following manufacturing

3.

processes:

Instructions: (1) Answer any one question.

- (2) Each question carries forty marks.
- 5. Study the given assembly drawing of Screw jack:
 - (a) Draw the part drawings.
 (b) Mention suitable fits and tolerances wherever required.
 (c) Indicate surface roughness values/symbols to the components.
 - (d) Prepare process sheet for the manufacturing of "Screw". 7
 - (e) Prepare bill of materials.



Parts List

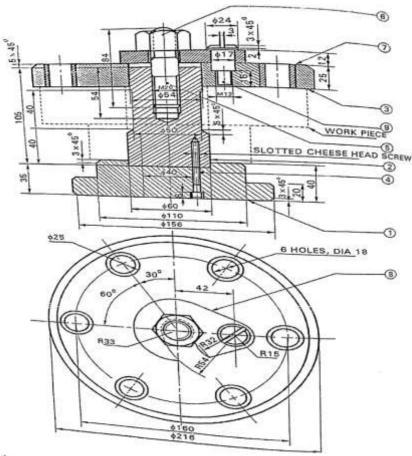
Laite Tast			
Part. No	Name	Raw material	Qty.
1	Body	C.I Casting	1
2	Screw	MCS Ф63 Bar stock	1
3	Cup	C.I -Casting	1
4	Tommy bar	MS Ф20 Bar stock	1

/7460 3 [Contd...

- 6. Study the giten assembly drawing of Drill Jig:
 - (a) Draw the part drawings. 20
 - (b) Mention suitable fits and tolerances wherever required. 4
 - (c) Indicate surface roughness values/symbols to the components. 6
 - (d) Prepare process sheet for the manufacturing of "Drill Bush". 7

3

(e) Prepare bill of materials.



Parts List

Part. No	Name	Raw material	Qty.
1	Base Plate	C.I-Casting	1
2	Stem	MS- Ф63 Bar stock	1
3	Jig Plate	C.I -Casting	1
4	Screw	MS- Std. Component	3
5	Stud	MS- Std. Component	1
6	Nut	MS- Std. Component	1
7	Bush	MCS- Ф32 Bar stock	6
8	Latch washer	MS- Stampling	1
9	Screw	MS- Ф25 Bar stock	- 1



/7460 4 AA22-PDF