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




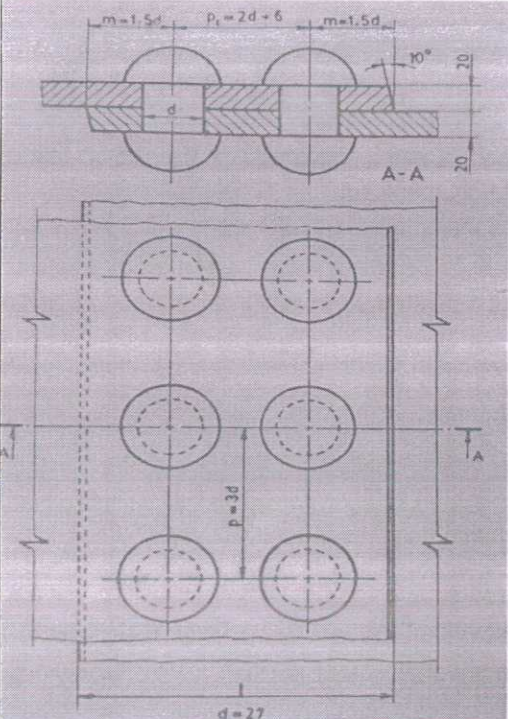


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Scoring Indicators

COURSE NAME : MACHINE DRAWING

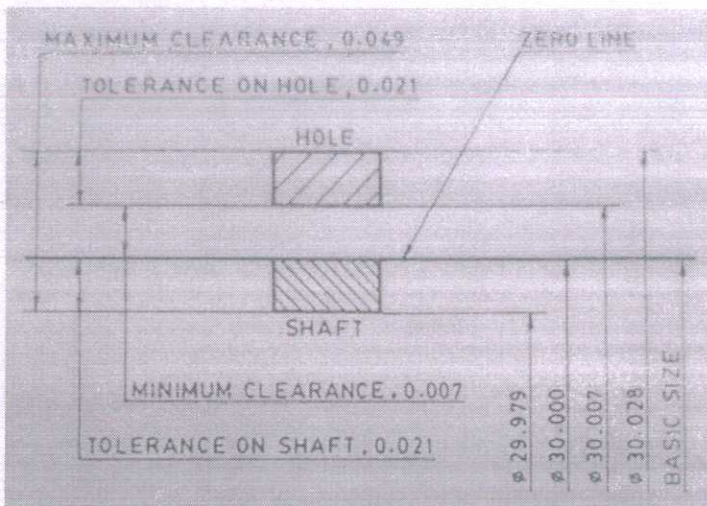
COURSE CODE : 3025 (21)

QID: 2110220181

Q No	Scoring Indicators	Split score	Sub Total	Total score
Module-1				15
1	Square butt weld  Single bevel butt  Single U butt  Single V butt weld  Fillet weld 	3 3 3 3 3	15	
2	<p>Diameter of the rivets, $d = 6\sqrt{t} = 6\sqrt{20} = 26.83 \approx 27 \text{ mm}$</p> <p>Longitudinal pitch, $p = 3d = 3 \times 27 = 81 \text{ mm}$</p> <p>Transverse pitch $p_t = 2d + 6 \text{ mm} = (2 \times 27) + 6 = 60 \text{ mm}$</p> <p>Marginal distance, $m = 1.5d = 1.5 \times 27 = 40.5 \text{ mm}$</p> <p>Length of overlap = $p_t + 2(1.5d) = 60 + 2(1.5 \times 27) = 141 \text{ mm}$</p> 	3		
	Figure Top view  Front view  6 6		15	

1.	<p>Limits</p> <p>Maximum limit of the shaft = $\text{Ø}30\text{mm}$</p> <p>Minimum limit of the shaft = (Max.limit of shaft – tolerance) $= \text{Ø} 30 - 0.021 = \text{Ø} 29.979\text{mm}$</p> <p>Minimum limit of hole = (Max.limit of shaft+ min. clearance) $= \text{Ø} 30 + 0.007 = \text{Ø} 30.007 \text{ mm}$</p> <p>Max.limit of the hole = (Min.limit of the hole + tolerance) $= \text{Ø}30.007 + 0.021 = \text{Ø}30.028 \text{ mm}$</p> <p>Check</p> <p>Total tolerance = Tolerance of shaft +Tolerance of hole $= 0.021+0.021 = 0.042 \text{ mm}$</p> <p>Maximum clearance = (Max.limit of hole – Min.limit of shaft) $= \text{Ø}30.028 - \text{Ø} 29.979 = 0.049 \text{ mm}$</p> <p>Minimum clearance = (Min. limit of the hole – Max.limit of shaft) $= \text{Ø} 30.007 - \text{Ø}30 = .007 \text{ mm}$</p> <p>Difference in clearance = $0.049 - .007 = .042 \text{ mm}$</p> <p>Total tolerance = Difference in clearance</p>	<p>1</p> <p>1</p> <p>2</p> <p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
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Representation



4

15

2

Grade identification 8
 Drawing 2
 Dimensioning 2
 Alignment of Roughness indications 3

Module-3

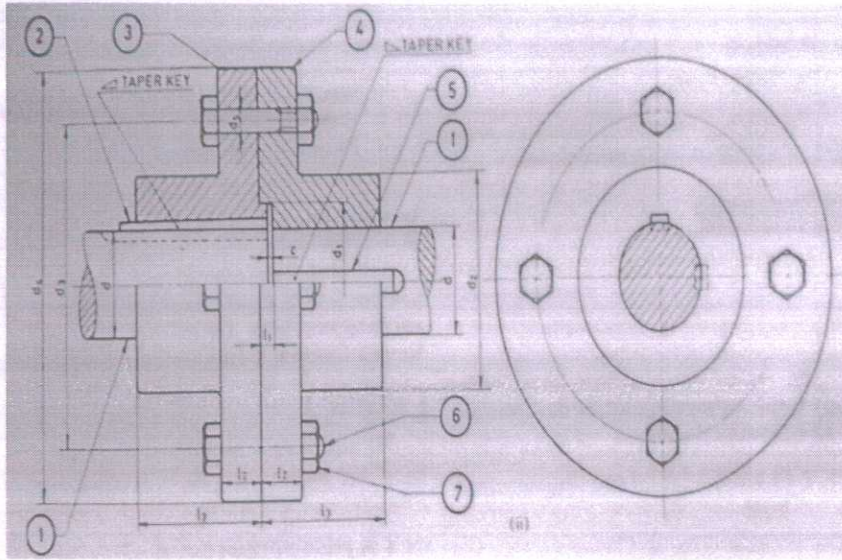
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1

Item	Description	Qty.	Material
1	Fork end	1	M. S
2	Taper pin	1	M. S
3	Collar	1	M. S
4	Pin	1	M. S
5	Eye end	1	M. S

Front view 15
 Side view 7
 Item list 5
 Dimensioning 3

2



ITEM LIST

Item	Description	Qty.	Material
1	Shaft end	2	Steel
2	Key (Long)	1	M. S.
3	Flange (Male)	1	C. I.
4	Flange (Female)	1	C. I.
5	Key (Short)	1	M. S.
6	Bolt	4	M. S.
7	Nut	4	M. S.

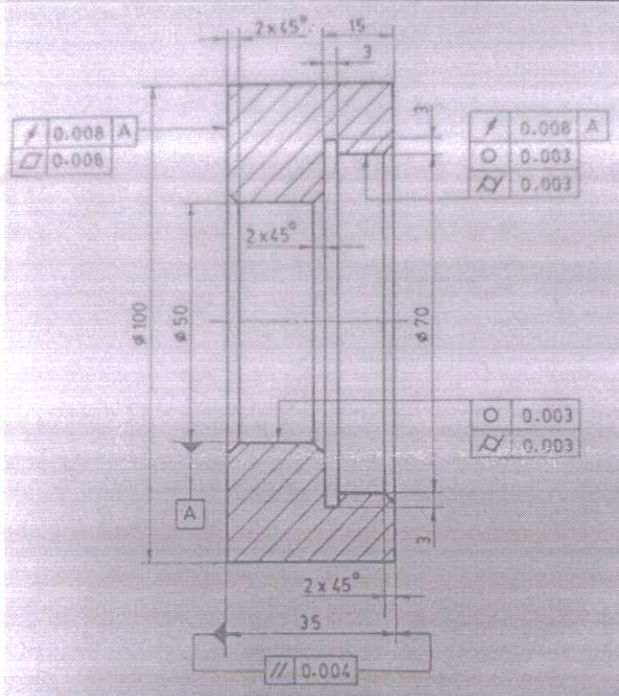
Front view 15
 Side view 7
 Item list 5
 Dimensioning 3

30

Module -4

15

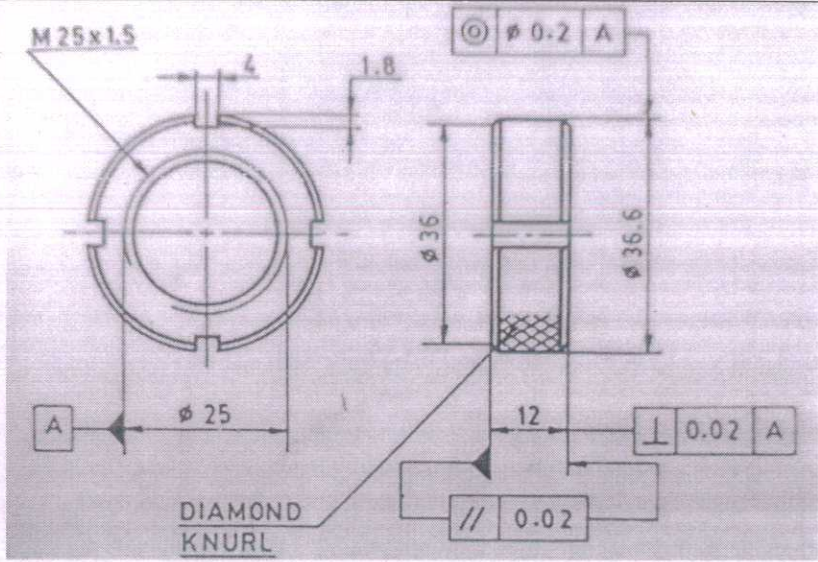
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Drawing 3
 Dimensioning 2
 Tolerance frame (2.5 marks each) 10

15

2



Front view 3
 End view 2
 Dimensioning 2
 Datum indication 2
 Tolerance frame (2marks each) 6