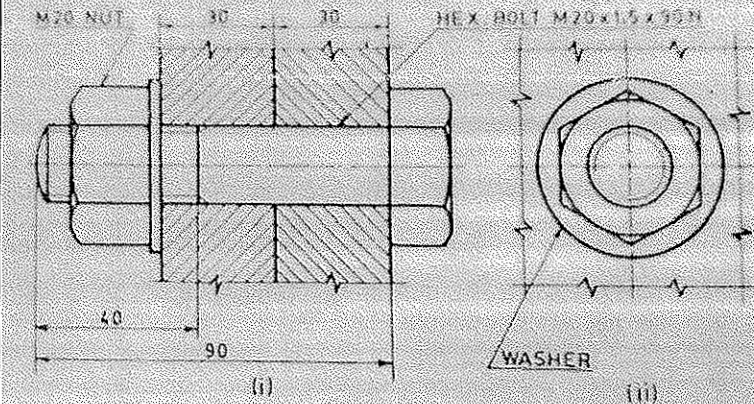
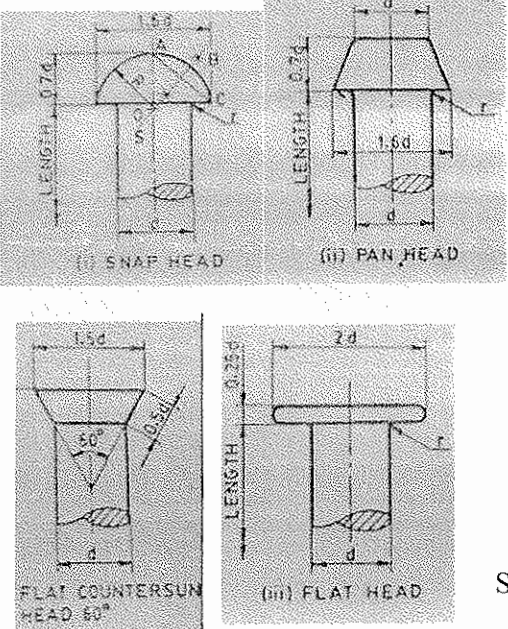


### Scoring Indicators

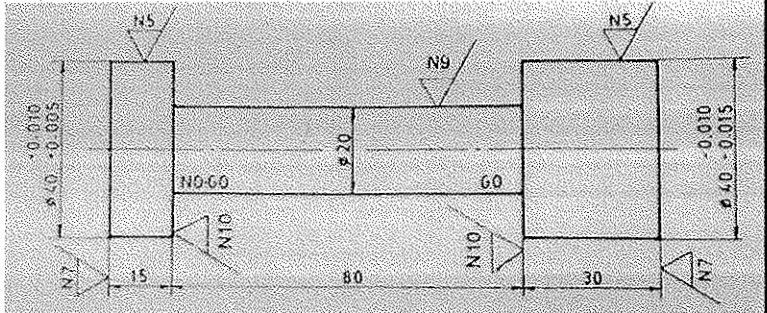
COURSE NAME : MACHINE DRAWING

COURSE CODE : 3025

QID: 2110220181

Q No	Scoring Indicators	Split score	Sub Total	Total score
	<b>Module-1</b>			<b>15</b>
1	 <p>(i) Sectional front view (ii) Side view Dimensioning</p>	7 5 3	15	
2	 <p>(i) SNAP HEAD (ii) PAN HEAD (iii) FLAT COUNTERSUNK HEAD 60° (iv) FLAT HEAD</p> <p>Snaphead Pan head Flat countersunk head Flat head Dimensioning</p>	3 3 3 3 3	15	

Module-2				
1	<p><b>LIMITS</b></p> <p>Minimum limit of the hole = <math>\varnothing 30</math> mm</p> <p>Maximum limit of the hole = <math>\varnothing 30 + 0.021 = \varnothing 30.021</math> mm</p> <p>Minimum interference = Max.limit of hole - Min.limit of the shaft</p> <p><math>-0.001 = 30.021 - (\text{minimum limit of shaft})</math></p> <p>Min.limit of shaft = <math>30.021 + 0.001 = 30.022</math> mm</p> <p>Max.limit of shaft = <math>\varnothing 30.022 + \text{tolerance} = \varnothing 30.035</math> mm</p> <p><b>Check</b></p> <p>Total tolerance = <math>0.021 + 0.013 = 0.034</math> mm</p> <p>Maximum interference = (Min.limit of the hole - Maximum Limit of shaft)</p> <p><math>= 30 - 30.035 = -0.035</math> mm</p> <p>Difference in interference = (Max.interference - Minimum Interference)</p> <p><math>= -0.035 - (-0.001)</math></p> <p><math>= -0.034</math> mm</p> <p>Total tolerance = Difference in interference (numerically)</p> <p><b>Representation</b></p>	1	1	
		2	2	
		1	1	
		1	1	
		2	2	
		4	15	

2	 <p>Identification of grades (1 mark each )</p> <p>Drawing</p> <p>Dimensioning</p> <p>Alignment of indications</p>	7	3	2	3	15
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### Module- 3

30

The image shows a technical drawing of a stuffing box assembly. The top view is a cross-section showing the internal components: a central piston rod (6) passing through a gland bush (2), a gland (5), and a body (1). The assembly is secured by two studs (3) and nuts (4). Dimensions include a total width of 140, a central hole diameter of Ø50, and a gland bush diameter of Ø46. The bottom view is a top-down view showing the outer flange with a radius of R25 and a central hole of Ø50. The assembly is labeled 'STUFFING BOX'.

ITEM LIST

Item	Description	Qty	Material
1	Body	1	C. I.
2	Gland bush	1	Brass
3	Stud	2	M. S.
4	Nut	2	M. S.
5	Gland	1	C. I.
6	Piston rod	1	Steel

Front view

Top view

Item list

Dimensioning

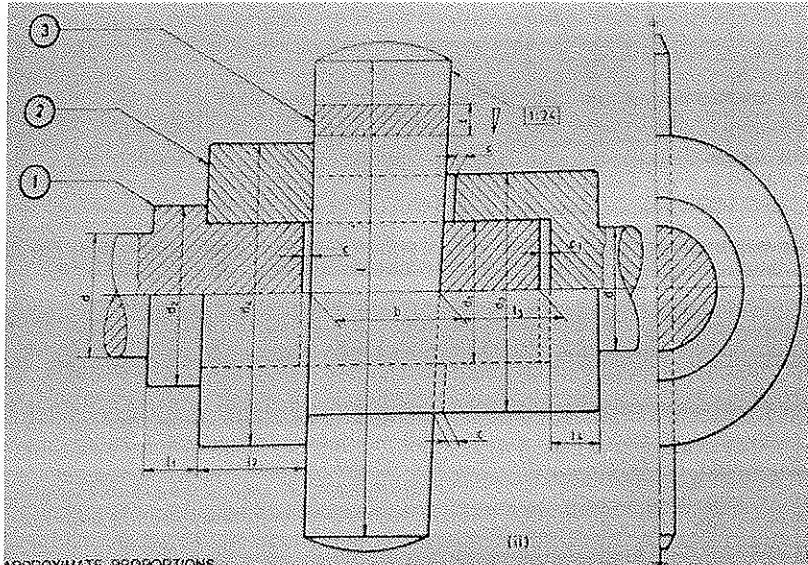
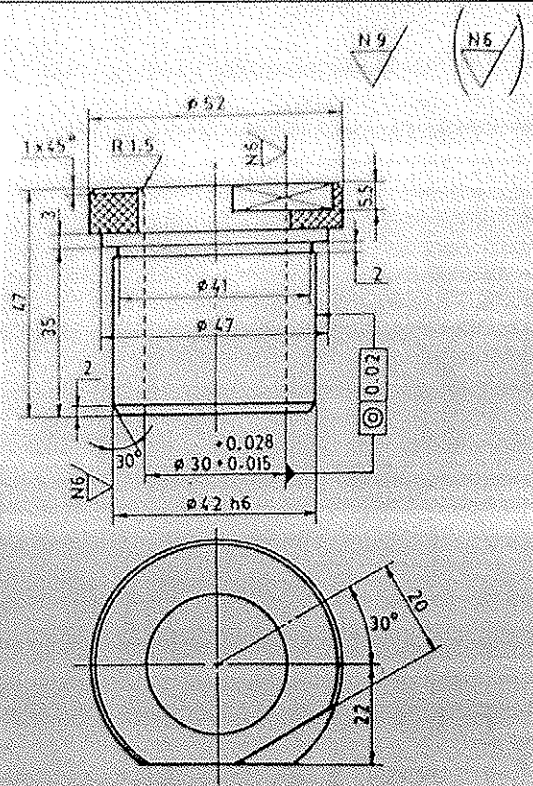
15


7

5

3

30

2	<div><p>APPROXIMATE PROPORTIONS</p><table><tr><th colspan="4">ITEM LIST</th></tr><tr><th>Item</th><th>Description</th><th>Qty</th><th>Material</th></tr><tr><td>1</td><td>Spigot</td><td>1</td><td>M.S.</td></tr><tr><td>2</td><td>Socket</td><td>1</td><td>M.S.</td></tr><tr><td>3</td><td>Cotter</td><td>1</td><td>M.S.</td></tr></table><p>Front view Side view Item list Dimensioning</p></div>	ITEM LIST				Item	Description	Qty	Material	1	Spigot	1	M.S.	2	Socket	1	M.S.	3	Cotter	1	M.S.	15 7 5 3	30	
ITEM LIST																								
Item	Description	Qty	Material																					
1	Spigot	1	M.S.																					
2	Socket	1	M.S.																					
3	Cotter	1	M.S.																					
Module -4				15																				
1	<div><p>APPROXIMATE PROPORTIONS</p><p>Drawing Dimensioning Tolerance frame &amp; Grade indication Surface roughness indication</p></div>	3 2 5 5	15																					

2	<p>A 4 x0.3</p> <p>A represents TYPE A relief grove</p> <p>4 represents the width of the relief groove</p> <p>0.3 represents the depth of the relief groove</p> <p>Dimensional tolerances</p> <p>Ø55 k6 means <math>\text{Ø}55^{+0.021}_{+0.002}\text{mm}</math></p> <p>Ø75h6 means <math>\text{Ø}75^{0}_{-0.019}\text{mm}</math></p> <p>Ø65 n6 means <math>\text{Ø}65^{+0.039}_{+0.020}\text{mm}</math></p> <p>Ø20p7 means <math>\text{Ø}20^{-0.014}_{-0.035}\text{mm}</math></p> <p>Geometrical tolerance</p> <p>a.Tolerance frame containing // represents parallelism.</p> <p>Tolerance surface contained in a cylindrical zone of Ø.03mm</p> <p>Parallel to the datum line</p> <p>b. Tolerance frame containing  represents co axiality</p> <p>axis of the cylinder to which the tolerance feature is connected</p> <p>shall be contained in a cylindrical zone Ø0.03 co axial with the datum axis</p> <p>c. Tolerance frame containing <math>\perp</math> represents perpendicularity</p> <p>Indicated end faces shall be contained in two parallel plnes at a</p> <p>Distance of 0.03mm apartand perpendicular to the axis of</p> <p>Cylinder to which the datum triangle is connected</p>	2	1	1
		2		
		2		
		2		
		2		
		1		
			15	
		1		

Decision taken by the JCIE Office on 01.01.2025 based on the complaints received from the students of various Polytechnic Colleges in connection with the Question papers of Diploma Examination November 2024 and recommendations of expert committee.

**1. Subject Code :-3025**

R (21)	3025 Machine Drawing	An ambiguity occurred in Part A Questions, ie answer any one of the questions instead of any two	15 marks each
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Decision:-

- \* If the students have attended two questions , I(1) or I(2) and I(3) or I(4) from Part A, then value the two answers.
- \* If the students have attended only one question from Part A,
  - (a) The marks secured will be considered as out of 60
  - (b) The Percentage of marks secured out of 60 shall be calculated and the same percentage of marks out of 15 shall also be added to the marks secured to arrive at the actual marks admissible out of 75.

**2. Subject Code :-3341**

R(21)	3341 Discrete Mathematics	Part A -6,7,8,9 Part B-6,7,8,10 Part C- IX,X,XI,XII	1 Mark each 3 Marks each 7 Marks each
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Decision:-

- \* Questions 6,7,8 & 9 of Part A , 6,7,8 & 10 of Part B and IX,X,XI and XII of Part C are cancelled.
- Value the remaining questions.
- \* Part B -Consider the marks of 4 highest scored questions out of remaining 6 questions.



- \* The marks secured will be considered as out of 45
- \* The percentage of marks secured out of 45 shall be calculated and the same percentage of marks out of 30 shall also be added to the marks secured to arrive at the actual marks admissible out of 75.

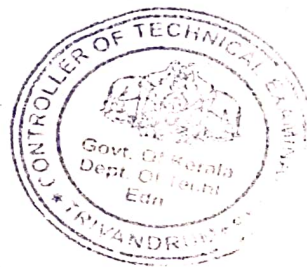
**3. Subject Code :-3043**

R(21)	3043 Electronic Circuits	Part B -3,9	3 Marks each
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Decision:-

**Part B**

- \* Question No: 3 and 9 are cancelled
- \* Consider the marks of 6 highest scored questions out of remaining 8 questions
- \* Marks secured will be considered as out of 69
- \* The percentage of marks secured out of 69 shall be calculated and the same percentage of marks out of 6 shall also be added to the marks secured to arrive at the actual marks admissible out of 75.



V.V Ray  
Joint Controller

Joint Controller of  
Technical Examinations