

Hall Ticket Number:

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Code No. : 42422B

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (Mech. Engg.) IV Year II-Semester Main Examinations, May-2019

Production Drawing

Time: 3 hours

Max. Marks: 70

*Note: i) Answer ALL questions in Part-A and Part-B
 ii) Tolerance table may be permitted
 iii) Assume any missing dimensions suitably*

Q. No	Stem of the Question	M	L	CO	PO
Part-A (10 × 2 = 20 Marks)					
1.	What are standard sizes of drawing sheets?	2	1	1	2
2.	What is the method of providing information about materials on a drawing sheet?	2	2	1	2
3.	Give few welding symbols.	2	1	1	2
4.	Why are tolerances required for the machining processes?	2	1	2	3
5.	How are the values of roughness indicated on a drawing?	2	1	2	3
6.	In an assembly of two parts of 50 mm nominal diameter the lower deviation of the hole is zero and upper deviation is 5 microns. While that of the shaft is – 8 and – 4 microns respectively. Estimate the allowance and type of fit.	2	2	2	3
7.	Explain the applications of stuffing box.	2	1	3	3
8.	What types of forces are experienced by hooks joint?	2	2	3	3
9.	What materials are used for IC engine connecting rod?	2	1	3	3
10.	Why surface treatment is required?	2	1	3	3
Part-B (50 Marks)					
11. a)	From the screw jack shown in figure1 Give the fits for the following (alpha numeric value and resulting tolerances)	15	4	4	3
	i) Nut (2) and screw (3)				
	ii) Tommy bar (7) and screw (3)				
	iii) Body (1) Nut (2)				
b)	Draw the following the component drawings and give necessary dimensional and geometric tolerances, surface roughness values and surface treatments	20	4	4	3
	i) Body (1)				
	ii) Cup (4)				
	iii) Screw (3)				
	iv) Tommy bar (7)				
c)	Give the process sheet for the component: Screw (3), indicate work tool orientation drawing.	15	3	4	3

Refer Overleaf for Figure

Contd... 2

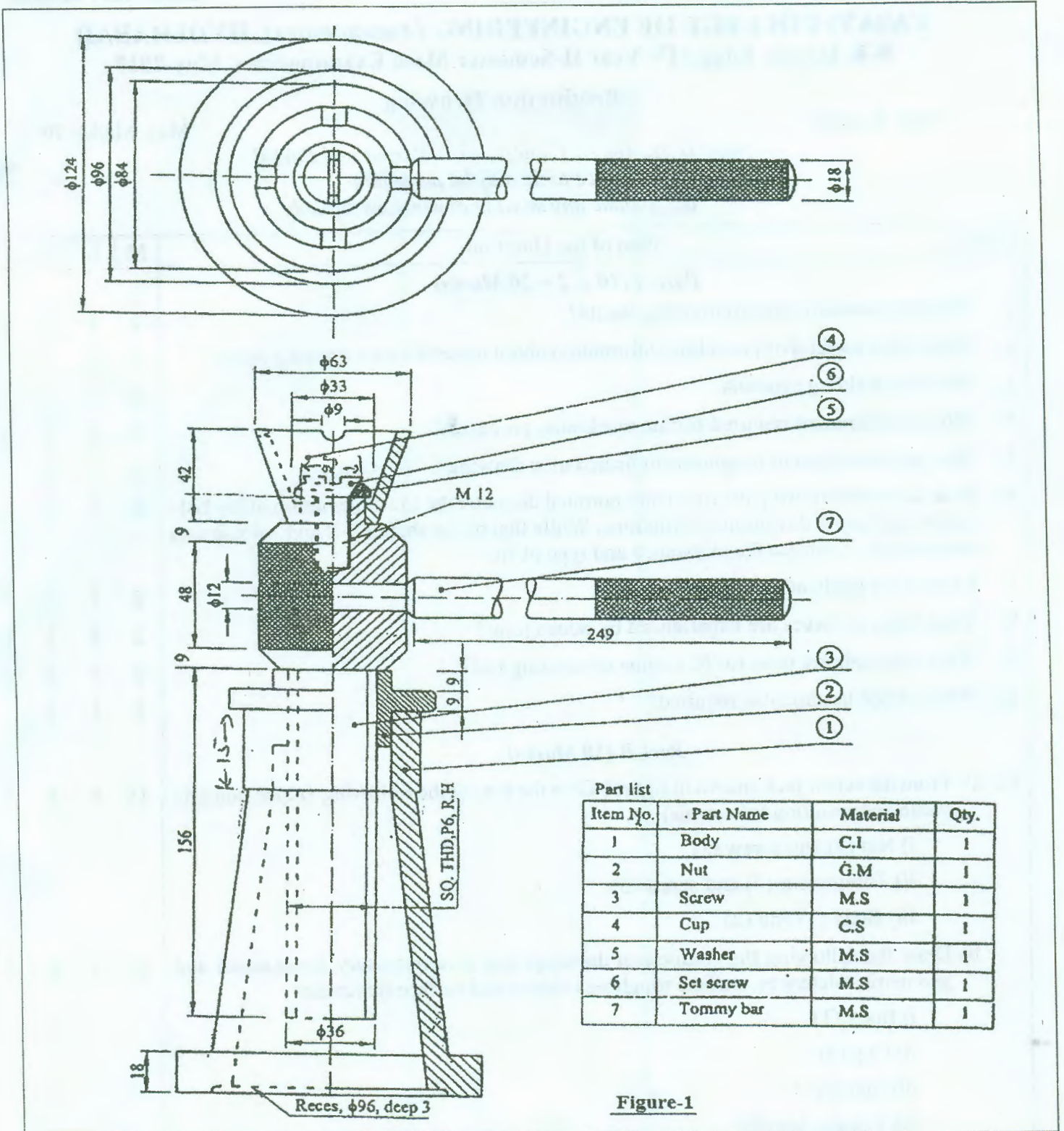


Figure-1

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	28%
2	Knowledge on application and analysis (Level-3 & 4)	72%
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	--