

**M-406 PRODUCTION DRAWING
BLUE PRINT OF QUESTION PAPER**

S. No	Chapter/Unit Title	Periods Allocated	Weightage Allocated	Marks Wise Distribution of Weightage				Question Wise Distribution of Weightage				CO's Mapped
				R	U	Ap	An	R	U	Ap	An	
1	Introduction to Production Drawing	06	-									CO1
2	Limits, Fits & Tolerances and Surface finish	18	10			10				02		CO2, CO3
3	Specification of materials and standard components	06	05			05				01		CO3
4	Preparation of Process sheet	12	05			05				01		CO4
5	Detailed and Part Drawings	48	40			40				02		CO1 to CO5
Total		90	12			60				06		

R-Remember; U-Understanding; Ap-Application ; An- Analysing

MODEL PAPER
D.M.E. – IV SEMESTER END EXAMINATION
PRODUCTION DRAWING (M-406)

Time : 3 Hours

Total Marks: 80

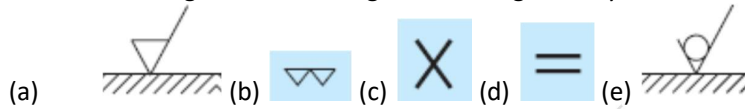
- Note:
1. Drawing should be neat and proportionate
 2. Use first angle projection
 1. Use Standard data
 2. Assume missing data suitably if any

PART – A

Answer all the questions

4 X 5 = 20

- 1) Determine the limit dimensions for a clearance fit between the mating parts having nominal diameter of 40mm, providing a minimum clearance of 0.1mm, with the tolerance of the hole as 0.025mm and that of the shaft 0.05mm. Follow hole basis system
- 2) Draw the symbols for the following geometrical tolerance characteristics.
(a) Flatness (b) Cylindricity (c) Position (d) Angularity
(e) Symmetry
- 3) Write the meaning of the following surface roughness symbols.



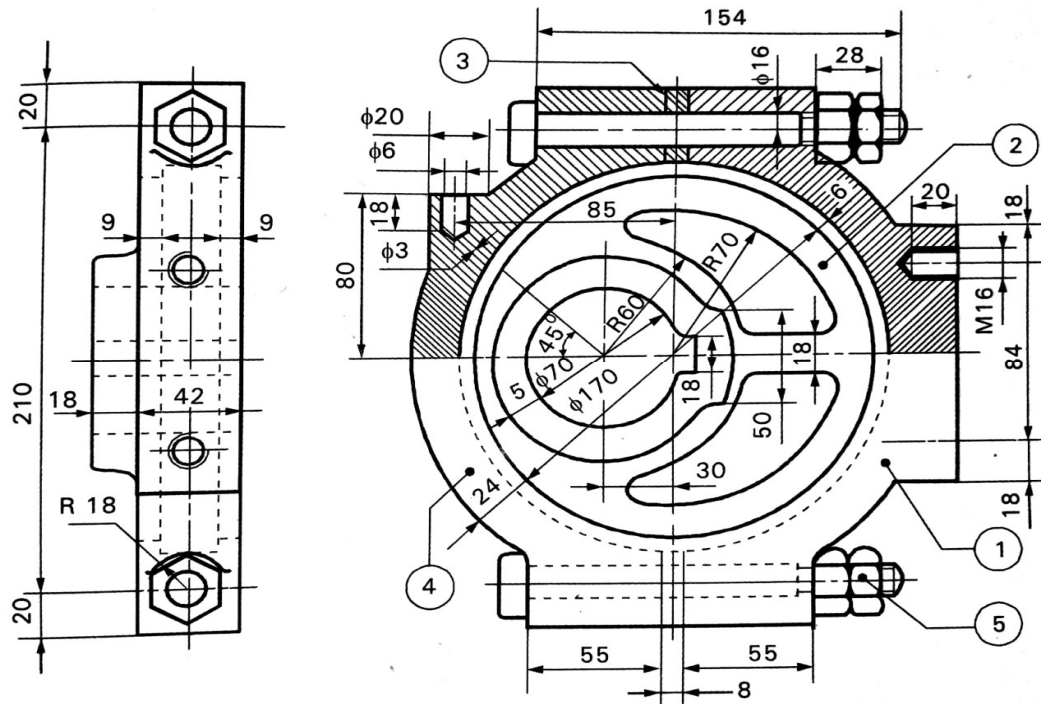
- 4) Draw the conventions for the following standard machine components.
(a) Straight knurling (b) bearings (c) Semi elliptic leaf spring
(d) Worm (e) Spur Gear

Part B

Answer any one question

1 X 40 = 40

- 5 A) Study the given assembly drawing of Eccentric and
(i) Draw the part drawings.
(ii) Mention suitable fits and tolerances wherever required.
(iii) Apply suitable geometrical tolerances.
(iv) Indicate surface roughness values/symbols to the components.
(v) Prepare process sheet for the manufacturing of "Straps".
(vi) Prepare bill of materials.



Parts List

Sl.No	Name	Material	Qty
1	Strap	CI	1
2	Sheave	CI	1
3	Shim	Brass	2
4	Strap	CI	1
5	Bolts with Nuts	MS	2

(OR)

- B) Study the given assembly drawing of Universal coupling and
- Draw the part drawings.
 - Mention suitable fits and tolerances wherever required.
 - Apply suitable geometrical tolerances.
 - Indicate surface roughness values/symbols to the components.
 - Prepare process sheet for the manufacturing of "Centre block".
 - Prepare bill of materials.

- The Internal Assessment can be conducted in the form of Assignments in all the 8 Units. One or Two assignments (oral / written) can be conducted in each Unit, awarding 10 marks for each assignment and the total marks can be averaged to 40 marks as suggested below.
- These assignments should focus mostly on LISTENING and SPEAKING skills rather than writing. The questions for assignments can be customized according to the topic.
- Listening skills can be tested by playing different Audio/ Video clips (appropriate in content and language, preferably without subtitles). Follow pre-while-post stages of listening activity and students should answer general, specific, inferential, vocabulary questions etc.
- Self -Introduction, JAM, Interview Skills, making presentation on a place/a thing/ a person/ an event / a picture etc.. are some of the topics for individual speaking skills.
- GD should be made as group activity and the teacher assesses various skills of the students as given in the workbook.
- The performance of the students in various Internal assessment activities should be documented as guided in the following Assessment sheet (one for each student) to award Internal marks.

Calculating Internal marks through Assignments :				
Name of the Student:		PIN:	Branch:	Academic Year:
S. No.	Title of the Unit	Assignment 1: 10 Marks	Assignment 2: 10 Marks	Total Marks in each Unit (Average for 10 Marks)
1	Listening Skills			
2	Workplace etiquette			
3	Introducing Oneself			
4	Short Presentations (JAM)			
5	Group Discussion			
6	Resume & Cover Letter			
7	Interview Skills			
8	Presentation Skills			
	Marks Scored			Ex: 65
	Total No. of Units			8
	Internal Assessment : Average for 40 Marks	$(65/8) \times 4 = 32.5$		33 (for 40 Marks)