UNIVERSITY COLLEGE TATI

UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET	
COURSE CODE	: BME 2134
COURSE	: MANUFACTURING PRACTICE
SEMESTER/SESSION	: 1-2022/2023
DURATION	: 12 HOURS 2 HRS THEORIES 10 HRS PRACTICAL

Instructions:

1. To obtain maximum marks, follow the dimension as per drawing.
2. Write legibly and draw sketches wherever required.
3. If in doubt, raise your hands and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

THIS BOOKLET CONTAINS 9 PRINTED PAGES INCLUDING COVER PAGE

QUESTION 1
Work Schedule

a) According to item 2 (Milling), item 3 and item 4 (Turning), and item 5 (Benchwork), **illustrate** the work procedures.
b) Duration: 2 Hours

(10 Marks)

QUESTION 2
Milling Section

c) Study the drawing carefully and **construct** the given work piece as per dimensions
d) Use suitable tools. Study the drawing carefully and **construct** the given work piece as per dimensions.
e) Duration for this section is 4 hrs (30 Marks)

QUESTION 3
Turning Section

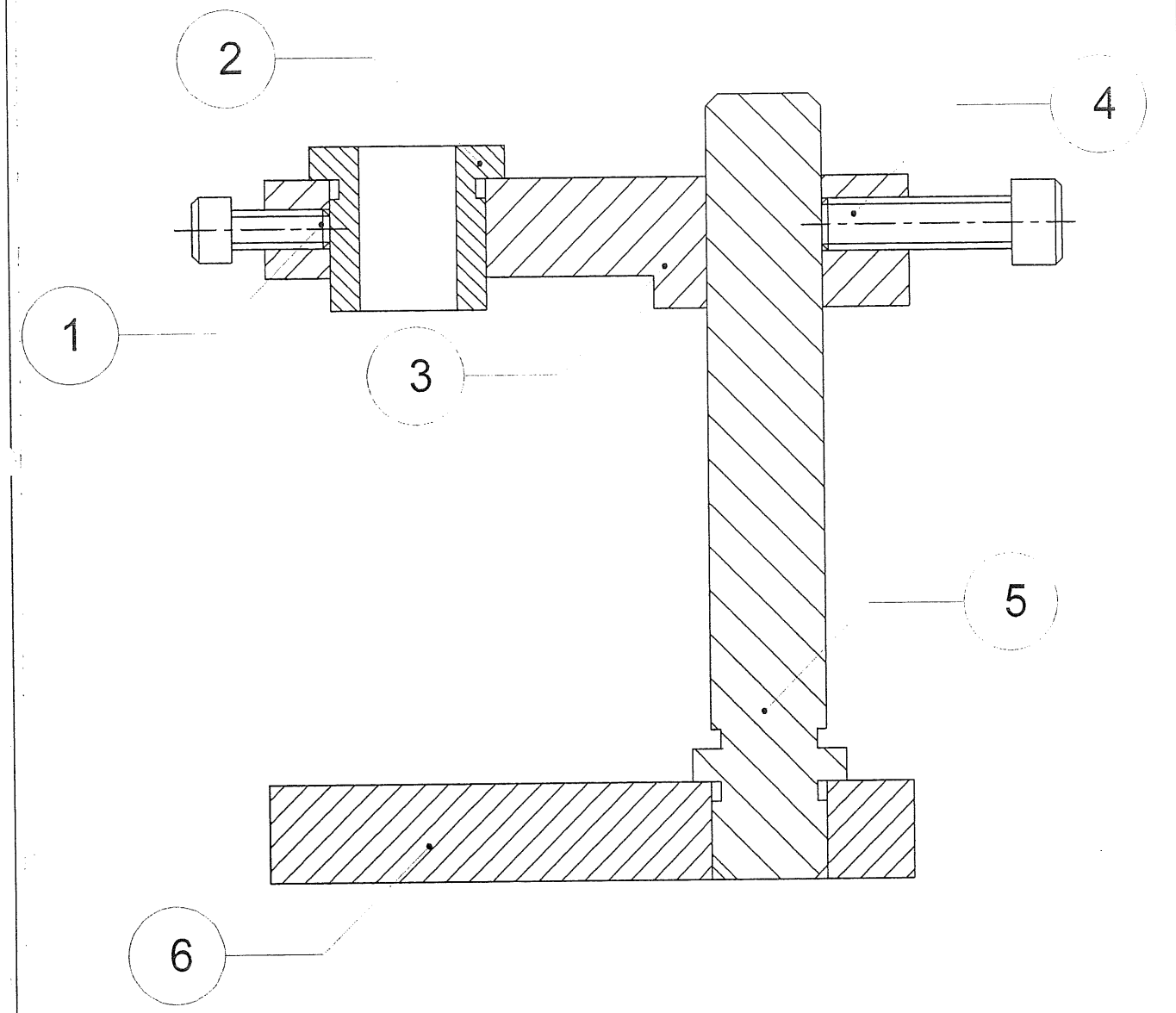
a) Study the drawing carefully and **construct** the given work piece as per dimensions.
b) **Use** suitable tools.
c) Duration for this section is 3 hrs. (30 Marks)

QUESTION 4
Bench work Section

a) Study the drawing carefully and **construct** the given work piece as per dimensions.
b) **Use** suitable tools
c) Duration for this section is 3 hrs. (30 Marks)

----------End of question----------

Criteria	Marks
All questions will be marked according to the answer scheme.	/100



QTY	DESCRIPTION	ITEM	MATERIAL	DIMENSION	REMARKS
6	BASE PLATE	1	MILD STEEL	100X45X15	
5	GUIDE PILLAR	1	MILD STEEL	ø24X120	
4	CAP SCREW	1	STD	CB8-30	
3	UPPER ARM	1	MILD STEEL	45X45X20	
2	DRILL BUSH.	1	MILD STEEL	ø30X25	
1	CAP CREW	1	STD	CB6-15	

FINAL EXAM
DRILL JIG ASSEMBLY
BME 2134 SEMESTER 1, SESSION 2022/2023, Sep 22, Intake April

DGN	CMohd
DRN	FAIZAL
CHD	KAMROL
APPD	KAMROL

Hard.HRc | Dp. | Figure 1

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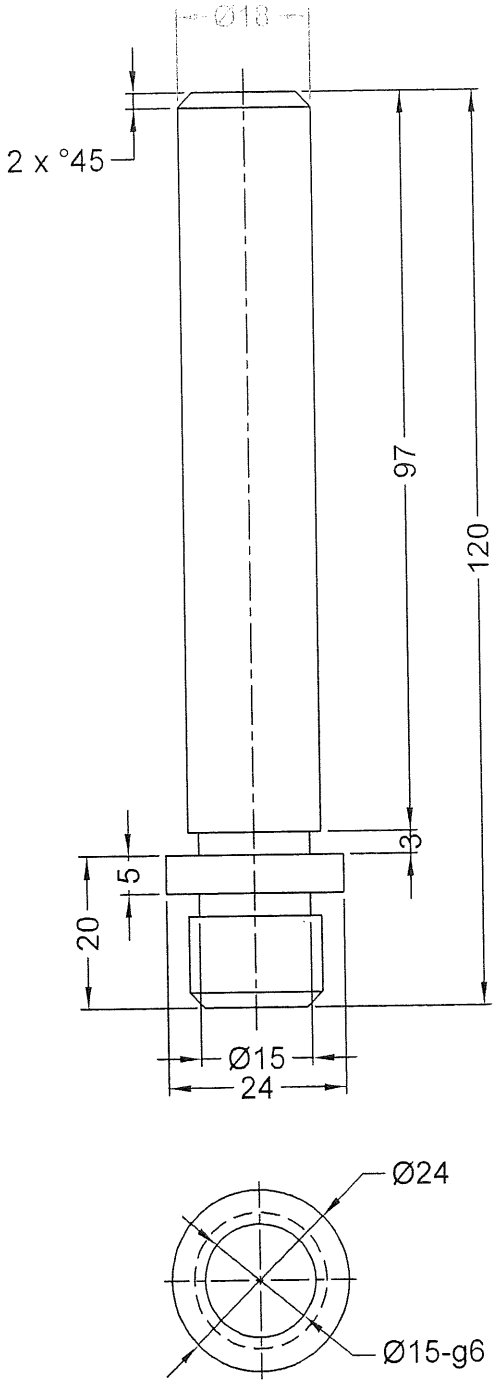
Title: DRILL JIG ASSEMBLY | A4



REMOVE ALL SHARP EDGES
ALL DIMENSION IN MILIMETER

Gen.tol : ±0.1

QTY	DESCRIPTION	ITEM	MATERIAL	DIMENSION	REMARKS
1	GUIDE PILLAR.	1	MILD STEEL	ø24x120	

FINAL EXAM
GUIDE PILLAR-DRILL JIG
BME 2134 SEMESTER 1, SESSION 2022/2023, Sep 22, Intake April

DGN	CMohd	
DRN	FAIZAL	
CHD	KAMROL	
APPD	KAMROL	

Hard.HRc | Dp. | Figure 3

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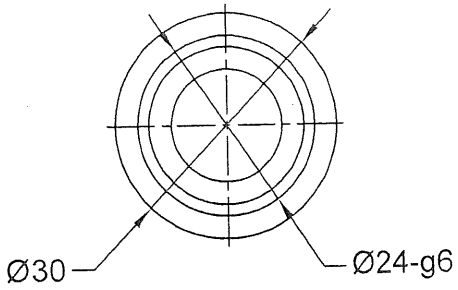
Title TURNING-GUIDE PILLAR | A4



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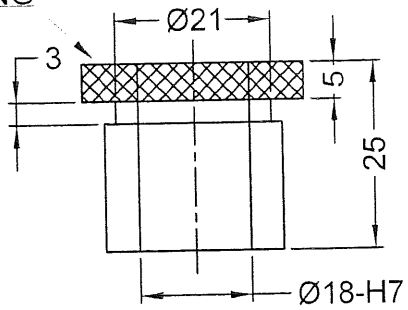

REMOVE ALL SHARP EDGES
ALL DIMENSION IN MILIMETER

Gen.tol : ±0.1

1	DRILL BUSH	1	MILD STEEL	Ø30X25	
QTY	DESCRIPTION	ITEM		DIMENSION	REMARKS

FINAL EXAM
DRILL BUSH-DRILL JIG
BME 2134 SEMESTER 1, SESSION 2022-2023, Sep 22,Intake April

DGN	CMohd
DRN	FAIZAL
CHD	KAMROL
APPD	KAMROL

Hard.HRc | Dp. | Figure 4

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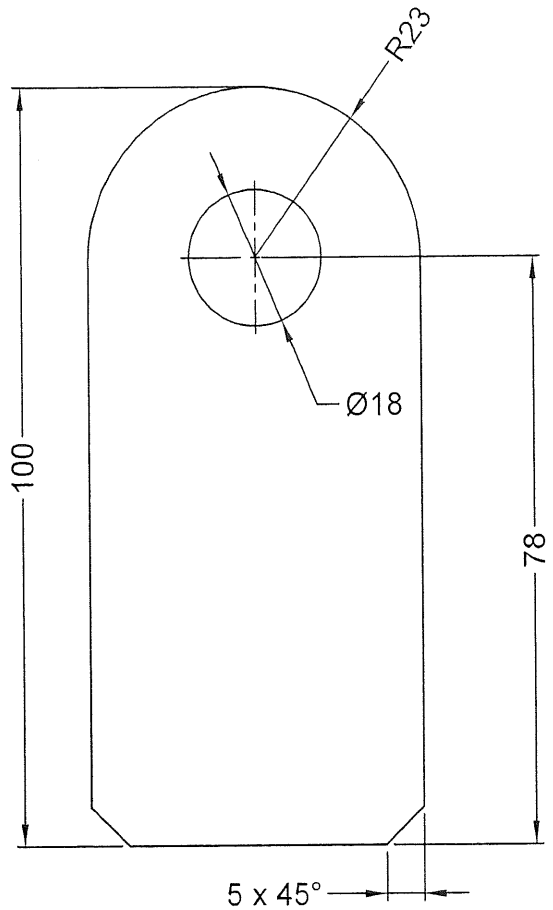
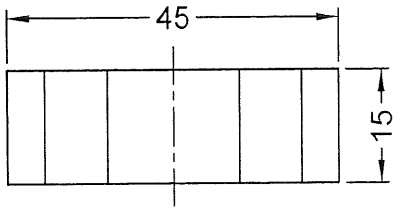
Title: TURNING-DRILL BUSH | A4





REMOVE ALL SHARP EDGES
ALL DIMENSION IN MILIMETER

Gen.tol : ±0.1

QTY	DESCRIPTION	ITEM	MATERIAL	DIMENSION	REMARKS
1	BASE PLATE	6	MILD STEEL	100X45X15	

FINAL EXAM
BOTTOM PLATE-DRILL JIG
BME 2134 SEMESTER 1, SESSION 2022/2023, Sep 22, Intake April

DGN	CMohd	
DRN	FAIZAL	
CHD	KHAIR	
APPD	KAMROL	

Hard.HRc | Dp. | Figure 5

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Title BENCHWORK-BASE PLATE | A4

PO1: Apply knowledge of sciences, mathematics and engineering fundamentals.(Knowledge and Understanding)

Criteria	Level					Mark
	Very poor (1)	**Poor (2)**	**Average (3)**	**Good (4)**	**Excellent (5)**	
Recognition	Unable to identify/ recognise concept		Able to partially identify / recognise concept		Able to identify / recognise concept	
Understanding	Unable to explain/express in own words		Able to explain/express in own words with misconception		Able to explain/express in own words	
Analytical Thinking	Unable to justify procedure/process/argument in mathematics and science.		Able to partially justify procedure/process/argument in mathematics and sciences		Able to justify procedure / process / argument in mathematics and sciences	
					Total	/15
					Grand Total	/10

* Average out the mark accordance to weekly workshop diary performance.

Excellent : 10 and 9

Good : 8 and 7

Fair : 6 and 5

Marginal : 4 and 3

Poor : 2 and 1

PLO 3: Perform a range of essential methods and procedures in Engineering Technology field. (Practical Skills) - Psychomotor

Criteria	Level					Mark
	Very poor (1)	Poor (2)	Average (3)	Good (4)	Excellent (5)	
Data Collection and Measurement	No systematic plan of data gathering; work data collection is disorganised, even random or incomplete		Develops a simplistic work plan of data gathering, applies appropriate theory of data when prompted to do so but misinterprets physical significance of theory or variable involved; make errors in unit conversions		Formulates work plan of data gathering to attain a stated objective. Analyzes and interprets data carefully using appropriate theory, if required, translates theory into practice or applies to process model (s)	
Tool Selection	Cannot select the appropriate equipment and instrumentation required to run the work (s)		Needs some guidance in selecting appropriate equipment and instrumentation		Can select appropriate equipment and instruments to perform the work independently	
Tool Operation	Unable to operate instrumentation and process, or requires frequent supervision		Able to operate instrumentation and process equipment or requires moderate supervision		Able to operate instrumentation and process equipment requires minimum supervision	
Method of speed	Land up in confusion. Never bother about the work habits. Very slow in work. Performance is seldom a standard one		Need explanation and does the needful when told tries to complete the given work in time		Comprehension and dealing with machinery is exemplary. Can analyze and work. Very good adaptability and fast in work	
					Total	/20
					Grand Total	/30

* Average out the mark accordance to practical skill performance and project mark sheet for each section. (Bench work, turning and milling)

P11: Act ethically and professionally within the varied social and professional environment and practice.
(Ethics and Professionalism) - Affective

Criteria	Level					Mark
	Very poor (1)	Poor (2)	Average (3)	Good (4)	Excellent (5)	
Professional act	Unable to demonstrate professional act – show every little positive response and technical professionalism		Sometime demonstrate professional act – give adequate positive response and technical professionalism		Constantly demonstrate professional act – always give positive response and technical professionalism	
Ethical behaviour	Unable to show polite/considerate/ethical behaviour. Ignore peers/seniors/lecturer		Ability to show fair polite/considerate/ethical behaviour. Acknowledge the present of other with smile/node/salam		Able to show maximum polite/considerate/ethical behaviour. Addressed others accordingly and very friendly	
Quality of Work	Interior found wanting in many aspects always inaccurate.		Moderated to standard requirement. Work produced is usually accurate and through.		Excellent workmanship, normal requirement of accuracy and thoroughness.	
Responsibility	Indiscipline and obstructive. Understand objectives incorrectly and requires close observation.		Fairly discipline. Co-operates with few selected people. Understand the objective & perform work with reasonable promptness.		Highly discipline and co-operative. Takes initiative with the scope of authority. Also reliable under pressure.	
Tidiness	Lag understanding the concept of cleanliness. Irregular in practice.		Reasonably tidy in work but requires reminder. Needs supervision at times.		Found always tidy in work maintains records neatly and up to date.	
						/25
						/40

* Average out the mark accordance to practical skill performance and project mark sheet for each section. (bench work, turning and milling).