

STUDENT'S NAME		TOTAL MARKS OBTAINED
CLASS	SUBJECT	
ROLL NO.	DATE	

NSQF

I Puc Mid - Term Examination
SUB: AUTOMOTIVE
Scheme of Valuation
2025 - 26

I.
Q01

40

Q02

06

Q03

Ctrl + V

Q04

Metals

Q05

Listening

Q06

Tacho meter

Q07

Speed

Q08

Protractor

Q09

Welding

Q10

Semi permanent

II 11

Manufacturing is the process of turning raw materials into finished products.

12

Machining Operations

*

Turning

*

Drilling

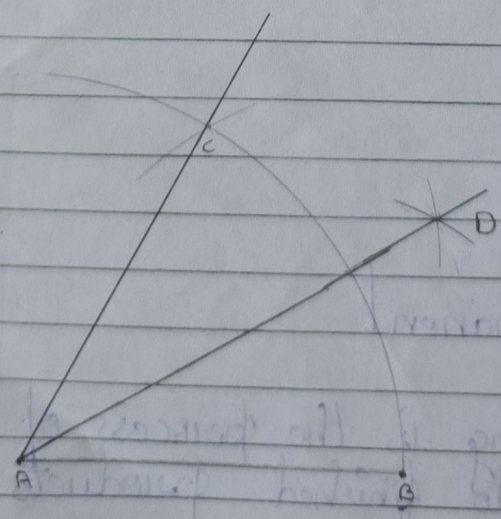
Caliber

- * Milling
- * Shaping
- * Planing
- * Boring
- * Broaching
- * Sawing

- 13f
- passive
 - * Submissive
 - * passive - Aggressive
 - * Aggressive
 - * Assertive

- 14f
- Facial
 - Expression
 - Posture
 - Gestures
 - Body language
 - Touch

- 15f
- 55mm



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16? Dimensions of Drawing Sheets.

Designation	Dimensions in mm
A0	841 x 1189
A1	594 x 841
A2	420 x 594
A3	297 x 420
A4	210 x 297

17? Welding

* Soldering

* Brazing

* Adhesive Bonding.

18? Measuring Instruments

* Linear measurement.

* Direct measuring instruments

* Indirect instruments for transferring measurements.

* Angular measurements

* Plane Surface measurement

19? Temperature gauge

The temperature gauge of a vehicle measures the temperature of the engine's coolant. If a vehicle's temperature gauge is in the hot range, it needs to be moved to a safe place and stopped immediately.

20? Feeler gauges.

These gauges are used for checking the clearance between mating surfaces. To know the clearance or gap, ~~the gap~~ **Caliber**

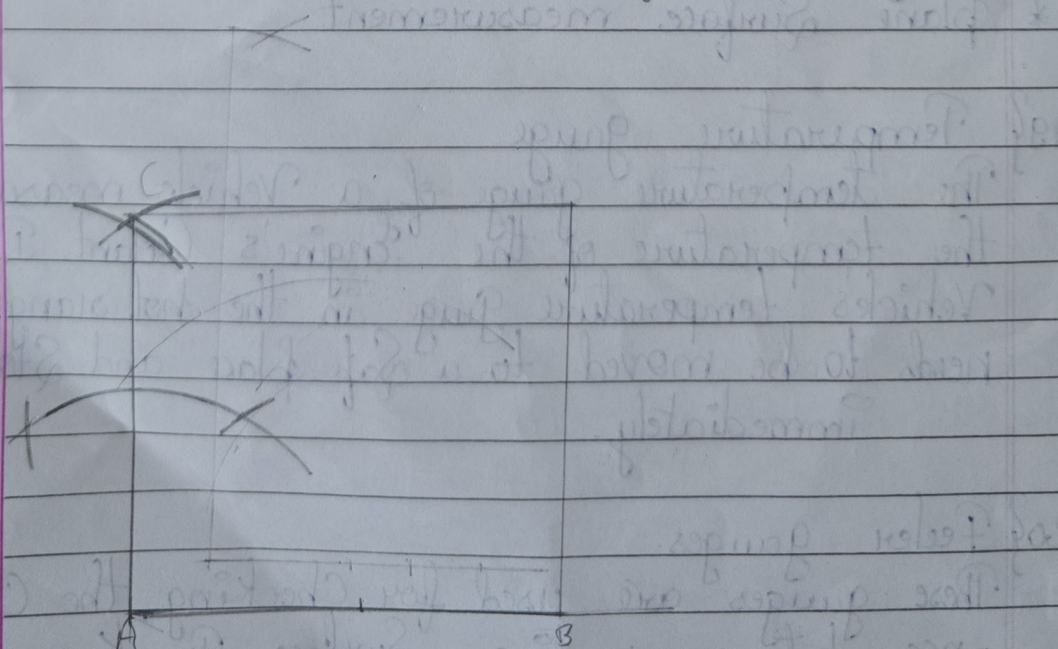
The leaf should not be loose or inserted in the leaf of the feeler gauge is selected and inserted in the gap. The leaf should not be loose or inserted with force.

217 Anti-rust solution is used for dissolving the dust and rust on fasteners. This solution makes the process of removing or changing fasteners easier.

227 A Spring pin is a mechanical fastener that joins two or more parts of a machine relative to each other.

237 A mechanical fastener is a device that is used to mechanically join two or more objects together and the process is called fastening. Bolts, nuts, screws, studs, rivets, pins, tie rods, etc., are some examples.

III 247 Construct the diagram of some up to



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Q5?

Engineering
material

Metals

Non-metals

Ferrous metals

Non-ferrous metals

Synthetic material

Natural material

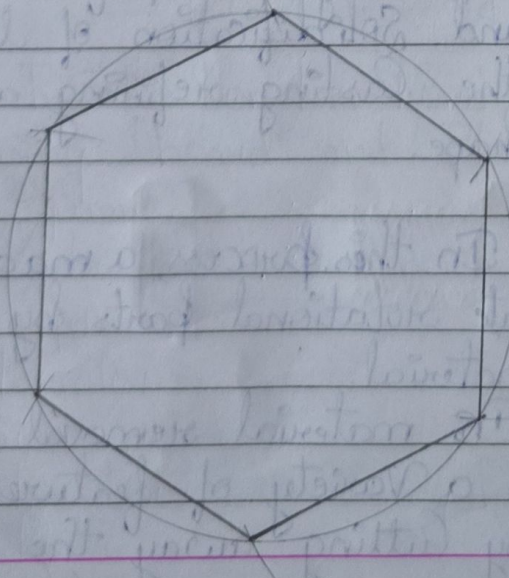
Q6?

Types of bolts.

* Anchor bolt	Heavy hex bolt	* Langes
* Carriage bolt	Hex machine bolt	* Nuttall
* Elevator bolt	Socket Shoulder bolt	* screw
* Eye bolt	Lag bolt	* self
* Flange bolt	Socket Screws	* self
* Frame bolt	Square headed bolt	* self
* Hanger bolt	U-bolt	*

Q7?

Regular Hexagon: A regular hexagon is a polygon with six equal sides and six equal interior angles. It is a common shape in geometry and is often used in engineering and design.



Caliber

289? 6. Types of Rivets.

- | | |
|------------------------------|-------------------|
| * Universal | * Flat head |
| * Cone head | * Tinners' rivet. |
| * Round top Countersunk head | |
| * Button head | |
| * Truss head | |
| * AN456 | |
| * Pan head | |
| * Flat top Countersunk head | |

299? Basic Casting Steps

- * Preparation of pattern and mould
- * Melting and pouring the liquefied metal.
- * Cooling and Solidification of liquid metal.
- * Inspecting the Casting, refining and giving it final shape.

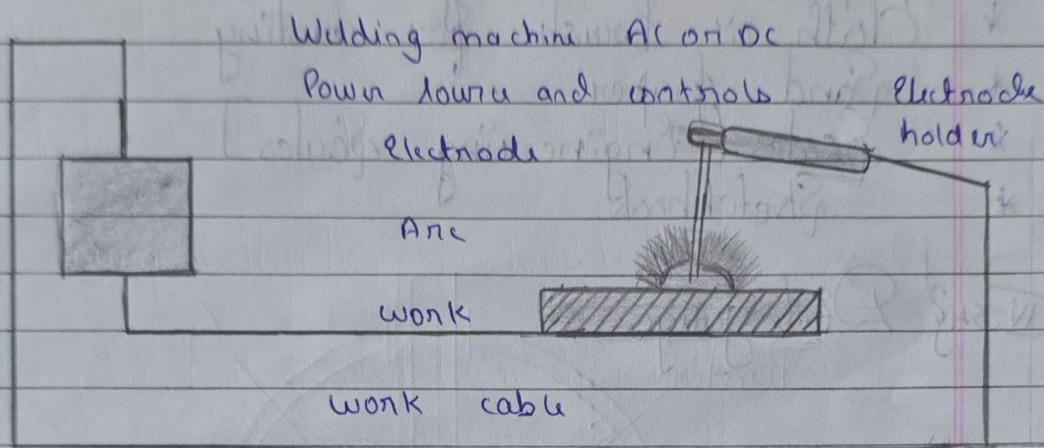
- 309? *
- * Turning. — In this process, a machine tool is used to Create rotational parts by Cutting away unwanted material.
 - * Milling — Is material removal process. In this process a Variety of features are Created on a part by Cutting away the undesired

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material in milling, rotary. Cutters are used to remove material from a work piece.

- * Grinding, is done to get the desired surface finish, correct size and accurate shape of product.

318



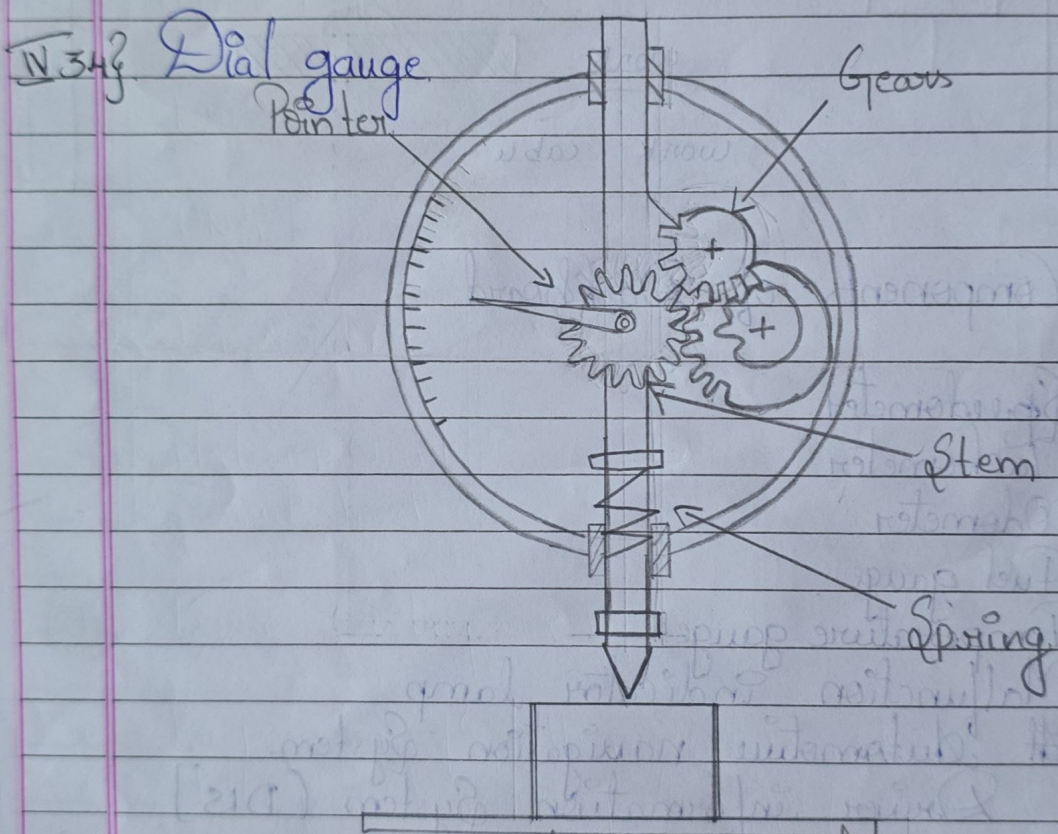
328 Components of Dashboard.

- * Speedometer.
- * Tachometer.
- * Odometer
- * Fuel gauge.
- * Temperature gauge.
- * Malfunction indicator lamp
- * Automotive navigation system.
- * Driver information system (DIS)

338 * Geometrical Constructions

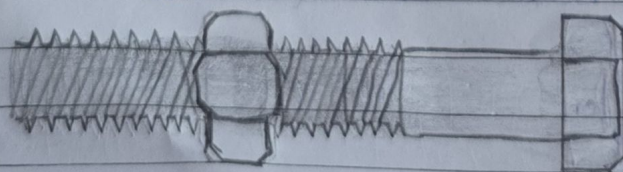
- * Drawing board and stand
- * Tee-square
- * Mini drafter
- * Set square
- * Protractor
- * Instrument box
- * French Curves or irregular curves.
- * Pencil.

- * Eraser and Erasing Shield.
- * Blade, pocket knife, or pencil sharpener.
- * Drawing pins, adhesive tape, or clips.
- * Drawing paper or drawing sheet, tracing paper, and tracing cloth.
- * Cloth or brush for dusting.
- * Sand paper.
- * Scales [Engineering Scales]
- * Sketchbook.



mechanism of dial gauge.

35? Parts of Standard Bolt

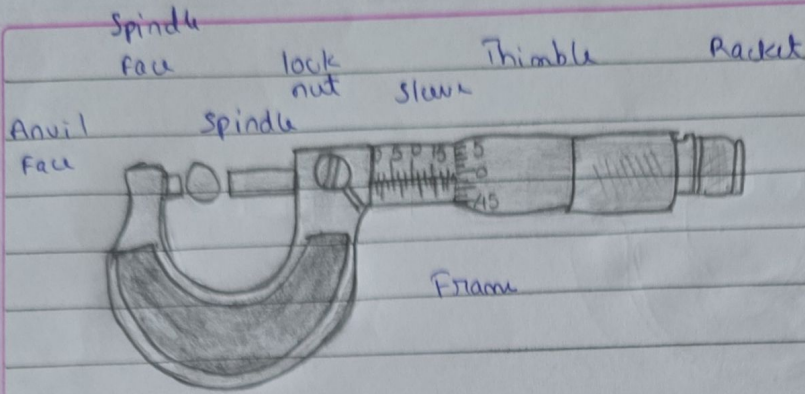


thread length

gripping length

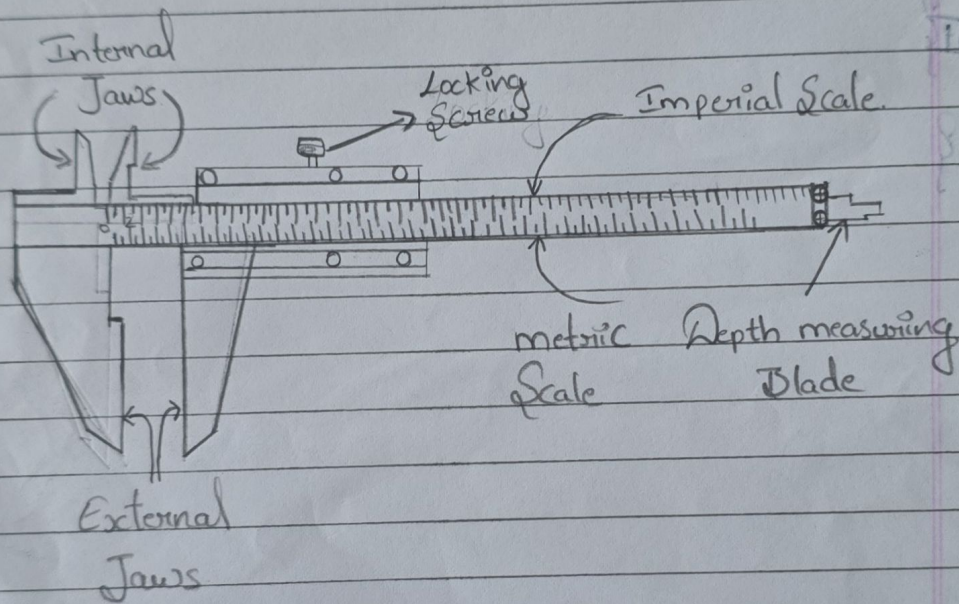
nominal length

36g



Micrometer and its Parts

37g



Vernier Caliper and its parts.