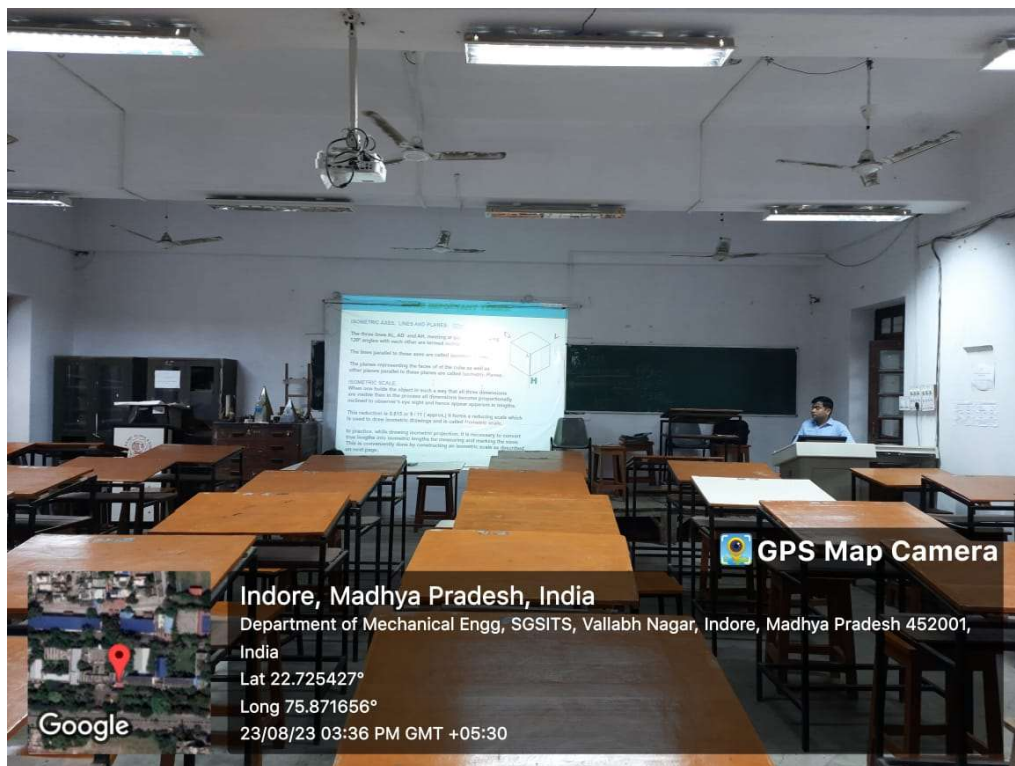


## ICT TOOLS (PODIUM, PROJECTOR FACILITY AT DRAWING HALL)



## ICT TOOLS (SMART BOARD AT CLASSROOM)

The smartboard displays a presentation slide with the following text:

If bodies are assembled in such a way that the motion of one causes constrained and predictable motion it is known as a *mechanism*. A mechanism transmits and modifies a motion. A *machine* is a mechanism or in of mechanisms which, apart from imparting definite motions to the parts, also transmits and modifies mechanical energy into some kind of desired work. Thus, a mechanism is a fundamental unit and one has its study.

of a mechanism involves its analysis. *Analysis* is the study of motions concerning different parts of an existing mechanism whereas *synthesis* involves the design of new parts. In a mechanism, the various parts are proportioned and related that the motion imparts requisite motions to the other parts. The parts are able to withstand the forces imposed upon them. However, the study of the motions of the parts does not depend upon the actual shapes of the parts.

In a reciprocating engine, the displacement of the piston depends upon the lengths of the connecting rod and the crank. It is independent of the bearing strength of the parts or whether they are able to withstand the forces imposed upon them. For the study of motions, it is immaterial if a machine part is made of mild steel, cast iron or wood. Also,

**Fig. 1.1**

Below the slide, a GPS Map Camera overlay shows the location: Indore, Madhya Pradesh, India, with coordinates PVGC+4QH, Builders Colony, Indore, Madhya Pradesh 452001, India. The location is also shown on a Google map. The time is 23/08/23 02:51 PM GMT +05:30.

## ICT TOOLS (GOOGLE CLASSROOM)

The screenshot shows the Google Classroom interface. At the top, there is a navigation bar with the Google Classroom logo and a hamburger menu icon. Below the navigation bar, there are two tabs: "To review" and "Calendar". The main area displays a grid of course cards. Each card has a title, a subtitle, and a small icon. The cards are arranged in three rows and five columns. The first row contains five cards: "ME 33711: Mechatronics", "1st Year Engineering ...", "July Dec 2022 Mecha...", "July-Dec 2022 IV th y...", and "MST I IPE 2nd Year Se...". The second row contains five cards: "MST I IPE 3rd Year Se...", "IPE III IP33511 Jan-Jun...", "BE(IPE) 2nd Year Jan...", "2021 Aug Dec UG CAD", and "CAD/CAM/CAE". The third row contains five cards: "MECHATRONICS CL...", "PRODUCT DESIGN A...", "BE (IPE)", "Mechatronics\_BE\_IPE...", and "ME CAD & Design".

# ME33711\_Mechatronics Quiz

Max. Marks : 10

Time: 10 Min.

*\* Indicates required question*

---

1. Email \*

---

2. Full Name \*

---

3. Enrolment No. \*

---

4. Mobile No. \*

---

## Multiple Choice Question

Choose Correct Options

5.

Which of the following order is correct for design of control system

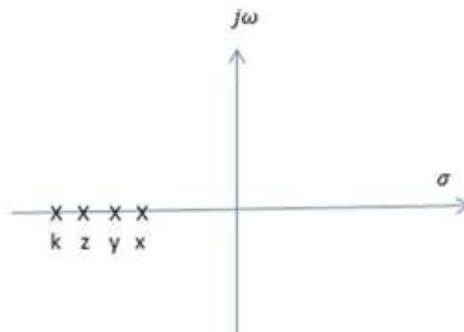
- 1: Draw a functional block diagram
- 2: Physical system specifications as per the requirement
- 3: Draw a schematic diagram
- 4: Develop a mathematical model
- 5: Analyse and Design
- 6: Reduce the block diagram

Mark only one oval.

- 1-4-6-3-5-2
- 1-3-2-4-6-5
- 2-3-1-4-6-5
- 2-1-3-4-6-5

6.

For the pole plot given below, which pole will have the fastest decrease in exponential transient response



Mark only one oval.

- k
- y
- x
- z

7. The elastic type of transducer element in the Bourdon pressure gauge is of

*Mark only one oval.*

- Circular cross-section
- Square cross-section
- Rectangular cross-section
- Elliptical cross-section

8. Repeatability of the instrument with respect to a given fixed input is

*Mark only one oval.*

- Accuracy
- Precision
- Resolution
- Loading error

9. Static characteristic of a sensor cannot be found using calibration.

*Mark only one oval.*

- True
- False

10. What is the open loop gain of an ideal operational amplifier

*Mark only one oval.*

- 0
- 1
- Infinite
- 1

11. Which is the most common load cell used in the force sensors

*Mark only one oval.*

- Hydraulic load cells
- Strain-Gauge based load cells
- Pneumatic load cells
- Capacitive load cells

12. The compressed air flows to the actuator through

*Mark only one oval.*

- pipes and valves
- shafts
- motors
- flow control valve

13. A servo motor is a typical example of

*Mark only one oval.*

- Electronics system
- Mechanical system
- Computer system
- Mechatronics system

14. Which is not a self driving car

*Mark only one oval.*

- Tesla Model S
  - NEXT TWO
  - Renault duster
  - Nissan LEAF
-





# ME33711\_Mechatronics Quiz

23 responses

[Publish analytics](#)



## Full Name

23 responses

Satyarth Guha

Rhushikesh Deshpande

Anugya Chaurasia

Aman Mandloi

Sunil dangi

Pranjal Tomar

Divyansh sharma

Agastya Dixit

Kuldeep singh thakur

Arjun Bhargav

Neeraj Solanky

Divyansh Dubey

Disha Rathi

aditya joshi

Mushfiq Behlim

ADITYA PRATAP SINGH

Jigyasa Nagda

Aditi Joshi

Prem Vaishnav

Sachin Nayak



Vikash Satankar

Sarthak Mehta

Ravi Malviya



**Enrolment No.**

23 responses

0801IP201061

0801IP213D05

0801IP201012

0801IP201007

0801IP201067

0801IP213D03

0801IP201023

0801IP201006

0801IP201036

0801IP201014

0801BM201033

0801IP201022

0801BM201020

0801IP201004

0801BM201031

0801ip201005

0801IP201031

0801IP201003

0801IP201052

0801IP201057



0801IP201071

0801IP201060

0801IP201054



### Mobile No.

23 responses

7974389963

8871726903

9589566188

8827016203

6263695291

8889519689

6263833395

9131759123

7970261380

6268069711

8461975134

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7225097229

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9521169028



6265585201

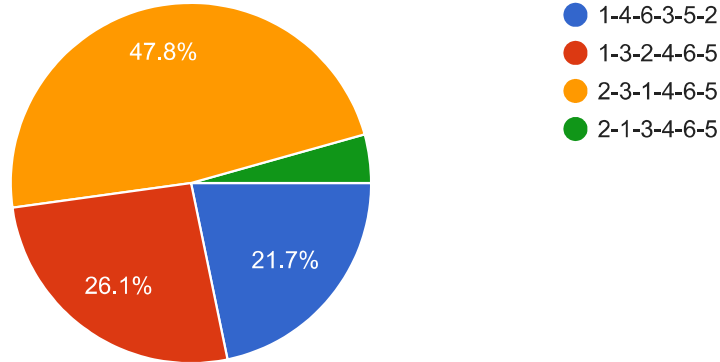
9111811750

7489206104

### Multiple Choice Question

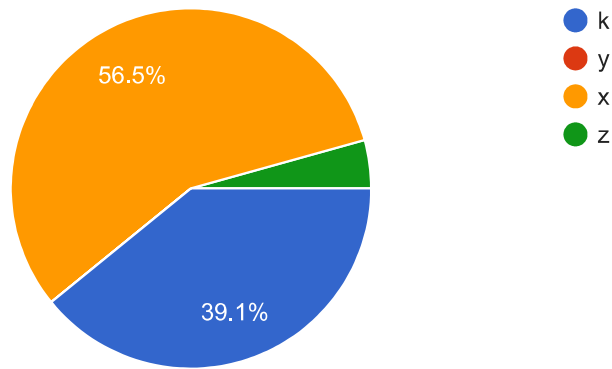
23 responses

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23 responses

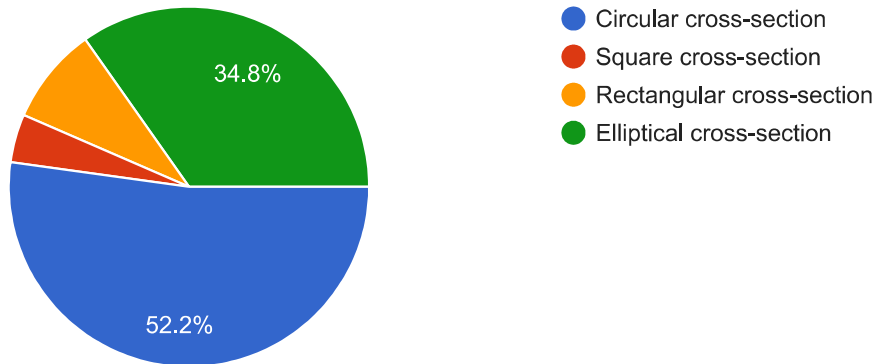
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The elastic type of transducer element in the Bourdon pressure gauge is of

 Copy

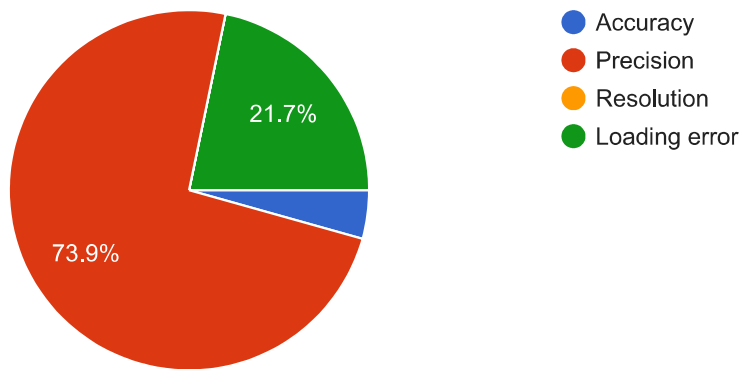
23 responses



Repeatability of the instrument with respect to a given fixed input is

 Copy

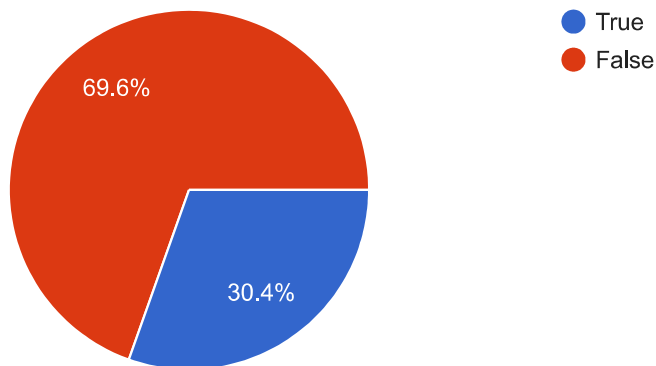
23 responses



Static characteristic of a sensor cannot be found using calibration.

 Copy

23 responses

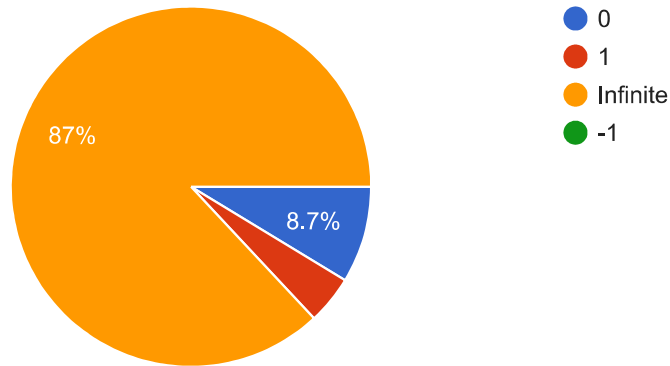




What is the open loop gain of an ideal operational amplifier

Copy

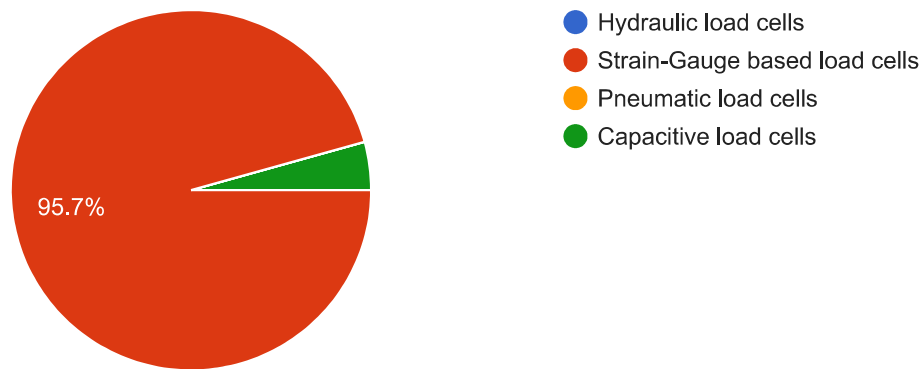
23 responses



Which is the most common load cell used in the force sensors

Copy

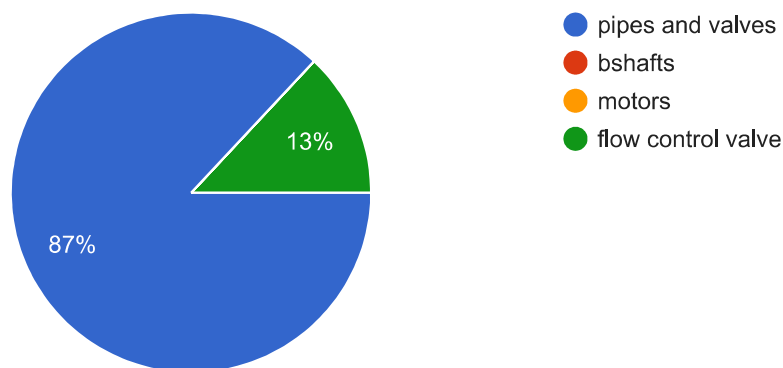
23 responses



The compressed air flows to the actuator through

Copy

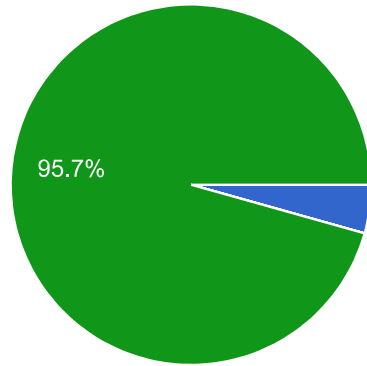
23 responses



A servo motor is a typical example of

 Copy

23 responses

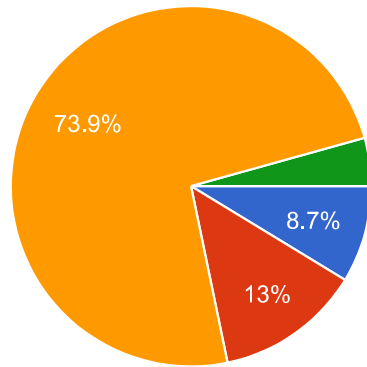


- Electronics system
- Mechanical system
- Computer system
- Mechatronics system

Which is not a self driving car

 Copy

23 responses



- Tesla Model S
- NEXT TWO
- Renault duster
- Nissan LEAF



