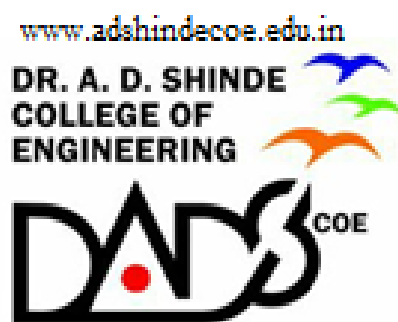


DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 01

Testing of Electronic components

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 01

Aim of the Experiment: Testing of Electronic components- resistors, capacitors, inductor, diode, transistor, LED and switches using multi-meter & C.R.O.

Objective: -

1. Introduction of various electronic components.
2. Measurement and testing of electronic components.

Components Required: Resistor, Inductor, Capacitor, Diode, Zener Diode, Transistor.

Theory:

A) RESISTORS

A resistor is a passive two-terminal electrical component that implements electrical resistance as a circuit element. The current through a resistor is in direct proportion to the voltage across the resistor's terminals. This relationship is represented by Ohm's law. A device used in electrical circuits to maintain a constant relation between current flow and voltage. Resistors are used to step up or lower the voltage at different points in a circuit and to transform a current signal into a voltage signal or vice versa, among other uses. The electrical behavior of a resistor obeys Ohm's law for a constant resistance; however, some resistors are sensitive to heat, light, or other variables.

Resistors are one of the most used components in a circuit. Most are color coded, but some have their value in Ohms and their tolerance printed on them. A multimeter that can check resistance can also be helpful; providing the resistor is already removed from the board (measuring it while still soldered in can give inaccurate results, due to connections with the rest of the circuit). They are typically marked with an "R" on a circuit board.



POTENTIOMETERS

Potentiometers are variable resistors. They normally have their value marked with the maximum value in Ohms. Smaller trim pots may use a 3-digit code where the first 2 digits are significant, and the 3rd is the multiplier (basically the number of 0's after the first 2 digits). For example, code 104 = 10 followed by four 0's = 100000 Ohms = 100K Ohms. They may also

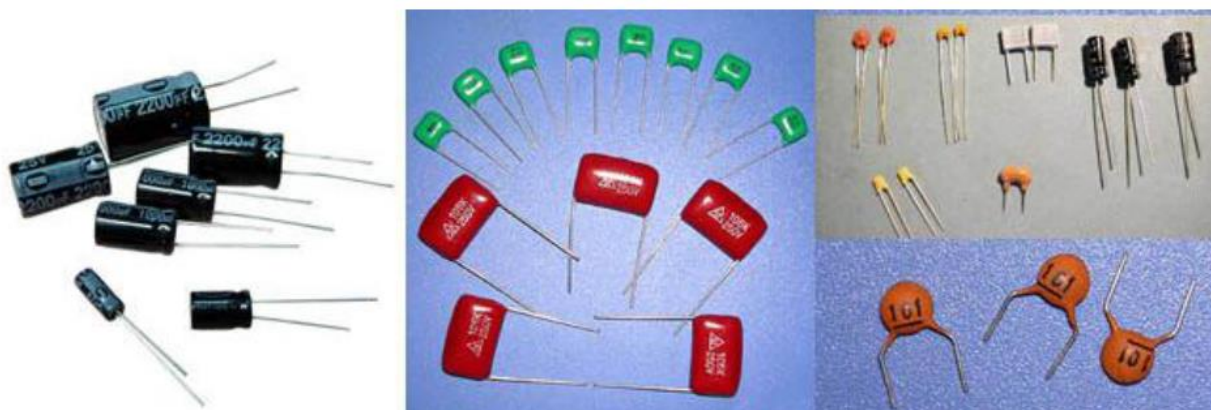
have a letter code on them indicating the taper (which is how resistance changes in relation to how far the potentiometer is turned). They are typically marked with an “VR” on a circuit board.



B) CAPACITORS

A capacitor (originally known as a condenser) is a passive two-terminal electrical component used to store energy electrostatically in an electric field. By contrast, batteries store energy via chemical reactions. The forms of practical capacitors vary widely, but all contain at least two electrical conductors separated by a dielectric (insulator); for example, one common construction consists of metal foils separated by a thin layer of insulating film. Capacitors are widely used as parts of electrical circuits in many common electrical devices.

Capacitors are also very commonly used. A lot have their values printed on them, some are marked with 3-digit codes, and a few are color coded. The same resources listed above for resistors can also help you identify capacitor values. They are typically marked with an “C” on a circuit board.



C) INDUCTORS

An inductor, also called a coil or reactor, is a passive two-terminal electrical component which resists changes in electric current passing through it. It consists of a conductor such as a wire, usually wound into a coil. When a current flows through it, energy is stored in a magnetic field in the coil. When the current flowing through an inductor change, the time-varying magnetic field induces a voltage in the conductor, according to Faraday’s law of electromagnetic induction, which by Lenz’s law opposes the change in current that created it.

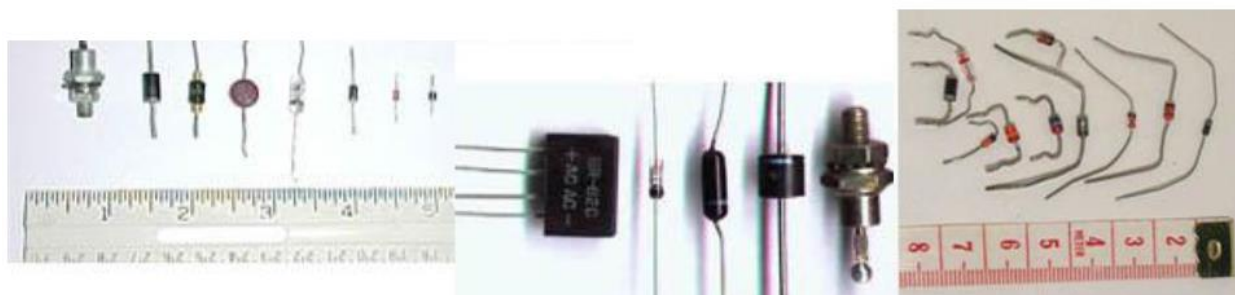
Inductors, also called coils, can be a bit harder to figure out their values. If they are color coded, the resources listed for resistors can help, otherwise a good meter that can measure inductance will be needed. They are typically marked with an “L” on a circuit board.



D) DIODES

In electronics, a diode is a two-terminal electronic component with asymmetric conductance, it has low (ideally zero) resistance to current flow in one direction, and high (ideally infinite) resistance in the other.

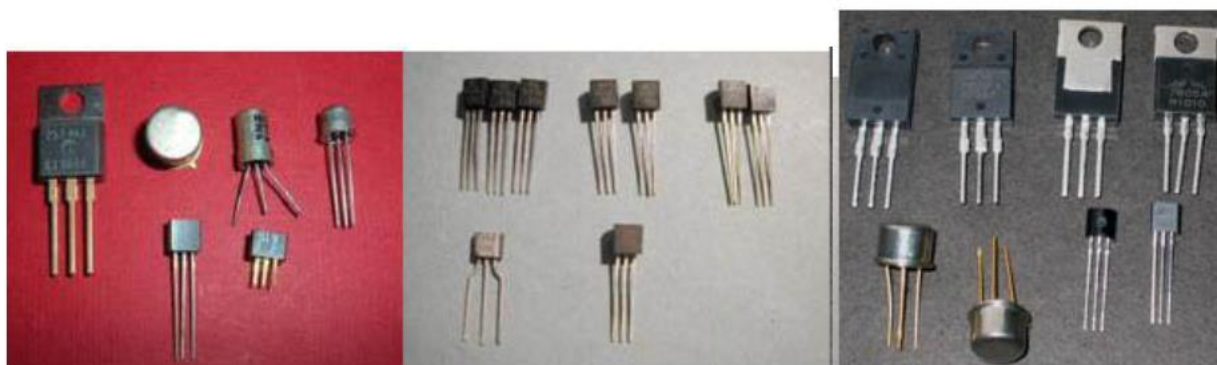
Semiconductors, such as Diodes (typically marked with an “D” on a circuit board).



E) TRANSISTORS

A transistor is a semiconductor device used to amplify and switch electronic signals and electrical power. It is composed of semiconductor material with at least three terminals for connection to an external circuit. A voltage or current applied to one pair of the transistor's terminals changes the current through another pair of terminals. Because the controlled (output) power can be higher than the controlling (input) power, a transistor can amplify a signal. Today, some transistors are packaged individually, but many more are found embedded in integrated circuits.

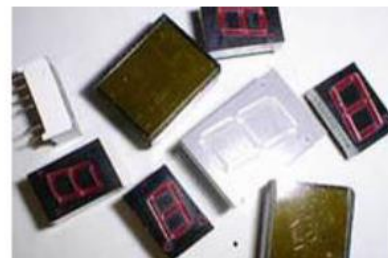
Transistors (typically marked with an “Q” on a circuit board).



F) LED AND LED DISPLAY

A light-emitting diode (LED) is a semiconductor light source. LEDs are used as indicator lamps in many devices and are increasingly used for other lighting. LEDs emitted low-intensity

red light, but modern versions are available across the visible, ultraviolet, and infrared wavelengths, with very high brightness.



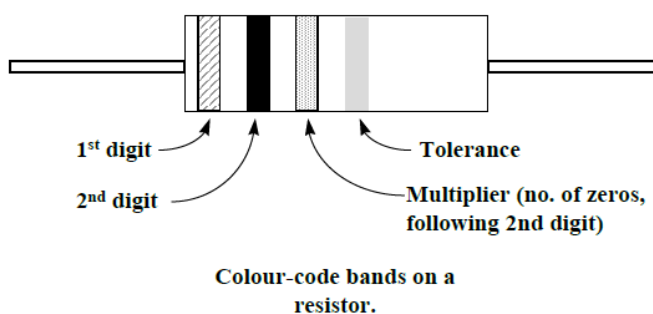
G) SWITCHES

In electrical engineering, a switch is an electrical component that can break an electrical circuit, interrupting the current or diverting it from one conductor to another. The most familiar form of switch is a manually operated electromechanical device with one or more sets of electrical contacts, which are connected to external circuits. Each set of contacts can be in one of two states: either "closed" meaning the contacts are touching and electricity can flow between them, or "open", meaning the contacts are separated and the switch is nonconducting.



Determining Resistor values

Resistor Colour Codes



Colour	Band 1	Band 2	Band 3	Band 4
Black	0	0	$\times 1$	–
Brown	1	1	$\times 10$	$\pm 1\%$
Red	2	2	$\times 100$	$\pm 2\%$
Orange	3	3	$\times 1000$	–
Yellow	4	4	$\times 10000$	–
Green	5	5	$\times 100000$	$\pm 0.5\%$
Blue	6	6	$\times 1000000$	$\pm 0.25\%$
Violet	7	7	$\times 10000000$	$\pm 0.1\%$
Grey	8	8	–	–
White	9	9	–	–
Gold	–	–	$\times 0.1$	$\pm 5\%$
Silver	–	–	$\times 0.01$	$\pm 10\%$

Resistance measurement

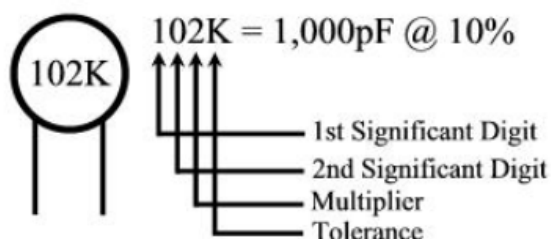
Procedure

1. Connect probes: black probe to COM terminal and red probe to terminal marked with ' Ω '
2. Set function to resistance measurement
3. Set to the appropriate range (refer to above)
4. Connect the two probes' crocodile clips to the resistor (or to the resistor circuit via jumper wires) to make measurement
5. Note the reading, adjust range if necessary
6. Take the more accurate reading.

Determine the value for the given data

Sr. No.	Color Code	Actual Value	Measured Value by DMM
1			
2			
3			
4			
5			

Determining capacitor values



Code	Tolerance
C	±0.25pF
J	±5%
K	±10%
M	±20%
D	±0.5pF
Z	80% / -20%

Determine the value of the ceramic capacitors

Sr. No.	Code No.	Actual Value
1		
2		
3		
4		
5		

A) Capacitor Testing

To test a capacitor by DMM (Digital Multimeter) in the **Resistance “Ω” or Ohm mode**, follow the steps given below.

1. Make sure the capacitor is fully discharged.
2. Set the meter on the Ohmic range (Set it at least on 1000 Ohm = 1kΩ).
3. Connect the multimeter probes to the capacitor terminals (Negative to Negative and Positive to Positive).
4. Digital multimeter will show some numbers for a second. Note the reading.
5. And then immediately it will return to the OL (Open Line) or infinity “∞”. Every attempt of Step 2 will show the same result as shown in steps 4 and 5. It means that **Capacitor is in Good Condition**.
6. If there is no Change, then **Capacitor is dead**.

B) Diode Testing

The best practice to test a diode in “Diode test” mode by measuring the voltage drop across the diode in case of forward biased. Keep in mind that diode in forward-biased acts as closed switch which let to flow current in it like conductors. In reverse-biased diode, it acts like an open switch and doesn’t permit current to flow in it as it acts like a resistor.

7. Remove the diode from the circuit i.e., disconnect the power supply across the diode which has to be tested. Discharge all the capacitor (by shorting the capacitor leads) in the circuit (If any).
8. Set the meter on “Diode Test” Mode by turning the rotary switch of multimeter.
9. Connect the diode leads to the multimeter test leads and note the reading.
10. Now, Connect the diode lead to the multimeter test leads in reverse direction (i.e., Reverse the test leads) and note the measurement.
 - If the multimeter shows 0.5V – 0.8V for common silicon diodes and 0.2V- 0.3V in case of germanium diodes in the first attempt, it means the diode is in good condition (forward-biased).
 - If multimeter display “OL” in reverse biased, it is good as well.
 - If multimeter does not show measurements I.e., if multimeter display “OL” reading in both direction (Forward-biased and reverse-biased), its mean diode is dead and acting as an open switch which doesn’t allow current to flow in it. In case of shorted diode, there will be zero voltage drop across the diode as current will flow through it and it acts like a short path for current. The diode needs to be changed then.
 - If the multimeter displays approximately 0.4V in both directions, it mean the diode is short and need to be replaced with new one.

C) LED Testing

Before testing a diode, we must identify the diode terminal i.e., anode and cathode. For LED, the longer terminal of diode is anode (+) and the shorter terminal is cathode (-). In other cases, the flat terminal of diode is cathode and the other side is anode

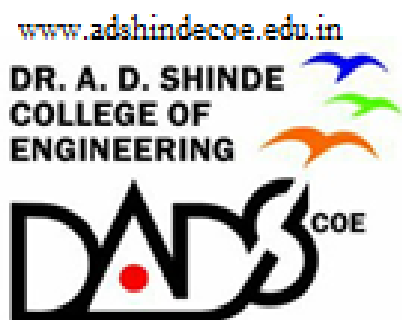
To test an LED with digital or analog multimeter, follow the instructions given below.

- Disconnect the LED from the circuit and power supply if it is already connected in a circuit.
- Find the LED terminal i.e., anode and cathode (as shown in above fig)
- In case of digital multimeter, set the meter on “Diode Test” Mode (in case of analog multimeter, set the multimeter on Resistance or continuity mode) by turning the rotary switch of multimeter.
- Connect the LED in forward biased with multimeter test leads i.e., cathode to black (-ve) and anode to Red (+ve) test leads.
- If the LED glows, it doesn’t need to say it is in good condition and working properly, otherwise LED is defective and it should be changed.
- In reverse biased (LED anode to Black (-ve) and cathode to Red (+ve) test leads), it won’t work and multimeter won’t show any reading as LED will not flow current through it i.e., it acts like an open switch same as diode.

Conclusion:

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 02

Study of Half Wave Rectifier and Full Wave Rectifier

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 02

Aim of the Experiment: Study of Half wave rectifier and Full wave rectifier.

Objective: -

1. Design the circuit diagram
2. Take the reading and draw the input & output waveform

Components Required: Digital Multimeter, CRO, 2 Diodes (Si-1N4007), Resistor 1K.

Theory:

Part I: Half wave rectifier

Working:

A rectifier is an electrical device that converts alternating current (AC) to direct current (DC).

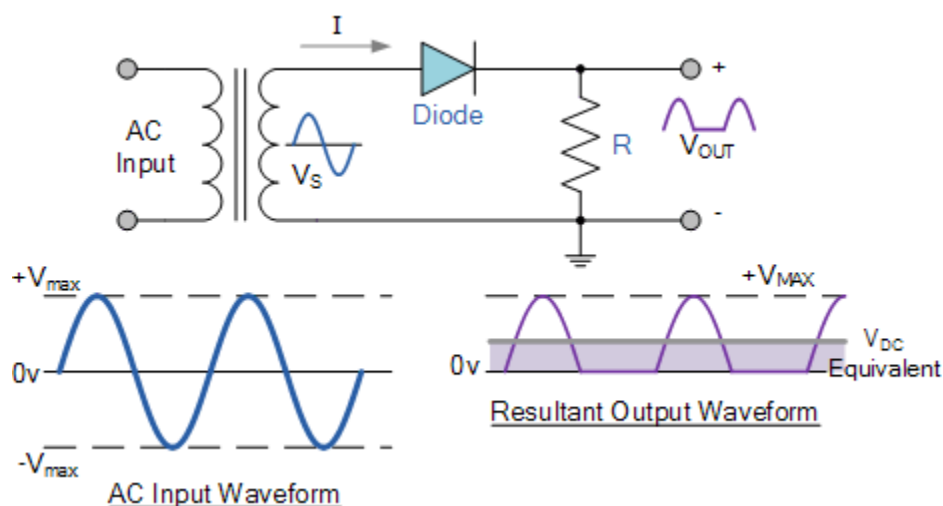
The half-wave rectifier circuit using a semiconductor diode (D) with a load resistance R_L but no smoothing filter is given in figure. The diode is connected in series with the secondary of the transformer and the load resistance R_L . The primary of the transformer is being connected to the ac supply mains.

The ac voltage across the secondary winding changes polarities after every half cycle of input wave. During the positive half-cycles of the input ac voltage *i.e.*, when upper end of the secondary winding is positive w.r.t. its lower end, the diode is forward biased and therefore conducts current. If the forward resistance of the diode is assumed to be zero (in practice, however, a small resistance exists) the input voltage during the positive half-cycles is directly applied to the load resistance R_L , making its upper end positive w.r.t. its lower end. The waveforms of the output current and output voltage are of the same shape as that of the input ac voltage.

During the negative half cycles of the input ac voltage *i.e.*, when the lower end of the secondary winding is positive w.r.t. its upper end, the diode is reverse biased and so does not conduct. Thus, during the negative half cycles of the input ac voltage, the current through and voltage across the load remains zero. The reverse current, being very small in magnitude, is neglected. Thus, for the negative half cycles no power is delivered to the load.

Thus, the output voltage (V_L) developed across load resistance R_L is a series of positive half cycles of alternating voltage, with intervening very small constant negative voltage levels. It is obvious from the figure that the output is not a steady dc, but only a pulsating dc wave. To make the output wave smooth and useful in a DC power supply, we have to use a [filter](#) across the load. Since only half-cycles of the input wave are used, it is called a *half wave rectifier*.

Circuit Diagram: Half wave rectifier



Part II: Study of Full wave rectifier

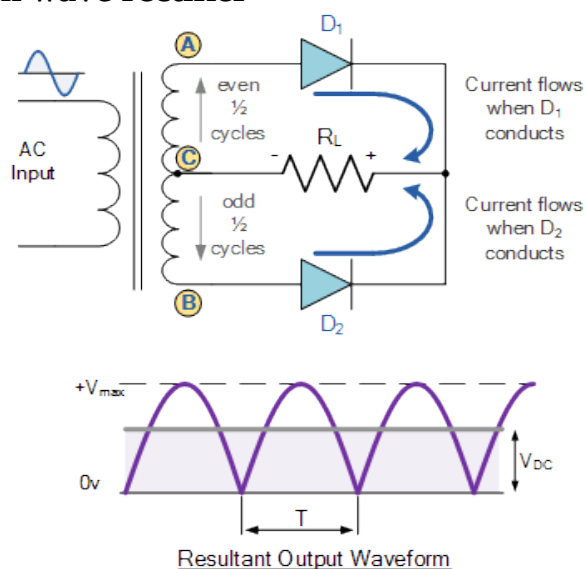
Working:

The conversion of AC into pulsating DC is called Rectification. Electronic Devices can convert AC power into DC power with high efficiency.

The full-wave rectifier consists of a center-tapped transformer, which results in equal voltages above and below the center-tap. During the positive half cycle, a positive voltage appears at the anode of D_1 while a negative voltage appears at the anode of D_2 . Due to this diode D_1 is forward biased. It results a current I_{d1} through the load R .

During the negative half cycle, a positive voltage appears at the anode of D_2 and hence it is forward biased, resulting a current I_{d2} through the load. At the same instant a negative voltage appears at the anode of D_1 , reverse biasing it and hence it doesn't conduct.

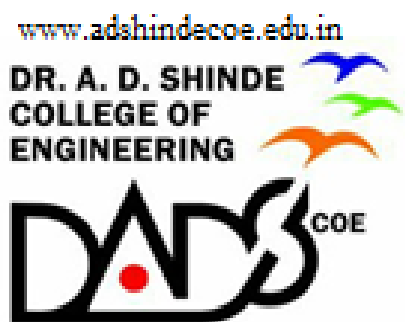
Circuit Diagram: Full wave rectifier



Conclusion:

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 03

Study of truth tables of logic Gates: OR, AND, NOT, NAND, NOR, EXOR.

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 03

Aim of the Experiment: Study of truth tables of logic Gates: OR, AND, NOT, NAND, NOR, EXOR.

Objective: -

1. Design the circuit diagram
2. Note down the input and output of truth table.

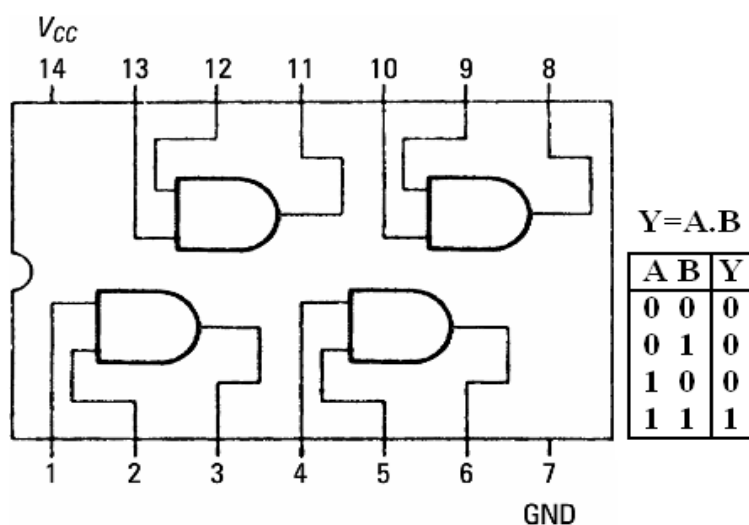
Components Required: Logic trainer kit, logic gates / ICs, wires.

Theory:

Logic gates are electronic circuits which perform logical functions on one or more inputs to produce one output. There are seven logic gates. When all the input combinations of a logic gate are written in a series and their corresponding outputs written along them, then this input/output combination is called **Truth Table**. Various gates and their working is explained here.

AND Gate

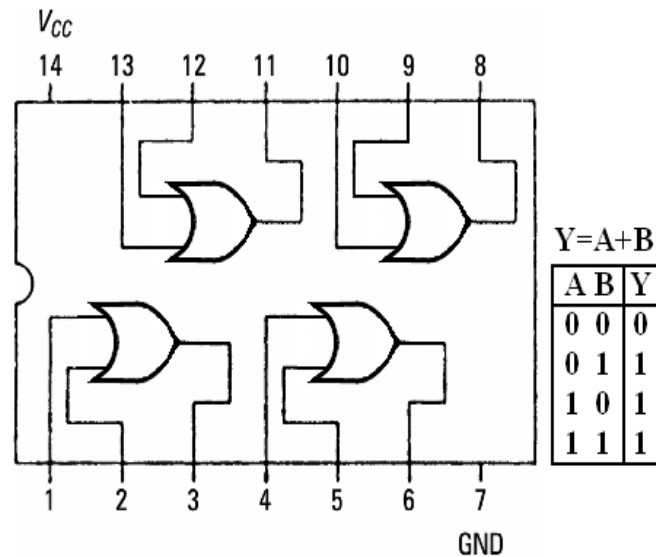
AND gate produces an output as 1, when all its inputs are 1; otherwise, the output is 0. This gate can have minimum 2 inputs but output is always one. Its output is 0 when any input is 0.



IC 7408

OR Gate

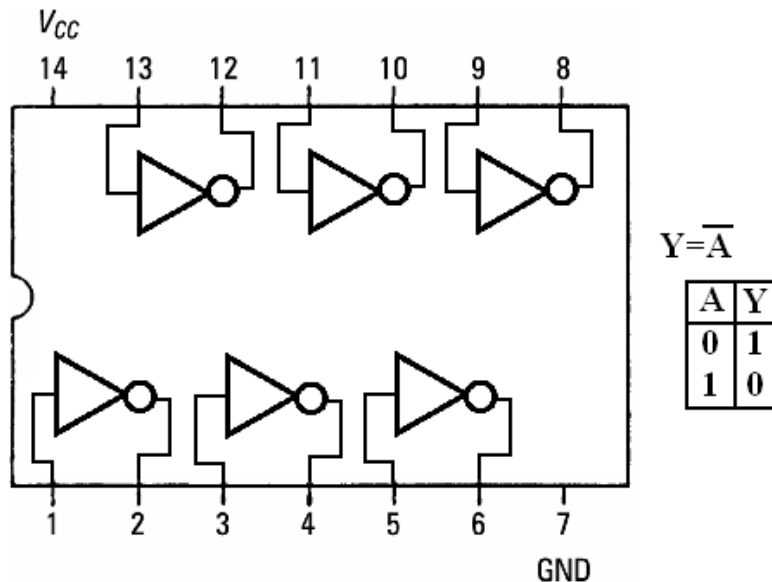
OR gate produces an output as 1, when any or all its inputs are 1; otherwise, the output is 0. This gate can have minimum 2 inputs but output is always one. Its output is 0 when all input are 0.



IC 7432

NOT Gate

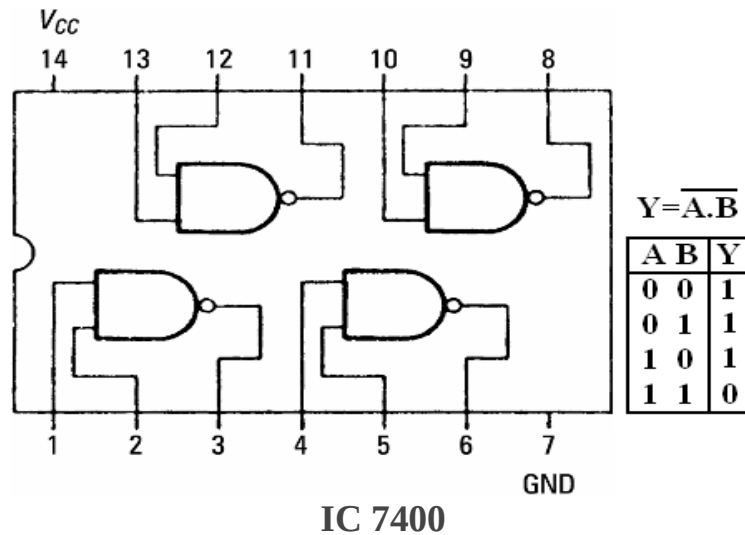
NOT gate produces the complement of its input. This gate is also called an INVERTER. It always has one input and one output. Its output is 0 when input is 1 and output is 1 when input is 0.



IC 7404

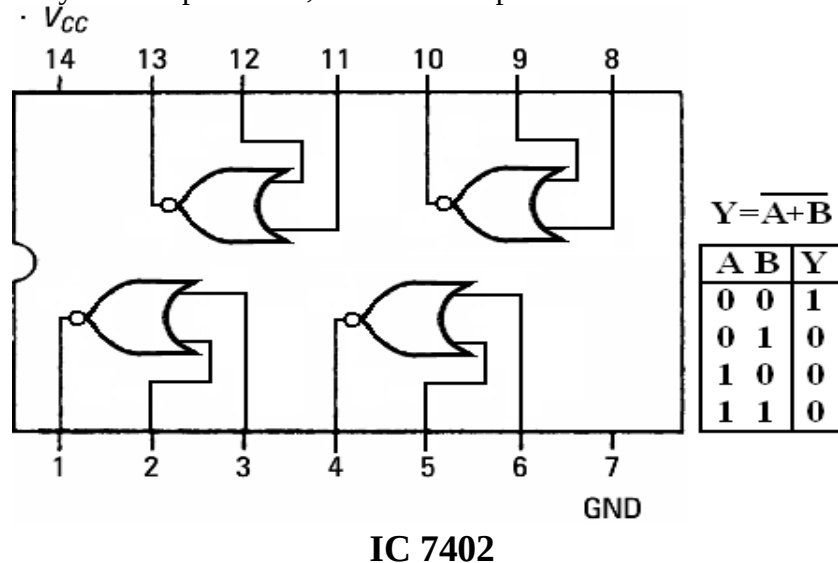
NAND Gate

NAND gate is actually a series of AND gate with NOT gate. If we connect the output of an AND gate to the input of a NOT gate, this combination will work as NOT-AND or NAND gate. Its output is 1 when any or all inputs are 0, otherwise output is 1.



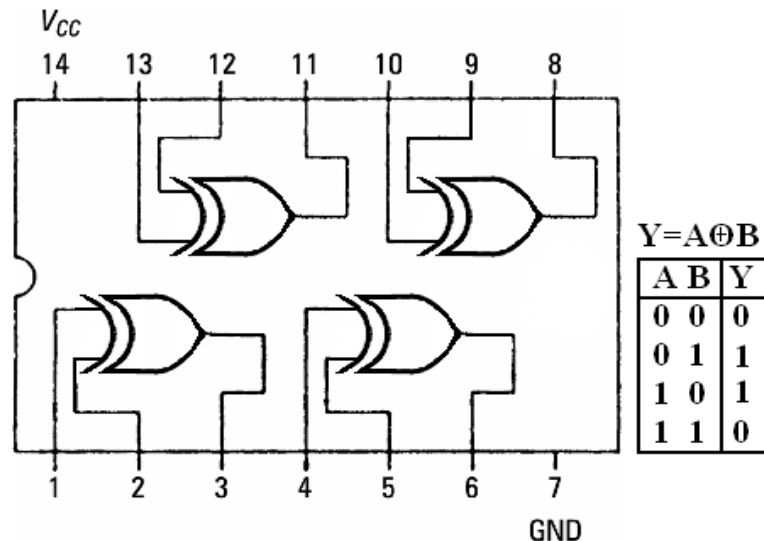
NOR Gate

NOR gate is actually a series of OR gate with NOT gate. If we connect the output of an OR gate to the input of a NOT gate, this combination will work as NOT-OR or NOR gate. Its output is 0 when any or all inputs are 1, otherwise output is 1.



Exclusive OR (X-OR) Gate

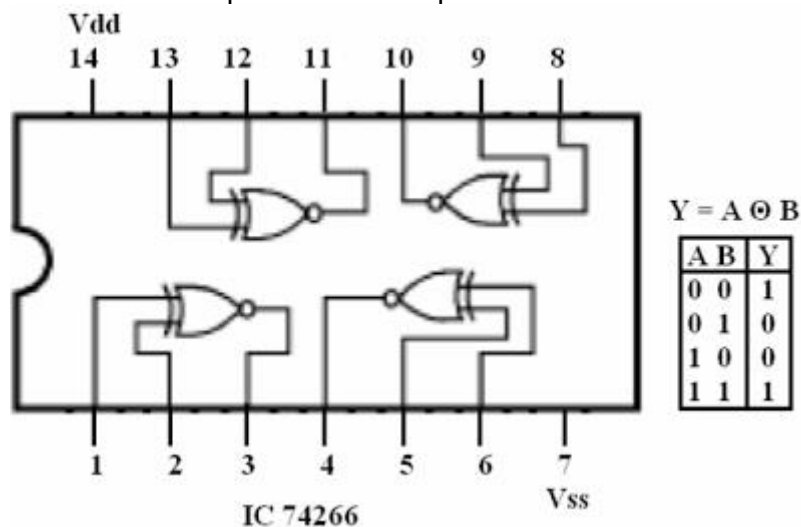
X-OR gate produces an output as 1, when number of 1's at its inputs is **odd**, otherwise output is 0. It has two inputs and one output.



IC 7486

Exclusive NOR (X-NOR) Gate

X-NOR gate produces an output as 1, when number of 1's at its inputs is **not odd**, otherwise output is 0. It has two inputs and one output.



IC 74266

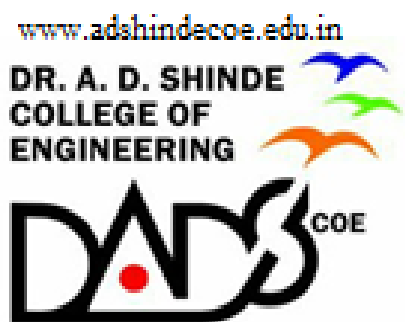
Procedure:

1. Connect the trainer kit to ac power supply.
2. Connect the inputs of any one logic gate to the logic sources and its output to the logic indicator.
3. Apply various input combinations and observe output for each one.
4. Verify the truth table for each input/ output combination.
5. Repeat the process for all other logic gates.
6. Switch off the ac power supply.

Conclusion:

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 04

Measurement of Distance using LVDT

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 04

Aim of the Experiment: Measurement of Distance using LVDT.

Objective: -

1. Examine the operation/performance of a device for measuring linear displacement.
2. Note down the Applied and Measured readings of displacement.

Components Required: LVDT set up, LVDT measuring system, Digital Multimeter.

Theory:

Working of LVDT:

The **linear variable differential transformer** (LVDT) is a type of electrical transformer used for measuring linear displacement. The transformer has three solenoid coils placed end-to-end around a tube. The center coil is the primary, and the two outer coils are the secondaries. A cylindrical ferromagnetic core, attached to the object whose position is to be measured, slides along the axis of the tube.

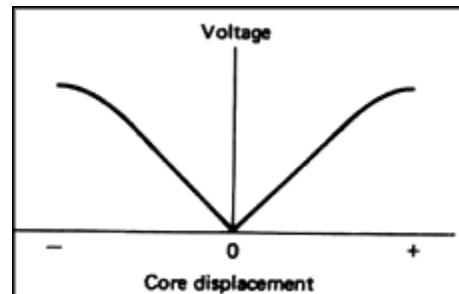
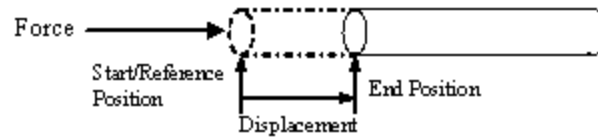
An alternating current is driven through the primary, causing a voltage to be induced in each secondary proportional to its mutual inductance with the primary. The frequency is usually in the range 1 to 10 kHz.

As the core moves, these mutual inductances change, causing the voltages induced in the secondaries to change. The coils are connected in reverse series, so that the output voltage is the difference (hence "differential") between the two secondary voltages. When the core is in its central position, equidistant between the two secondaries, equal but opposite voltages are induced in these two coils, so the output voltage is zero.

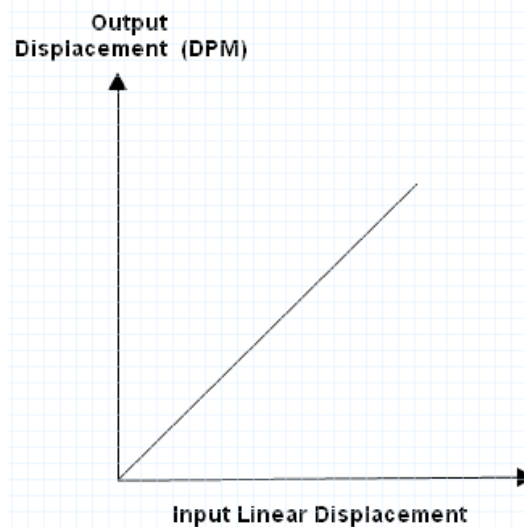
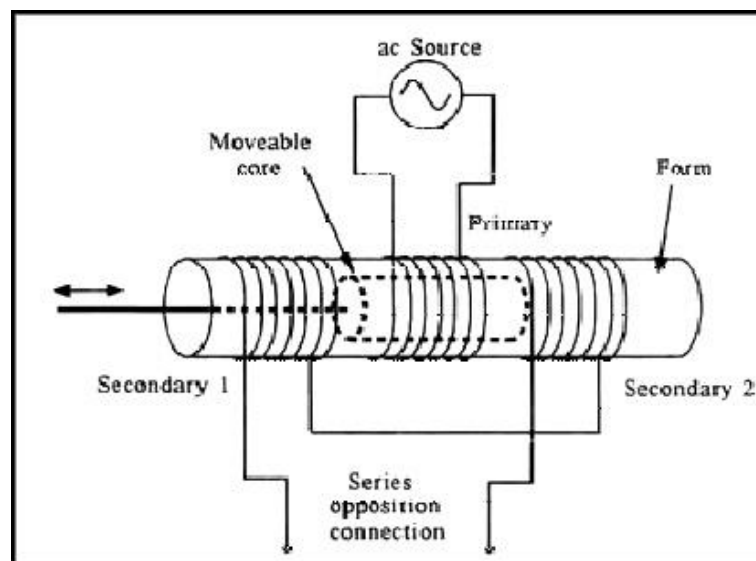
When the core is displaced in one direction, the voltage in one coil increases as the other decreases, causing the output voltage to increase from zero to a maximum. This voltage is in phase with the primary voltage. When the core moves in the other direction, the output voltage also increases from zero to a maximum, but its phase is opposite to that of the primary. The magnitude of the output voltage is proportional to the distance moved by the core (up to its limit of travel), which is why the device is described as "linear". The phase of the voltage indicates the direction of the displacement.

Because the sliding core does not touch the inside of the tube, it can move with little friction, making the LVDT a highly reliable device. The relative absence of any sliding or rotating contacts can also allow the LVDT to be sealed against a given operating environment.

LVDTs are commonly used for position feedback in servo-mechanisms, and for automated measurement in machine tools, control systems, robots, and many other industrial and mechanical systems.



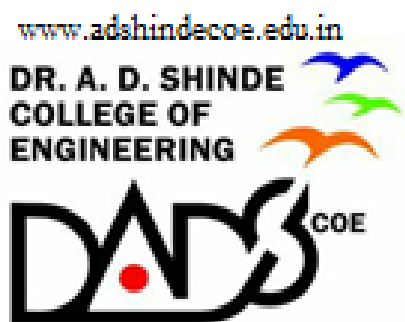
Circuit Diagram:



Observation table:**Conclusion:**

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 05

Study of Computer System – Internal Components & Peripherals

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 05

Aim of the Experiment: Study of computer system – Internal Components & peripherals.

Objective: -

1. Examine different parts of computer and peripherals.
2. Differentiate input and output devices.

Components Required: Computer, Mother Board.

Theory:

INTRODUCTION TO COMPUTER:

Computer is an electronic device which takes the input information from the input device and generates the output information and it will be displayed on the output. It enables arithmetic computations, data processing, information management (storage) and knowledge reasoning in an efficient manner. The word computer is derived from the word compute which means „to calculate“. So, a computer generally considered to be calculating device that perform operations at very faster rates.

BLOCK DIAGRAM OF COMPUTER

Basically the computer system has three major components. These are System Unit o Central Processing Unit (Processor) o Memory Unit. (Main memory and Auxiliary storage). Input Unit. Output Unit.

A) Monitor:

- a. Monitor of a computer is like a television screen.
- b. It displays text characters and graphics in colors or in shades of grey.
- c. The monitor is also called as screen or display or CRT (cathode ray tube). In the monitor the screen will be displayed in pixels format. i. 800 by 600 pixels ii. 1024 by 768 pixels

B) Key Board:

- a. Key board is like a type writer, which contains keys to feed the data or information into the computer
- b. Keyboards are available modules. These are
 - i) enhanced key board with 104 keys or above
 - ii) standard key board with 83-88 keys

C) Mouse:

- a. Every mouse has one primary button (left button) and one secondary button (right button).
- b. The primary button is used to carry out most tasks, whereas secondary button is used in special cases you can select commands and options

D) Printer:

- a. A device that prints images (numbers, alphabets, graphs, etc....) on paper is known as Printer.
- b. We have different types of printers to take printouts. These are as follows:
 - i. Dot matrix printer ii. Ink jet printer iii. Laser printer

E) Speakers:

- a. Speakers make your system much more delightful to use entertain you while you are working on computer

F) Scanner:

- a. Scanner used to scan images and text

G) System board/Motherboard:

- a. This is the major part of the PC hardware
- b. It manages all transactions of data between CPU peripherals. c. which holds the Processor, Random Access Memory and other parts, and has slots for expansion cards d. It is rectangle shape

F) Socket 478:

- a. It use 478 – PIN MICROPGA package it is used installing CPU
- b. It is square type design.

G) CPU:

- a. The central processing unit contains the heart of any computer, the processor. The processor is fitted on to a Mother Board. The Mother Board contains various components, which support the functioning of a PC.
- b. It is brain of the computer
- c. It is square shape

H) Ram Slots and Rams:

- a. Ram slots are used to install the rams
- b. It is large rectangle shape and each ending has small clips.

I) ATX Power connector:

- a. ATX power connector is used to connect ATX power plug (This is from SMPS)
- b. ATX Power connector has 20/24 pins available.
- c. It is white color and it has ATX name is available on Mother Board

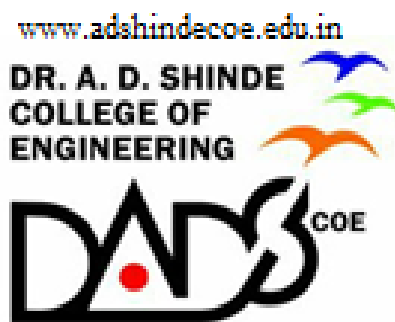
J) Floppy connector:

- a. Floppy connector is used to connect Floppy Disk Drive.
- b. This is beside of ATX power connector and Name FDD is available on the mother board.

Conclusion-

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 06

Create a document using any Word Processor

In Linux (open office) /Windows (Microsoft office)

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 06

Aim of the Experiment: Create a document using any word processor In Linux (open office) /Windows (Microsoft office).

Objective: -

1. Create a Resume in word processor

Components Required: Computer, Windows (Microsoft office).

Theory:

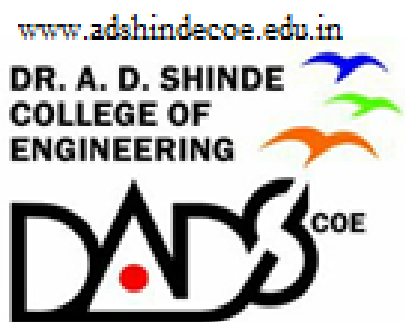
PROCEDURES TO CREATE A RESUME:

1. Open MS Office-MS Word – File – New
2. Go to View- Header and Footer- Type name, mobile number inside the Header
3. Go to Insert- Page Number-select the position bottom of the page and Alignment to Center – Click Ok.
4. Go to Table-Insert-Table- chose Number of Columns 2 and Rows to 1. Enter the name, format it (bold and increase the font size via standard tool Bar). And in the second column type the whole address.
5. Whenever you want to increase the number of columns in the existing row, that row and go to Table-click Split Cells- enter number of columns click Ok.
6. In order to decrease the existing column numbers, select that columns and Go to Tables- click Merge cells.
7. Finally type the declaration outside the table with your name aligning right side and date to the left side.

Conclusion-

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 07

**Use any spreadsheet application to manipulate numbers, formulae and graphs
(In Linux/Windows).**

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 07

Aim of the Experiment: Use any spreadsheet application to manipulate numbers, formulae and graphs (In Linux/Windows)

Objective: -

1. Create a Spreadsheet in Microsoft office Excel

Components Required: Computer, Windows (Microsoft office)

Theory:

PROCEDURES TO CREATE A WORKSHEET WITH 4 COLUMNS,

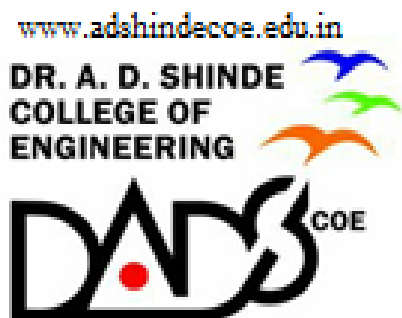
ENTER 10 RECORDS AND FIND THE SUM OF ALL COLUMNS:

1. Open MS Office-MS Excel – File – New
2. Select 3 column and 3 rows at the center of the beginning- right click Format cells - click select the alignment tab- tick Merge cells option- ok Type the Heading.
3. Enter the 4 columns Heading and 10 row heading by clicking the cursor onto the particular cell.
4. Enter the data for the 4 columns.
5. Select the first column whole data, except the heading and click Σ (auto sum) in the standard bar- this will add the column's data and places result at the end.
6. Repeat the same for remaining 3 columns.

Conclusion:

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 08

Use any power point presentation application and create a professional power point presentation using text, image, animation etc. (In Linux / Windows).

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 08

Aim of the Experiment: Use any power point presentation application and create a professional power point presentation using text, image, animation etc. (In Linux / Windows).

Objective: -

1. Create a Presentation in Microsoft office PowerPoint.

Components Required: Computer, Windows (Microsoft office).

Theory:

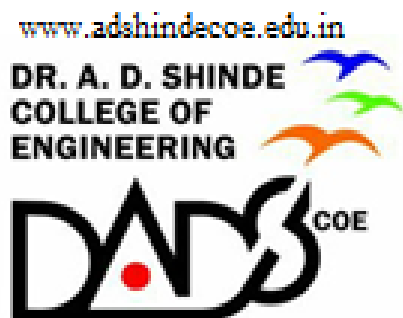
PROCEDURES TO CREATE A SIMPLE PRESENTATION TO LIST SIMPLE DOS COMMANDS, HARDWARE, SOFTWARE:

1. Open MS Office-MS Power Point – File – New - Blank Presentation
2. Click the Other Task Panes drop down menu- tick Slide Layout- Select the Layout you want.
3. Click the Other Task Panes drop down menu- tick Slide Design – Select the Design of your choice.
4. Click on the slide to type the text- align the text using standard tool bar.
5. In order to insert new slide –go to Insert - New Slide-Type your text.
6. Each slide may have the different slide layouts depending on the content.
7. After creating all the slides- By holding Ctrl key select all the slides- go to Slide show – Slide transition- the transition- select speed to minimum – tick Automatically after and enter the time of interval foreach slide to appear in slide show- Click Apply to all the slide.
8. You can also use Custom animation to apply animation to the Text/Content, for that select the object- go to Slide Show- Custom animation- click add effect- choose the style.
9. Finally go to Slide Show- view Show

Conclusion-

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				

DR. A. D. SHINDE COLLEGE OF ENGINEERING, BHADGAON.



Experiment No: 09

An assignment based on use of Internet and Web for searching and downloading technical information.

Name of the Student	
Roll No	
Batch	
Date	

EXPERIMENT NUMBER: 09

Aim of the Experiment: An assignment based on use of Internet and Web for searching and downloading technical information.

Objective: -

1. Search and Download Technical information using Internet.

Components Required: Computer, website, internet.

Theory:

Conclusion-

Continuous Assessment of Lab Work	Cognitive (04)	Psychomotor Skills (04)	Affective Domain (02)	Total out of (10)
Signature of Subject Expert				