



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



COIMBATORE-35

**Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**COURSE NAME: 19EET101/BASIC ELECTRICAL AND ELECTRONICS
ENGINEERING**

I YEAR / II SEMESTER

Unit III – WIRING, GROUNDING AND SAFETY

Topic : Wiring Accessories and Material





GUESS THE TOPIC NAME...





WIRING ACCESSORIES AND MATERIALS

- All the wiring systems and electrical installations needs the following accessories:

- Cables
- Flexible wires
- Switches
- Fuses
- Ceiling rose
- Lamp holders
- Plugs
- Socket outlets
- Junction boxes





CABLES

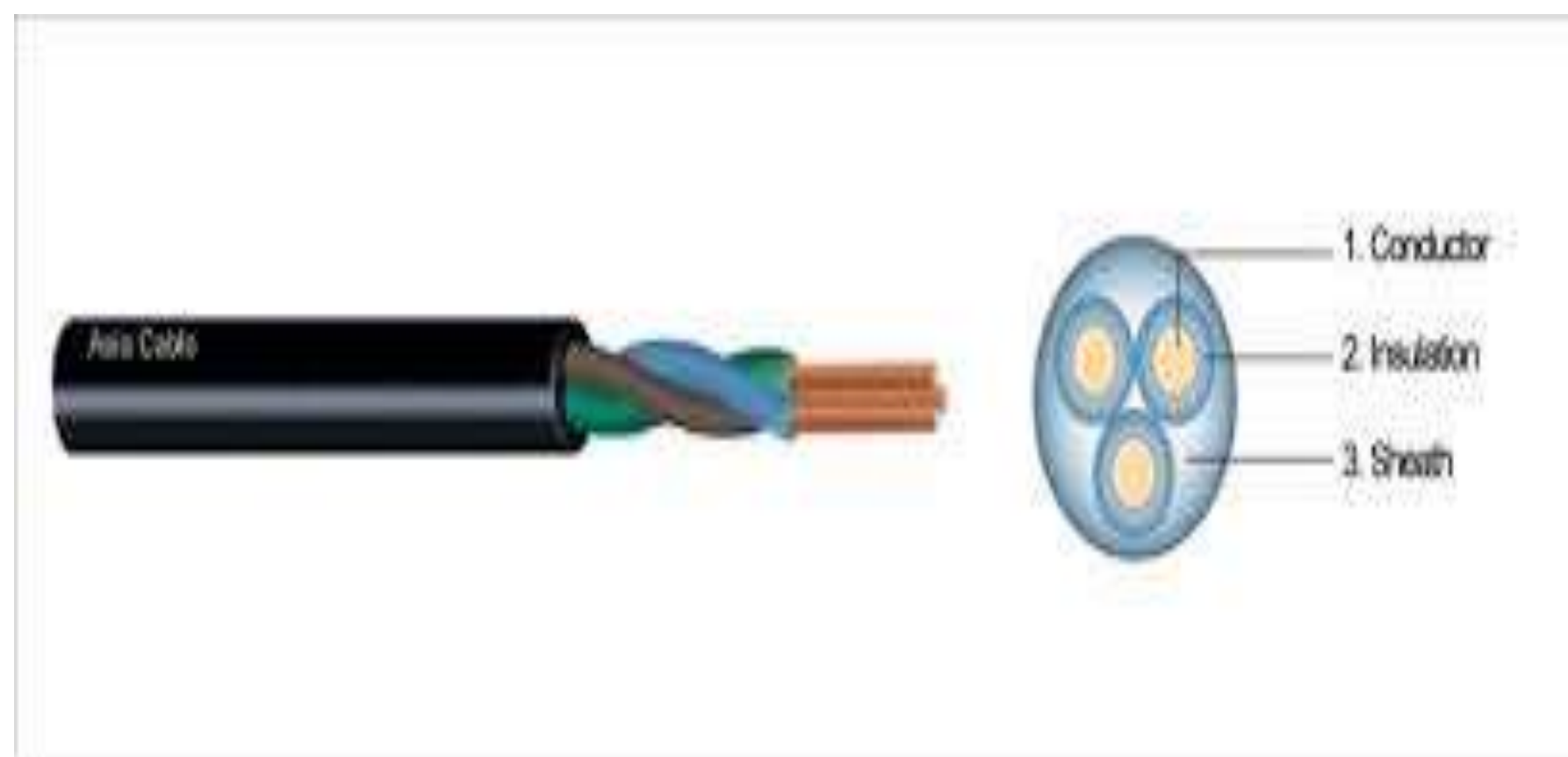
- A cable is made of some conducting material such as copper or aluminium. It is surrounded by insulation and a sheath for mechanical protection.
- The cables are generally classified according to the insulation used. Different types of cables are as follows:
 - Weather- proof cables
 - Polyvinyl chloride insulated cables (PVC)
 - Lead sheathed cables
 - Cab tyre sheathed cables (CTS)





FLEXIBLE CORD

- In the flexible cord, a large number of fine wires are used to form the conductor. These are insulated by plastic insulation.
- The flexible cords are used as connecting wires to connect the portable domestic appliances and light fittings etc.
- These cords are easy to guide and handle.





SWITCHES

- A switch is supposed to carry out the make (connect) and break (disconnect) of electrical connection to the load.
- Switches should be connected to the live (L) wire in the circuit.
- The switches can be classified into two types as follows:
 1. Tumbler switch
 2. Flush switch

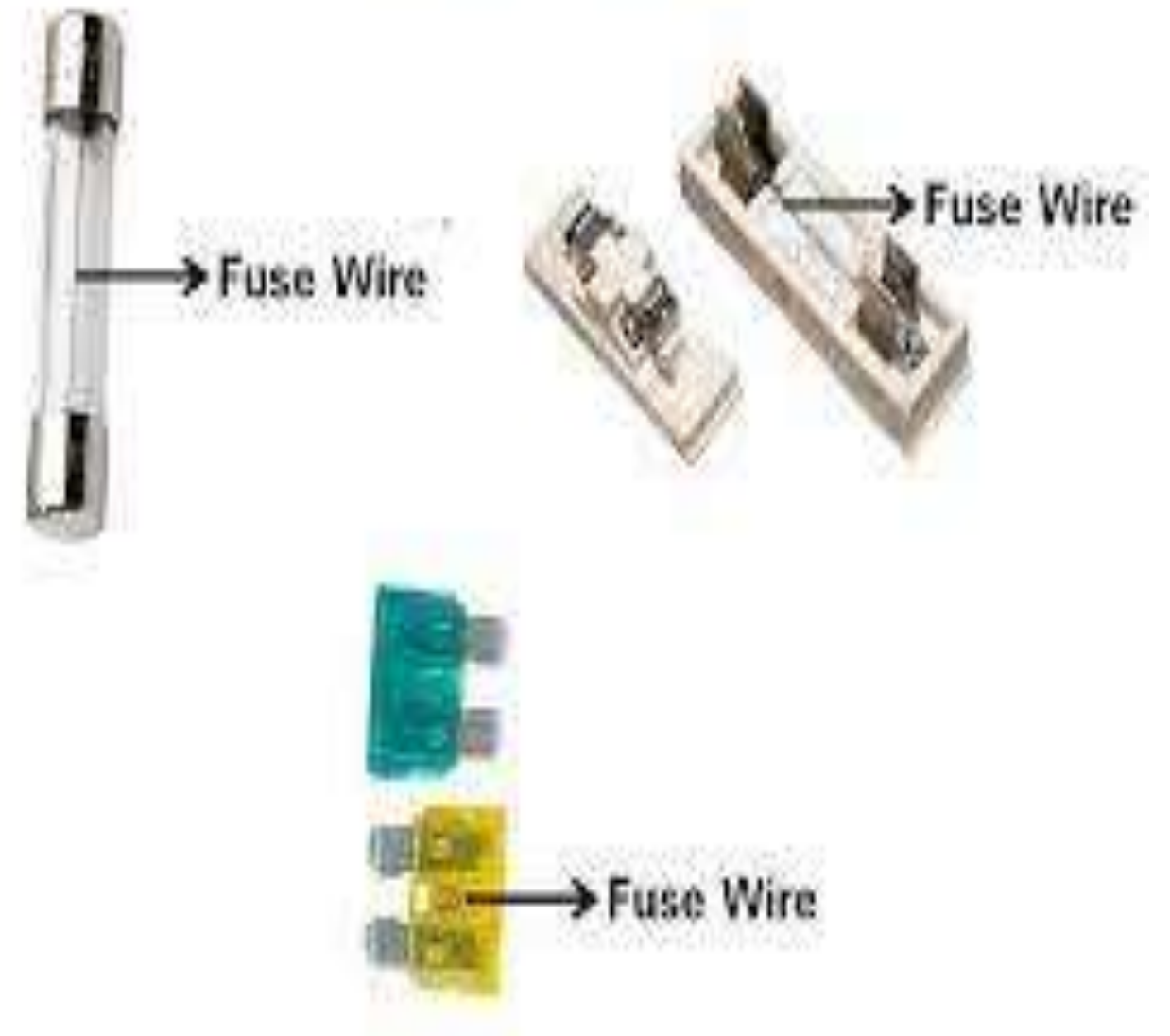




FUSES

- In any electrical installation, fuse is used for protecting the appliances against over current. Fuse is used in different stages of the wiring.
- A fuse can be made of the following conducting materials:
 1. Copper
 2. Lead
 3. Aluminium
 4. Alloys of lead and
 5. Zinc
 6. Tin

Fuse Wire





SOCKET OUTLETS

- The socket outlets are provided for temporary electrical connections such as table lamps, table fans, radio, TV, mobile chargers etc.
- The socket outlet can be of the following two types:
 - Two pin type (Live, Neutral)
 - Three pin type (Live, Neutral, Earth)





PLUGS

- The **plugs** along with flexible cords are used for providing the electrical supply to the **portable appliances** like table fan, table lamps, radio etc.
- The plugs are available in two types, similar to the sockets:
 1. Two pin plugs
 2. Three pin plugs





CEILING ROSE

- The ceiling rose is **used for connecting the ceiling fans, pendant lamps** etc to the supply system.
- Ceiling rose is made of the following two parts:
 1. Base
 2. Cover





LAMP HOLDER

- A lamp holder supports the lamp and connects it to the supply system as well
- The lamp holders are classified into following different types:
 1. Batten holders
 2. Angle holder
 3. Pendant holder
 4. Water tight bracket holders
 5. Bracket holders





SUMMARY

Various Wiring Accessories and Material



KEEP
LEARNING..
Thank u

SEE YOU IN NEXT CLASS