

A second display is then presented for an adjustable short time interval, which may be followed by either a repeat of the original card (or) by a third display.

- changes of displays is achieved by switching the illumination (or) by means of electromechanical shutters.

- By varying the presentation time for the second display & by using displays of various complexity, the perception & recognition of objects can be studied.

### Galvanic Skin Response (GSR):

- For measuring variations in perspiration, a special technique has been developed.

- In response to an external stimuli, such as touching a sharp point, the resistance of skin shows a characteristic decrease, called Galvanic skin response (GSR).

- The Baseline value of the skin resistance in this context, is called Basal skin resistance (BSR).

- GSR is caused by the activity of the sweat glands.

- It does not depend on the overt appearance of perspiration & the mechanism of

is not completely understood  
- GSR is measured at the palm  
of the hand (where the body has highest  
concentration of sweat glands).

- Active electrode will be placed  
at the centre of the palm.

- Neutral electrode will be placed  
at the wrist (or) at the back of the hand.

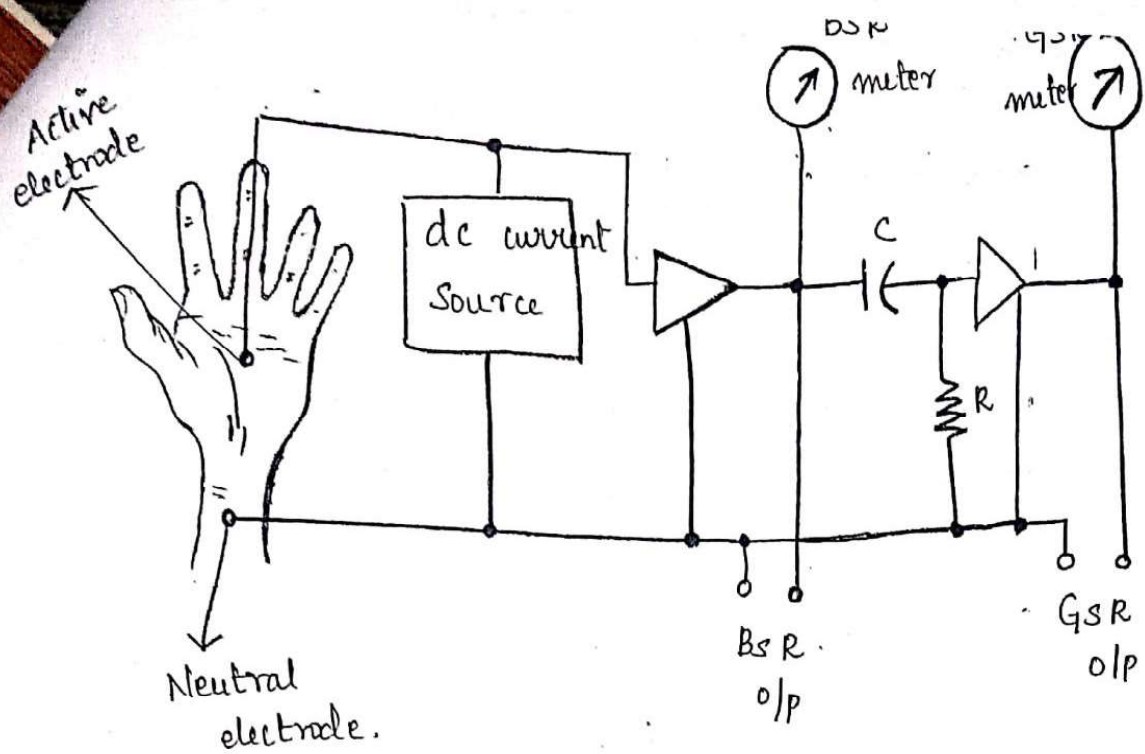
- In some devices, simply clips  
are attached to the two fingers.

- To increase stability, silver -  
silver chloride surface electrodes are used with  
electrode gel (which has same salinity as  
the perspiration).

- To minimize polarization at the  
electrodes, the current density is kept below  
 $10 \mu\text{A}/\text{cm}^2$ .

- Current generator sends a constant  
dc current through the electrodes.

- A voltage drop across the  
basal skin resistance, on the order of several  
kilohms to several hundred  $\text{k}\Omega$ , is measured  
with an amplifier & a meter that can be  
calibrated directly in BSR values.



- A second meter, coupled through RC network with a time constant of about 3 to 5 seconds, measures the GSR, as a change of skin resistance of from several <sup>hundred</sup>  $k\Omega$  to several  $k\Omega$

- O/p can be recorded on a graphic recorder.

- change of GSR, depending on the experimental conditions & its latency (time delay b/w stimulus & response), can be used to study emotional changes.

- Instead of the change of the skin resistance, the change of skin potential has been used occasionally.

- Potential difference of b/w 50 & 70 mV that can be measured b/w nonpolarizing electrodes