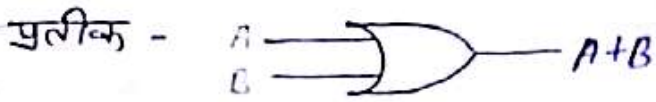


जनरेटर		32 रिजिस्टर	
फेस		33 सेलरी	
एरियल		34 सेल	
ट्रांसफार्मर		35 चोक	
बेल		36 रेग्युलेटर	
वज्जर		37 अर्थ	

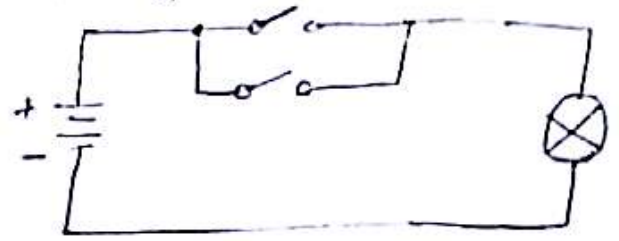
### Electronic symbol

Name of component	Symbol	Name of Component	Symbol
P-N जंक्शन डायोड		8 NPN ट्रांजिस्टर	
जेनर डायोड		9 PNP ट्रांजिस्टर	
वैक्टर डायोड		10 CRO (केथोड रे ऑसिलोस्कॉप)	
टनल डायोड		11 UJT (यूनिपेक्षर जंक्शन ट्रांजिस्टर)	
प्रकाश उत्सर्जित डायोड (LED)		12 डायक (DIAC)	
फोटो डायोड (LRD)		13 ट्रायक (TRIAC)	
सिम्बिकल कंट्रोल रेस्टिफायर (SCR)		14 FET (फिल्ड इफेक्ट ट्रांजिस्टर)	

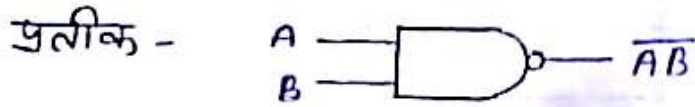
### 1) OR Gate



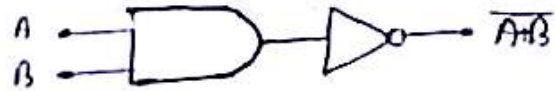
परिपथ  $\rightarrow$



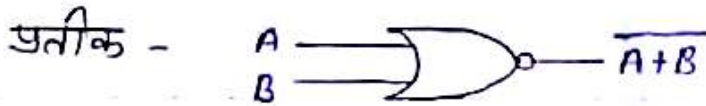
### 4) NAND Gate



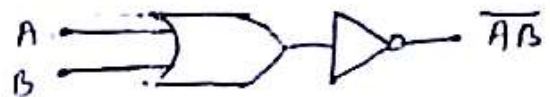
परिपथ  $\rightarrow$



### (5) NOR Gate



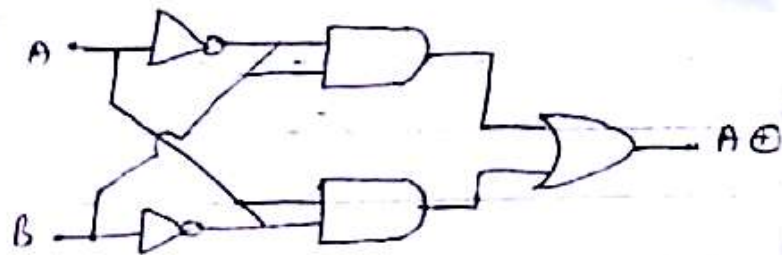
परिपथ  $\rightarrow$



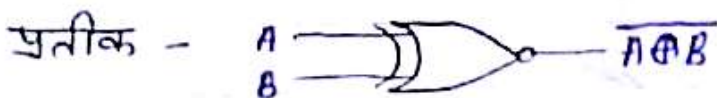
### (6) EXOR Gate



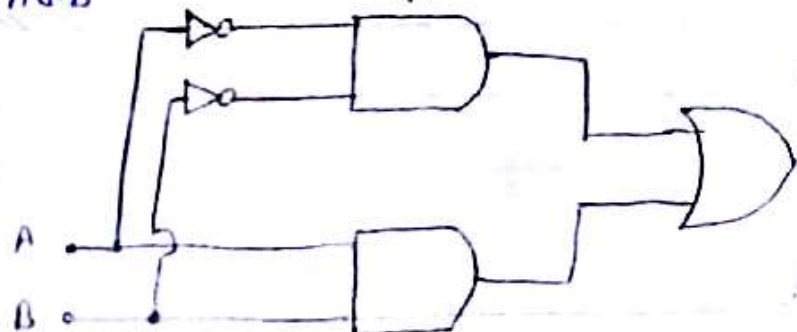
परिपथ  $\rightarrow$



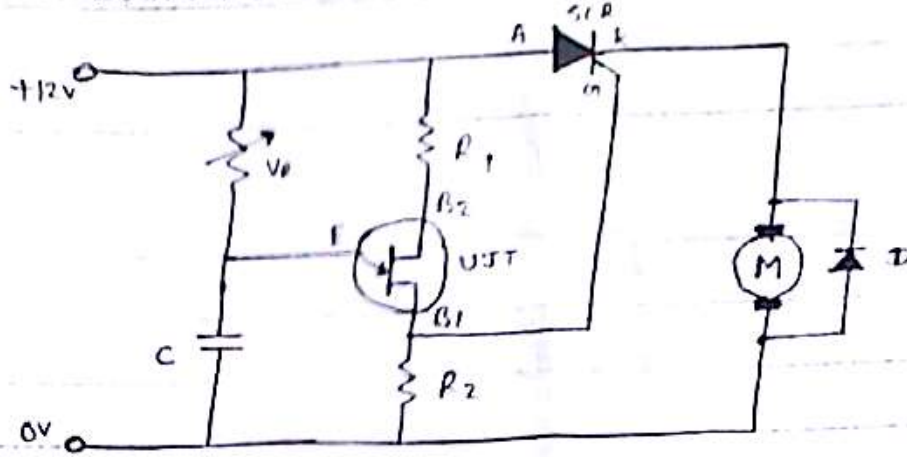
### (7) EXNOR Gate



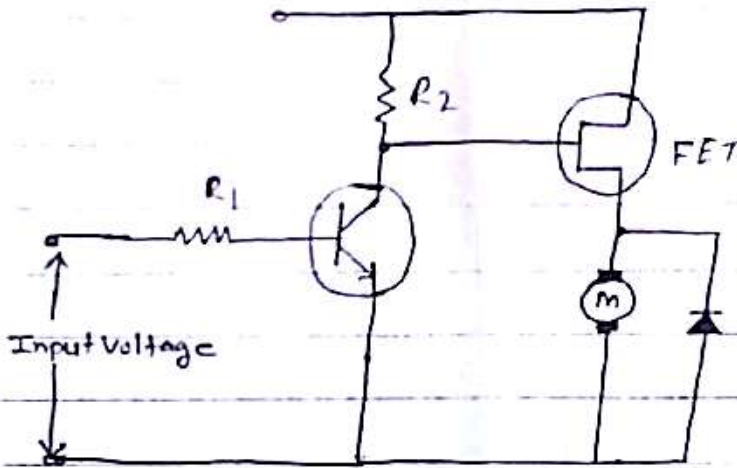
परिपथ  $\rightarrow$



\* Power control ckt using UJT

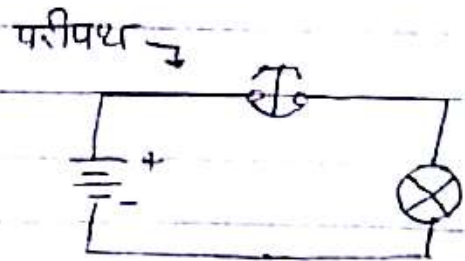
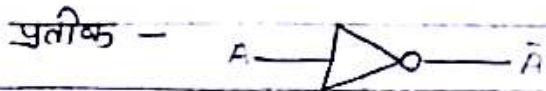


\* Power Control ckt using FET

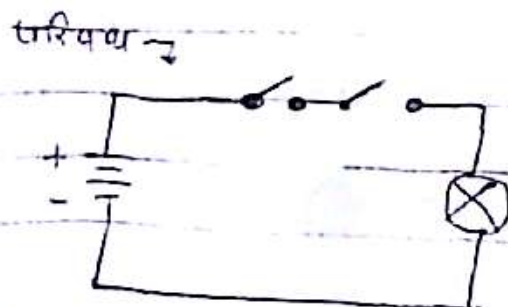
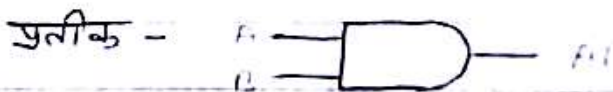


\* Logic Gate (लॉजिक गेट)

(1) NOT Gate




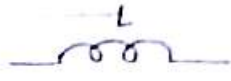
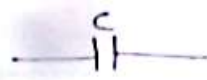
(2) AND Gate





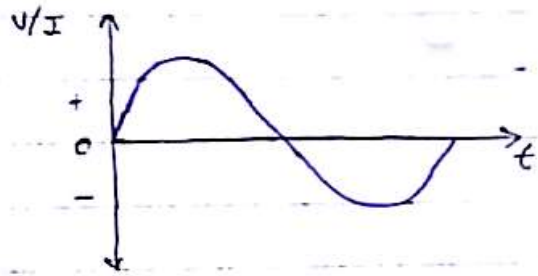
## 2 Electronic ckt's

### RLC ckt

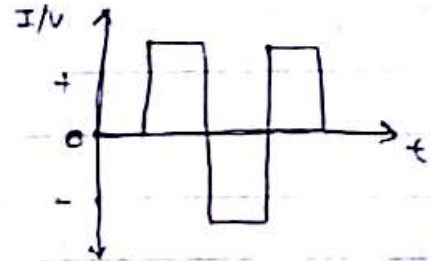
- ① R - Resistor  $\rightarrow$   Unit - ओम  $\Omega$
- ② L - Inductor  $\rightarrow$   Unit - हेनरी H
- ③ C - Capacitor  $\rightarrow$   Unit - फैरड F

### विभिन्न तरंग रूप (Waveform)

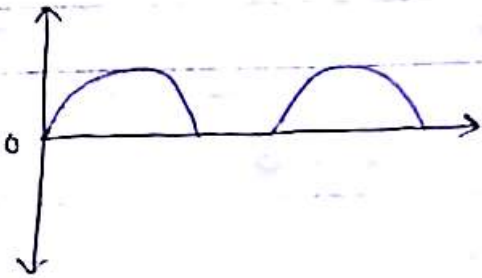
#### (1) Sinewave



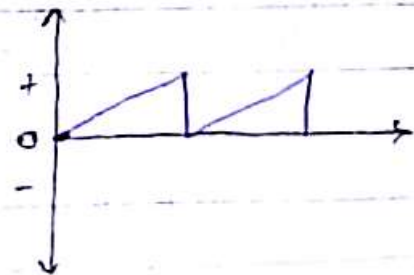
#### (2) Square wave



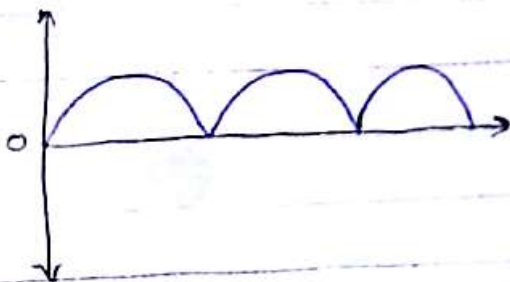
#### (A) Half wave



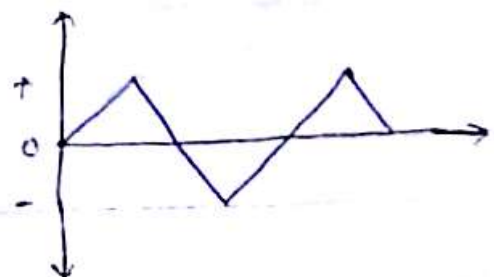
#### (3) Saw tooth wave



#### (B) Full wave

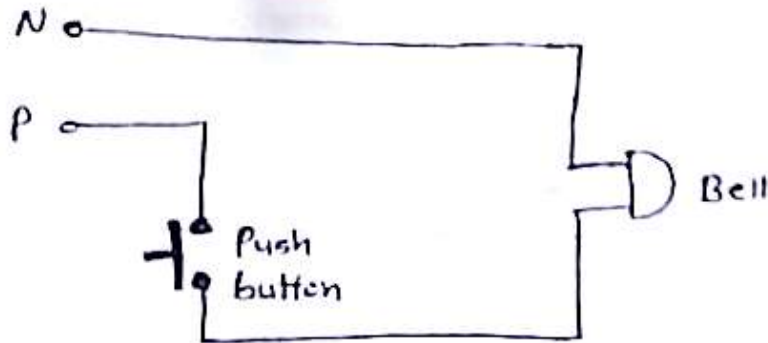


#### (4) Triangular wave

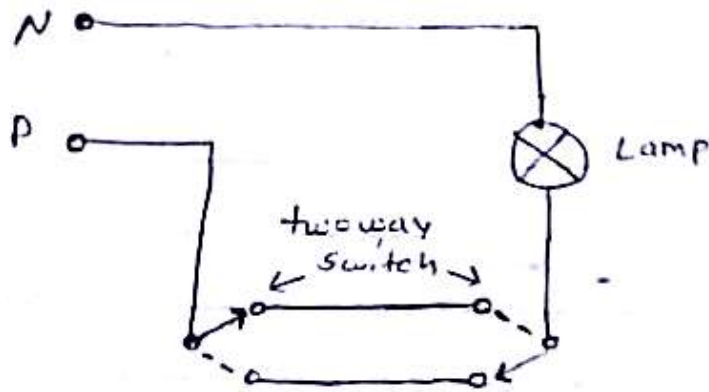


### 3 Electric wiring

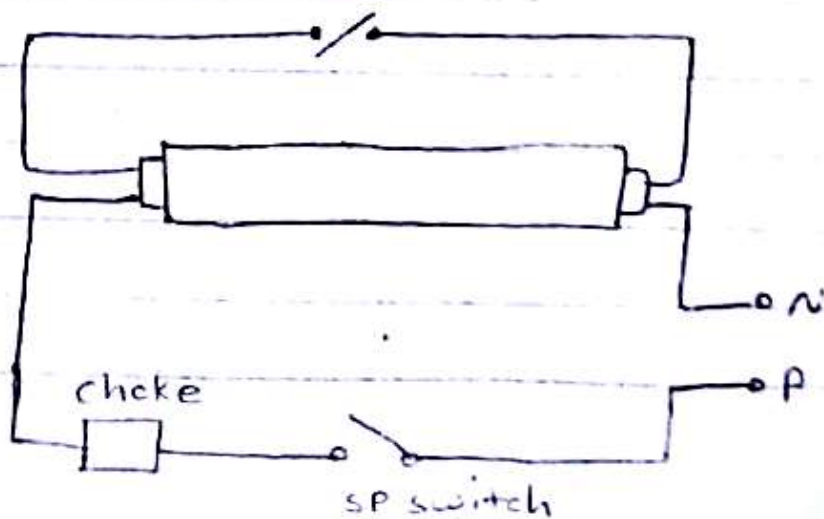
(1) circuit diagram of calling Bell (विद्युत घण्टी परिपथ)



(2) staircase wiring (जीने की वायरिंग)

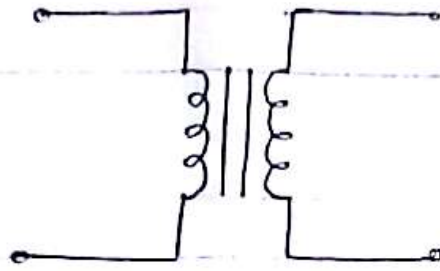


(3) Tube Light ckt (ट्यूब लाइट परिपथ)

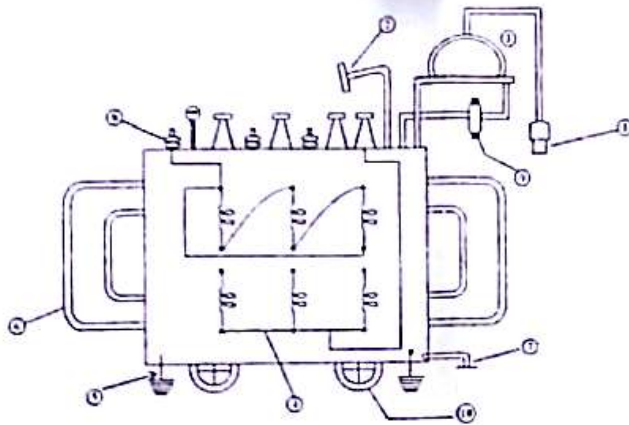


## 5 Transformer

प्रतीक :-

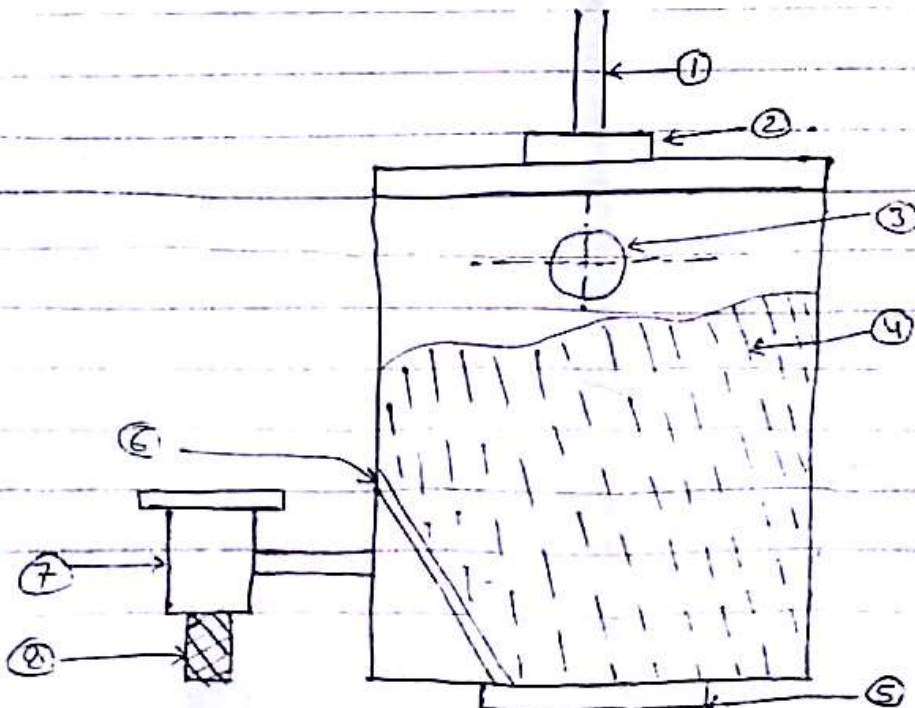


Free hand sketching of transformer



- 1 क्रीडर
- 2 एक्सप्लॉजन वेन्ट
- 3 कन्जरपेटर
- 4 वाइंडिंग
- 5 अर्थ पाइंट
- 6 कूलिंग ट्यूब
- 7 ड्रेनकोक
- 8 इन्सुलेटर
- 9 बाल्कॉज रिले
- 10 वहील

sketching a breather : (ब्रिडर का स्केच)

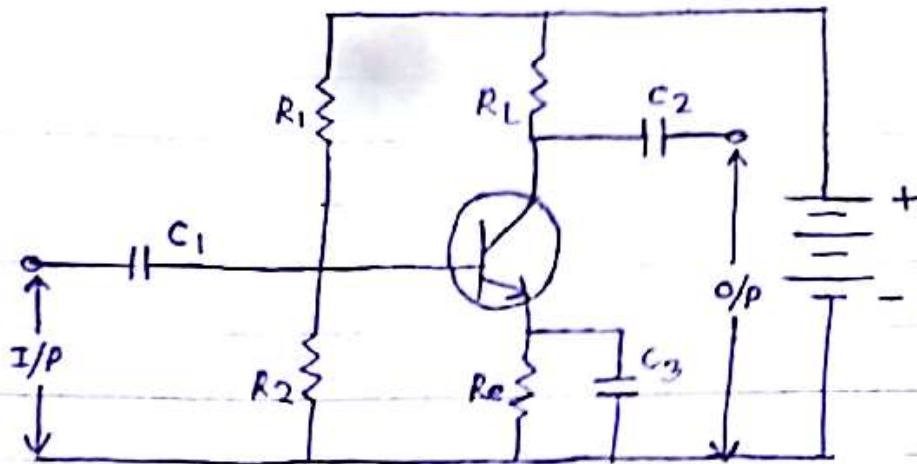


- 1 कनेक्शन पाइप
- 2 जेल होल
- 3 एम्ब्रेचर विंडो
- 4 सिलिका जेल
- 6 स्टेनर
- 5 ड्रेन होल
- 7 एगर इन्वैलट
- 8 ऑयल सील

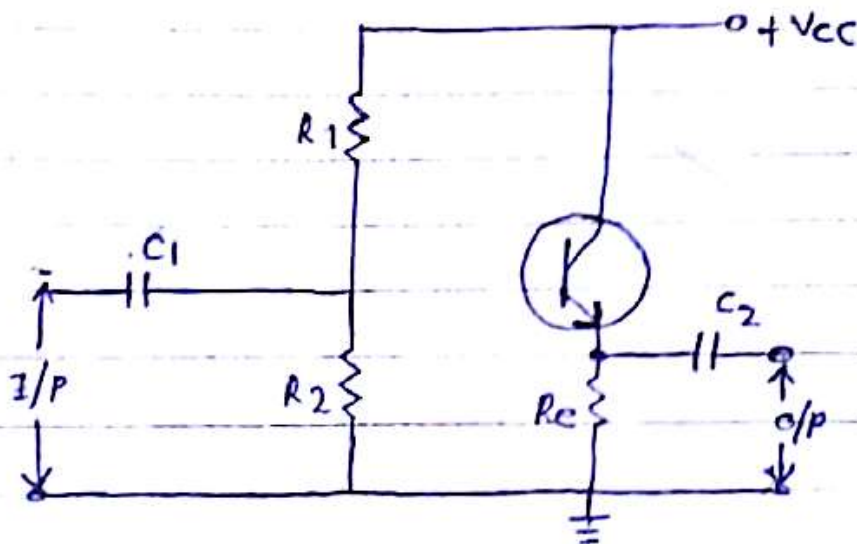


# \* Amplifier ckt

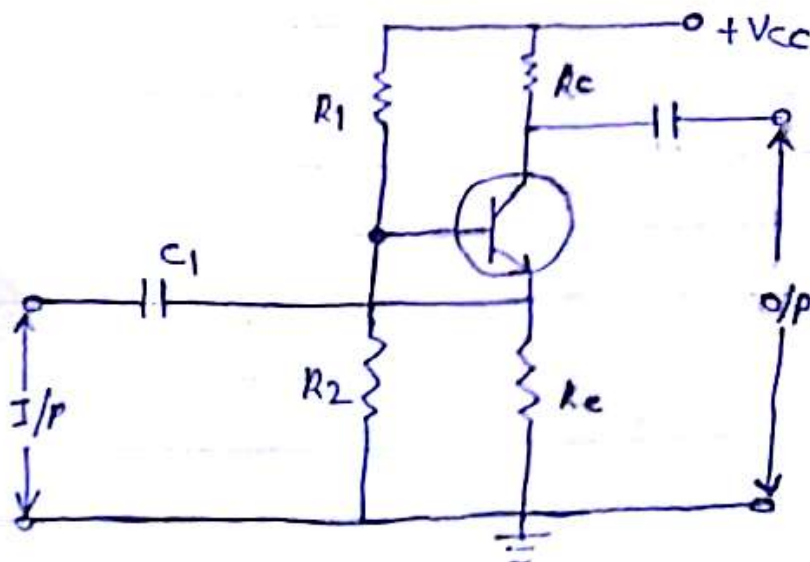
(1) Common-Emitter Amplifier (कॉमन इमिटर अम्पलीफायर)



(2) Common-Collector Amplifier (कॉमन कलेक्टर अम्पलीफायर)



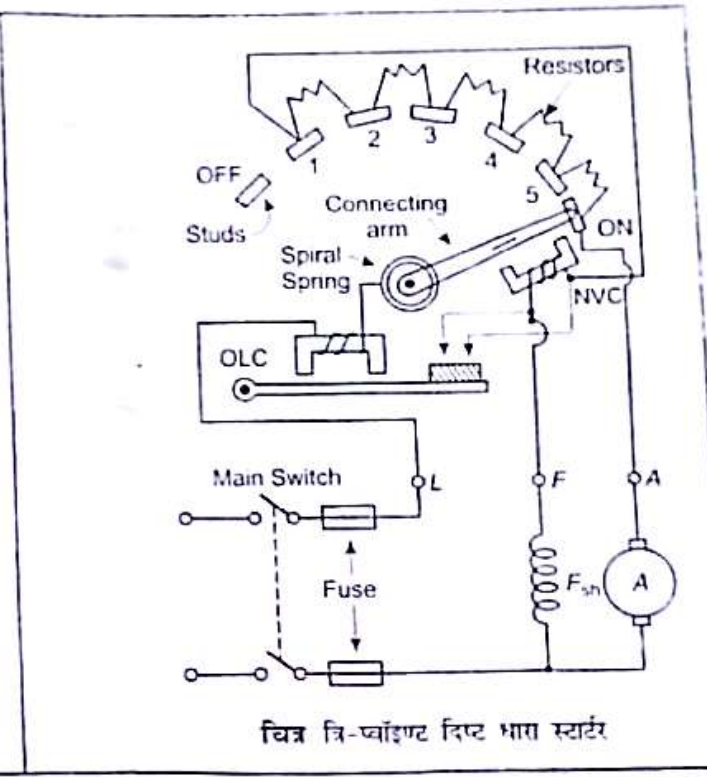
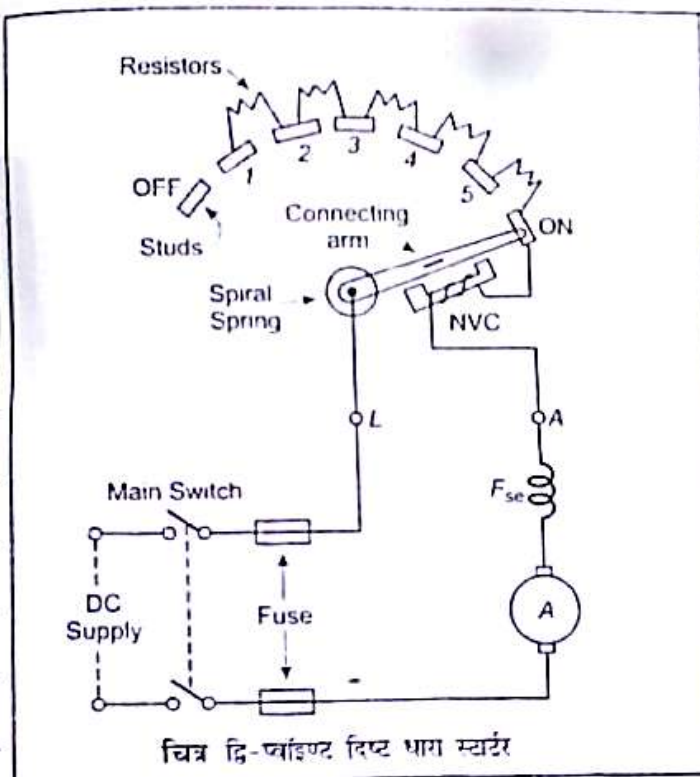
(3) Common-Base Amplifier (कॉमन बेस अम्पलीफायर)



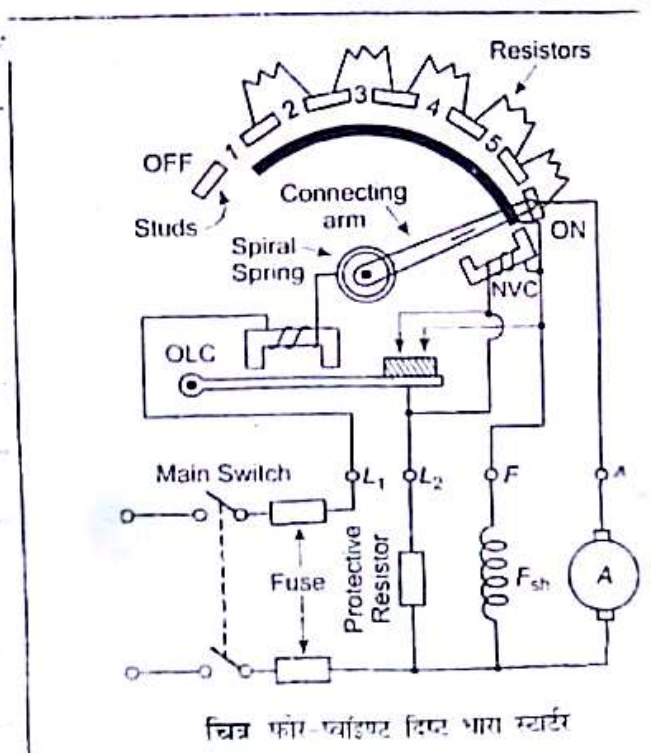
# 6. DC Machines

1) sketching of DC-3 point starter

2) sketching of DC-2 point starter



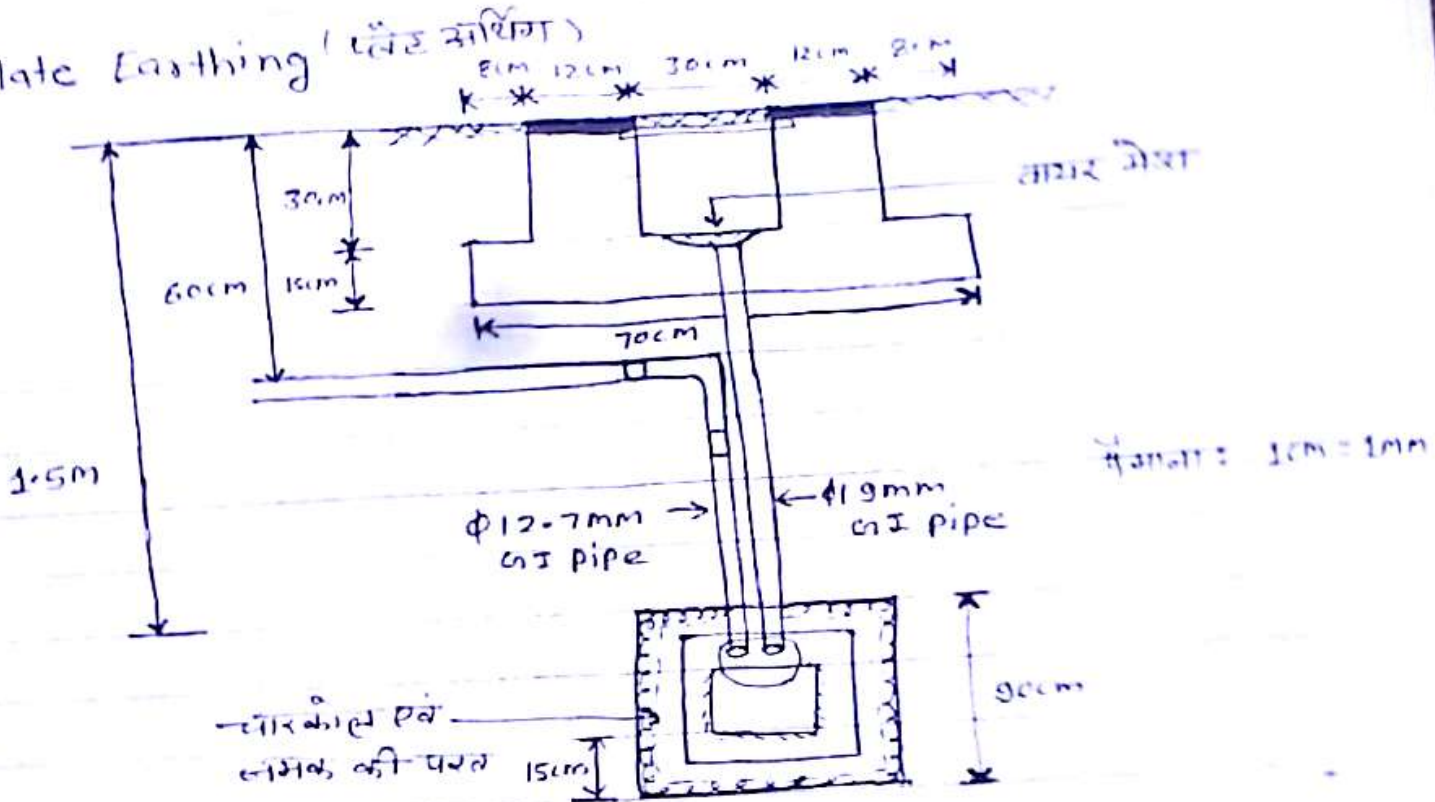
sketching of DC-4 point starter



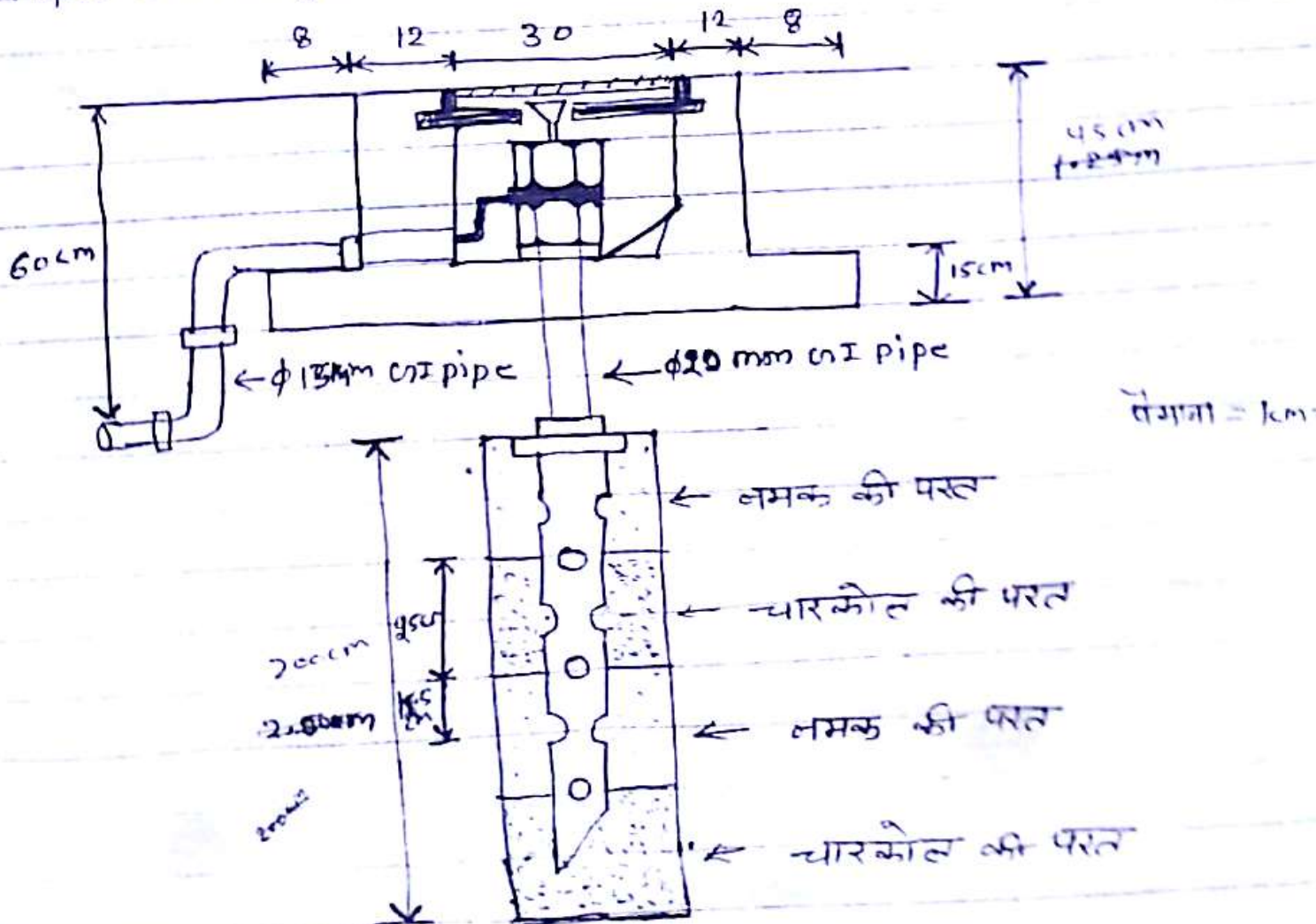


# 4. Earthing

## (1) Plate Earthing (प्लेट अर्थिंग)

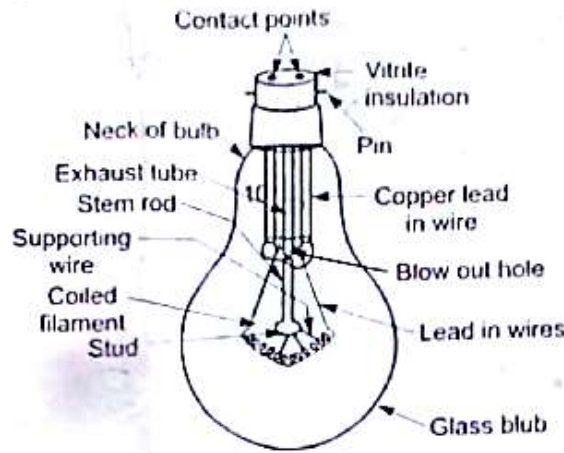


## (2) Pipe Earthing (पाइप अर्थिंग)



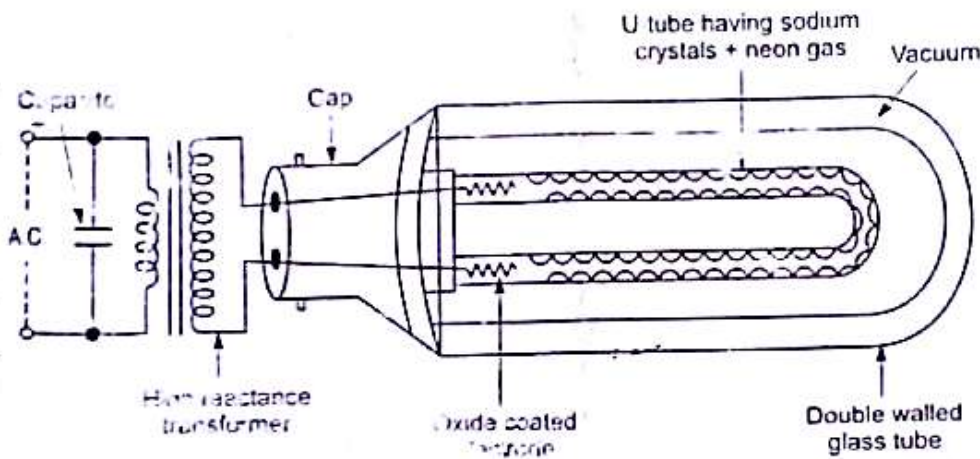
# 7. Illumination

## Free Hand sketching of विद्युत् नैर्गल लेम्प Mercury vapour lamp



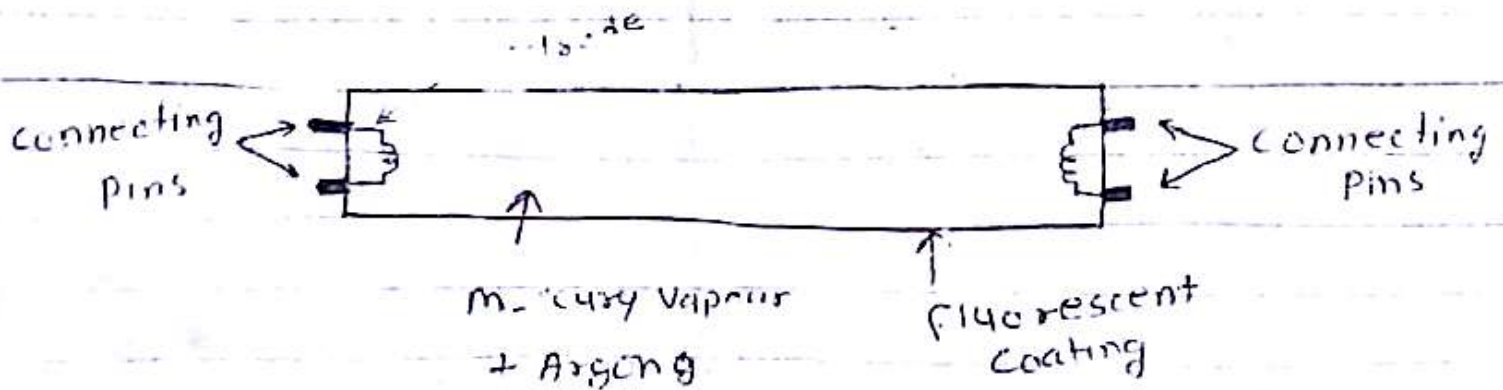
चित्र भेर्यालिक फिलामेन्ट लेम्प

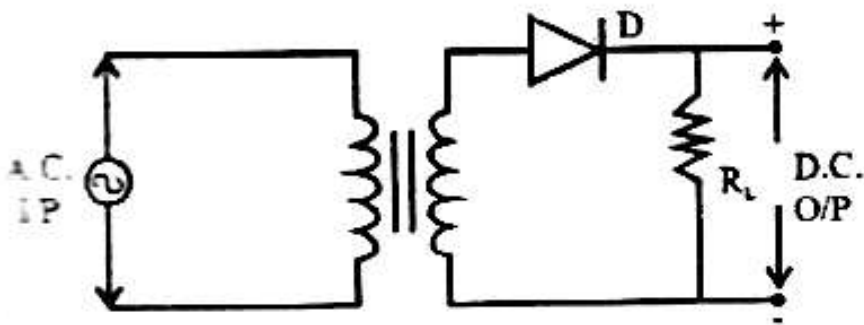
## Free Hand sketching of sodium vapour lamp



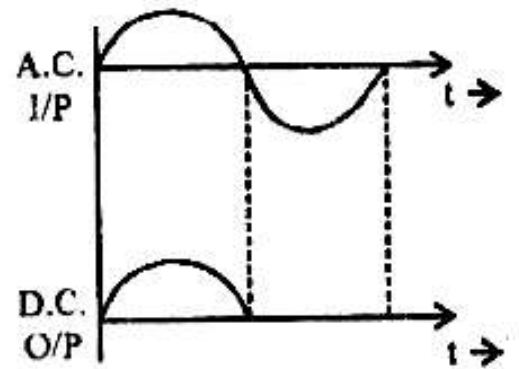
चित्र सोडियम वेल्ड लेम्प

## Free Hand sketching of fluorescent tube.



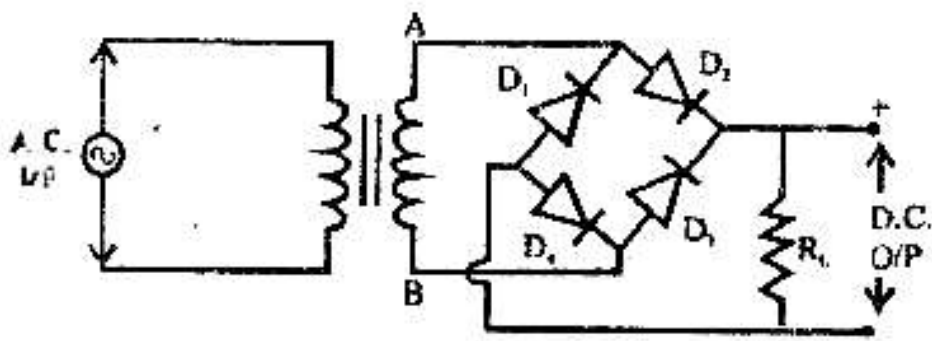


**a) Half wave Rectifier**

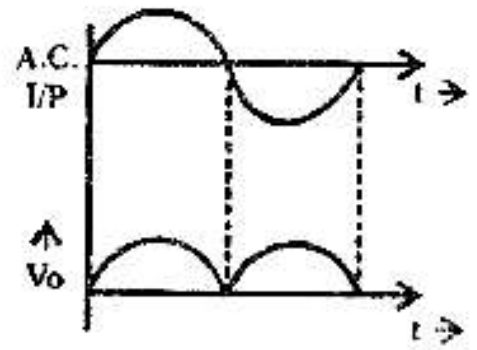


**b) Wave forms**





**a) Bridge Rectifier**



**b) Waveforms**