

Q1:- (a) Single phase transformer 220/400 V, 1 kVA, 50 Hz.

Draw the hysteresis output with settings & scaling.

And Draw the wiring diagram for it.

(b) If the voltage is halved, what is the effect of the curve?

Exp. 2 الرخصة

Q2:- Draw the wiring diagram of polarity test
 $S_r = 50 \text{ MVA}$, $\frac{220 \text{ V}}{\sqrt{3}} / \frac{220 \text{ V}}{\sqrt{3}}$ volt, 50 Hz. with all devices.

And show when it indicates addition and when it indicates subtraction

Q3:- Draw the wiring diagram of short circuit test.

as preferred S_r , $\frac{220 \text{ V}}{\sqrt{3}} / \frac{220 \text{ V}}{\sqrt{3}}$, 50 Hz.

And show the equivalent ckt For this ckt.

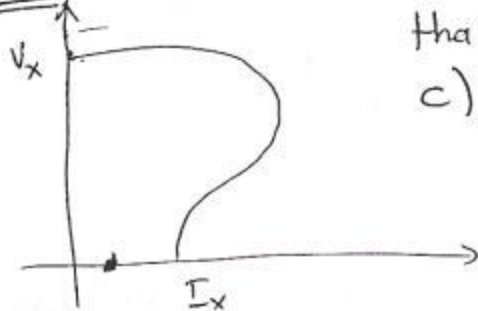
Show how we can obtain the parameters from this test By equations.

- What is the range of the short circuit voltage? $(3-8) V_{\text{rated}}\%$

Q4:- Is it possible to obtain a full load terminal voltage high than no-load terminal voltage for any D.C generator? Explain why?

Q4:- ~~Is it~~ State how to control the speed of motor and range of speed for each method & show the torque-speed characteristic for both cases.

Q5:-



a) Mention the type of this Machine?

b) What is V_x and I_x and what are the parameters that effect on them?

c) Show the wiring diagram for the test that gives this figure?