Quiz on Single Phase Transformer -1

Part 1 Personal Details
Part 2 Quiz
*Required

1. Email address *

2. Name *

3. Branch *

Mark only one oval.

- TC
- MMFT

4. Roll No *

Enter correct 13 digit roll number.

5. Mobile Number *

Enter correct 10 digit Mobile no.

Quiz

6. Single phase Transformer is * 1 point

Mark only one oval.

- An electro-mechanical energy conversion device
- Used in Power grid for increasing grid current
- very low efficiency device and incur heavy lossess in transmission lines
- used for stepping up and down ac Voltages

7. One of the drawbacks of using Potential Divider in place of transformer is * 1 point

Mark only one oval.

- Potential divider cannot be used for AC voltages
- There will be huge losses in the resistor and low efficiency will result
- The voltage cannot be stepped down by this method
- The flux created in resistor will not be constant.

8. In auto-transformer * 1 point

Mark only one oval.

- The two windings are not connected electrically so there is no danger of direct short circuit of primary and secondary
- we can step up as well as step down the supply voltage
- Both 1 and 2 are correct
- None of the above

9. $Erms$ = $4.44f\phi mN$is the expression for * 1 point

Mark only one oval.

- RMS value of EMF induced in HV Coil
- RMS value of EMF induced in LV Coil
- RMS value of EMF induced in HV or LV Coil
- RMS value of Voltage supplied to the primary Coil

10. In an ideal transformer we assume about Coil Resistances, Core material permeability, Leakage Flux and Core Losses to be * 1 point

Mark only one oval.

- infinite, zero, zero, infinite
- Zero, Infinite, Zero, Infinite
- infinite, Zero, Infinite, Zero
- Zero, Infinite, Zero, Zero

11. In a transformer if the secondary side is left open it is said that Transformer is : * 1 point

Mark only one oval.

- On Load
- fully loaded
- at No-Load
- at minimum Load

12. In an ideal single phase transformer if the secondary side Turns are N2 and Primary side turns are N1, The primary current I1 and Secondary current I2 can be related as: * 1 point

Mark only one oval.

- $(N1/N2)=(I2/I1)$
- $(N1 X N2)=(I2 X I1)$
- $(N1/N2)=(I1/I2)$
- $(N1 X N2)=(I1 X I2)$

13. The core of the transformer is made up of * 1 point

Mark only one oval.

- thin sheets of CRGO steel
- Thin sheets of stainless Steel
- Thin sheets of Low resistance copper
- solid Cast iron

14. A 5kVA, 200 V/ 100 V, 50 Hz, single phase ideal two winding transformer is to used to supply full Load at 100 V. The full load secondary current and primary current will be * 1 point

Mark only one oval.

- 25A, 50A
- 25A, 25A
- 50A, 25A
- None of the above

15. A 5kVA, 200 V/ 100 V, 50 Hz, single phase ideal two winding transformer is to used to supply a Load of 25+j50 Ohm at LV side when rated voltage is supplied at hv side . The secondary power factor will be * 1 point

Mark only one oval.

- 0.826
- 0.811
- 0.862
- 0.830