UNIT-3

Transformers

S.No		Questions	BT	CO	PO
Part – A (Short Answer Questions)					
1		What is a transformer?	BT1	CO3	PO1
2		How does a transformer work?	BT1	CO3	PO2
3		What is auto transformer?	BT2	CO3	PO2
4		What is the difference between step up transformer and step down transformer?	BT2	CO3	PO2
5		What are properties of ideal transformer?	BT2	CO3	PO2
6		What is eddy current loss in transformer?	BT2	CO3	PO2
7		What is the condition for maximum efficiency of transformer?	BT2	CO3	PO1
8		Define transformation ratio for transformer.	BT2	CO3	PO2
9		What is meant by regulation in a transformer?	BT3	CO3	PO2
10		What is hysteresis loss in transformer?	BT3	CO3	PO3
Part – B (Long Answer Questions)					
11	a)	Explain Construction of Single Phase Transformer With Neat Diagram?	BT2	CO3	PO2
	b)	Explain Principal of Operation Of Single-Phase Transformer?	BT3	CO3	PO3
12	a)	Obtain Conditions For Maximum Efficiency Of A Single-Phase Transformer?	BT3	CO3	PO2
	b)	Explain Losses In Single Phase Transformer?	BT2	CO3	PO1
13	a)	Derive Emf Equation Of Single Phase Transformer?	BT3	CO3	PO2
	b)	Explain Working Of Single Phase Transformer On Load Condition.	BT3	CO3	PO2
14	a)	Explain Working Of Single Phase Transformer No Load Condition.	BT2	CO3	PO2
	b)	Explain The Principle And Operation Of Auto Transformer?	BT2	CO3	PO2

15	a)	Explain Three Phase Transformer Connection.	BT2	CO3	PO2
	b)	A 125 KVA transformer having primary voltage of 2000V at 50 Hz has 182 primary and 40 secondary turns.Neglecting losses,Calculate (i)The full load primary and secondary currents.(ii)The no load secondary induced emf (iii)Maximum flux in the core	BT2	CO3	PO2
16	a)	Explain about core and shell type transformer.	BT3	CO3	PO2
	b)	Explain about step up and step down transformer and derive an expression for equivalent circuit of transformer.	BT3	CO3	PO2