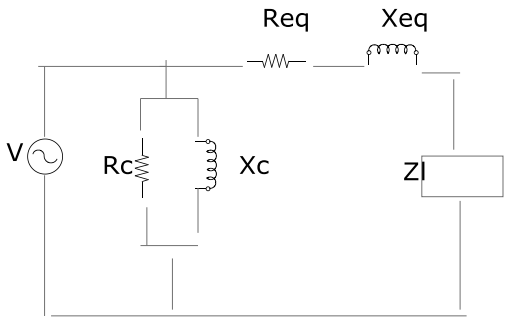
G040 Online Test

Ref339



Req= 0.3Ω, Xeq= 0.4 Ω, Rc= 200 Ω, Xc= 400 Ω, V = 200 V, Zl= 2.7 + j 3.6 Ω

Find efficiency

A	47%	B	86.4%
C	99%	D	35%
	Answer		

Ref340

200/400V Transformer

Open circuit test—Io= 0.7A, Po= 60W

Short circuit test--- Vsc= 9V, Isc= 6A, Psc = 26 w. Find Re', Xe', Rc and Xc

A	0.12 Ω 0.4 Ω, 666.7 Ω, 317.8 Ω	B	0.06 Ω 0.2 Ω, 333.35 Ω, 156 Ω
C	1 Ω ,4 Ω, 666.7 Ω, 317.8 Ω	D	2 Ω ,8 Ω, 500 Ω, 400 Ω
	Answer		

Ref341

KVA = 500, Copper loss = 4 KW, Iron loss = 2.4 KW. Find ½ load efficiency at 0.8 PF lagging.

A	66%	B	98.1%
C	75%	D	40%
	Answer		

Ref342

%Reg = % Req cosϴ+/- %Xeq sinϴ

+ for

A	Leading	B	Lagging
C	Unity	D	
	Answer		

Ref343

Dy, Yd connection is suitable for

A	Small HV transformer	B	Large LV transformer
C	Power supply transformer	D	Earthing transformer
	Answer		

Ref344

10MVA Star/ Star connected transformer. 33KV/ 11KV

No load test Line voltage = 11KV, Line current = 15A, Power = 75KW

Short circuit test Line voltage= 1650V L-L, Line current = rated current, Power=90KW

Find Req, Xeq, Ro', Xo'

A	0.98Ω, 5.3 Ω, 14.5KΩ,2.93 KΩ	B	2Ω, 10 Ω, 20KΩ,5KΩ
C	4Ω, 20 Ω, 40KΩ,15 KΩ	D	1Ω, 5 Ω, 30KΩ,15 KΩ
	Answer		

Ref345

Find the load at maximum efficiency of the following single phase transformer. KVA = 5000, Voltage ratio = 6600/440, Iron loss = 2.9 KW, Full load copper loss = 4KW, Maximum efficiency is achieved at 0.8 PF lagging. Find maximum efficiency.

A	0.7 , 90%	B	0.851, 98.38%
C	0.35, 75%	D	0.45, 85%
	Answer		

Ref346

Find all day efficiency of the following transformer 100 KVA, single phase, Iron loss=750W Full load copper loss = 750W 24 hr load cycle.

Time	Power factor	Output
8 hr	0.8 Lag	80KW
6hr	0.9 lag	50 KVA
4hr	25KVA & 20 KW	
3hr	Energized with no load	
The rest of time	De-energized	

Calculate all day efficiency.

A	98.1%	B	75%
C	60%	D	50%
	Answer		

Ref347

To operate two transformers in parallel , it needs

A	Same voltage ratio	B	Same % impedance
C	Like polarity	D	All above
	Answer		

Ref348

2700KVA load PF 0.9 lagging is supplied by two transformers connected in parallel.

Tr A = 2000KVA Z = 3+J2 ohm

TrB =1000KVA X=3+j5 ohm

Find load A transformer load share, B load share.

A	1350, 1350 KVA	B	900, 1800 KVA
C	1000KVA, 1700KVA	D	721KVA, 2332KVA
	Answer		

Ref349

Which winding can not take away harmonic ?

A	Star/Star without neutral	B	Star/Star with neutral
C	Delta/Delta	D	Star/Delta
	Answer		

Ref350

400/200 V , 50VA transformer needs to supply 600/200V. Find the rating.

A	The same rating	B	100VA
C	33.3VA	D	11VA
	Answer		

Ref351

ONAF is

A	Oil is naturally cooled by force air	B	Forced oil is cooled by forced air
C	Oil is naturally cooled by force oil	D	Oil is naturally cooled by natural air
	Answer		