

**G042 Online Test**

Ref352

Circuit breaker is

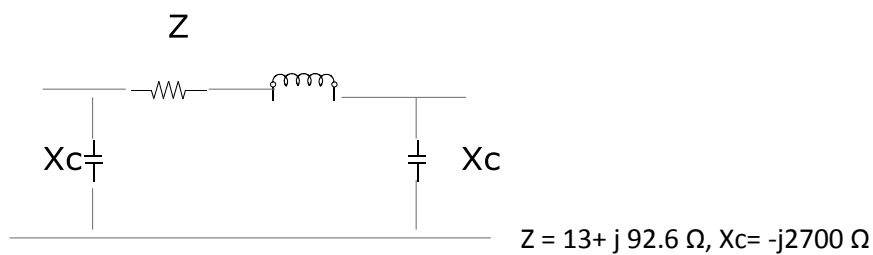
A	To cut off the circuit when fault occurs	B	To cool the arc after disconnecting the circuit
C	To reclose the switch	D	All above
<b>Answer</b>			

Ref354

Find the input impedance and VSWR of a transmission line  $4.3\lambda$  long when  $Z_0=100\Omega$  &  $Z_L=200-j150\Omega$

A	$1+j2 \Omega, 0.592 \lambda$	B	$2-j1.5 \Omega, 0.592 \lambda$
C	$3+j4 \Omega, 1.6 \lambda$	D	$3-j4 \Omega, 3.6 \lambda$
<b>Answer</b>			

Ref356



Find A, B, C, D constants

A	A=1.8, B= 180, C =0.0007, D= 1.8	B	A=2, B= 360, C =0.0012, D= 2
C	A=3, B= 400, C =0.015, D= 5	D	A=0.967, B= 93.5, C =0.0007, D=0.967
<b>Answer</b>			

Ref358

A  $50\Omega$  transmission line is connected to a load impedance  $75+j60\Omega$ . The forward wave voltage RMS value on line is 25V. Calculate

- (a) Power delivered to resistive part of load impedance
- (b) RMS current in impedance reflected wave voltage RMS size
- (c) Peak voltage , forward and backward waves
- (d) Voltage standing wave ratio (VSWR)
- (e) Return loss in decibel

A	12.5W, 0.101A, 35.6V, 16.57V, 2.764,4.4dB	B	25W, 0.38A, 70V, 32V, 5.3,8.8dB
C	5W, 0.39A, 70V, 16V, 3, 4dB	D	25W, 0.38A, 40V, 32V, 2.764,4.4dB
Answer			

Ref360

The sum of \$1000 is invested at 6% for 10 years at compound interest.

(a) Calculate the sum at the end of 10 years (b) If instead of lump sum at the end of 10 years, the loan of \$1000 is to be paid by fixed amount each year, calculate the annual amount.

A	\$1791, \$ 135.90	B	\$3400, \$270
C	\$1000,\$70	D	\$500,\$35
Answer			

Ref362

Attenuation is related to

A	Radiation loss	B	Dielectric loss
C	23V, 24.8V, -0.96V, -0.76V, 2V	D	All
Answer			

Ref364

Which is correct?

A	$\lambda = v/f$	B	$\lambda = f/v$
C	$\lambda = fv$	D	$\lambda = f+v$
Answer			

Ref366

In short transmission line,

A	Load impedance dominates the circuit	B	Line impedance dominates the circuit
C	Load & line impedance equally influence the circuit	D	Load & line impedance do not influence the circuit
Answer			

Ref368

Reflection coefficient is

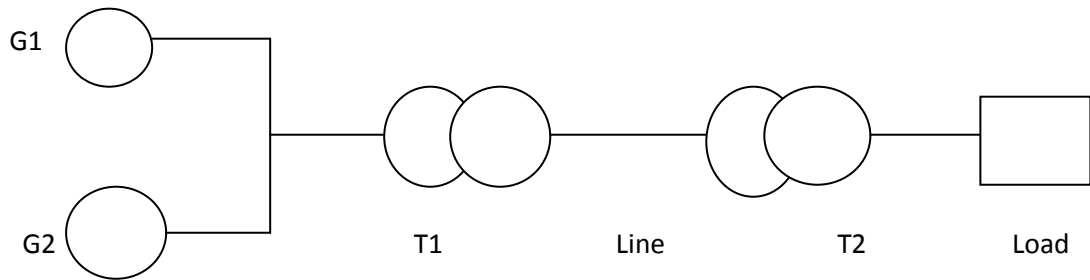
A	$(Zl - Zo) / (Zl + Zo)$	B	$(Zl + Zo) / (Zl - Zo)$
C	$Zl Zo / (Zl + Zo)$	D	$Zl Zo / (Zl - Zo)$
Answer			

Ref 370

No magnetic field in direction of propagation is

A	TM mode	B	TE mode
C	TEM mode	D	Hybrid mode
Answer			

Ref372



G1-1000VA 250V  $Z = j0.2$  pu

G2-2000VA 250V  $Z = j0.8$  pu

T1=4000VA 250/800V  $z = j0.1$  pu

Line  $Z = 50 + j200$  ohm

T2= 8000VA 800/400 V  $Z = j0.08$  pu

Load---2500VA 400V

Calculate PU impedance referred to base 5000VA 250V Base

A	Generator= $j 0.75$ pu TrA = $j0.125$ pu, Tr B = $j0.125$ pu Line = $0.39 + j1.56$ pu Load 0.5 pu	B	Generator= $j 1.5$ pu TrA = $j0.25$ pu, Tr B = $j0.25$ pu Line = $0.78 + j3$ pu Load 1 pu
C	Generator= $j 3$ pu TrA = $j0.5$ pu, Tr B = $j0.5$ pu Line = $1.56 + j6$ pu Load 2 pu	D	Generator= $j 3$ pu TrA = $j0.5$ pu, Tr B = $j1$ pu Line = $3 + j4$ pu Load 3pu
Answer			