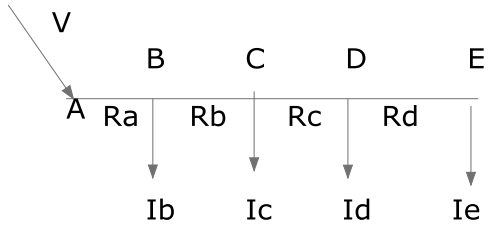
G047 Online Test

Ref407



V= 500V, Ra=0.1Ω, Rb=0.2Ω, Rc= 0.2Ω Rd = 0.1Ω

I_b = 5A, I_c = 10A, I_d = 20A, I_e = 10A, Calculate line efficiency

A	96.8%	B	90%
C	80%	D	75%
	Answer		

Ref408

Three towns A, B, C are located as follows. Determine the most suitable place to locate the electric power station to supply those towns.

A = 1000MW (10,20) km

B= 600MW (5, 7) km

C= 500MW (10, 15) km

A	7 km, 10 km	B	3.57 km, 15.09 km
C	4 km, 8 km	D	12 km, 20 km
	Answer		

Ref409

$\sqrt{a^2 + b^2}\ \angle 180 - \tan^{-1} b / a$ is the answer of

A	a+jb	B	a-jb
C	-a+jb	D	-a-jb
	Answer		

Ref410

Copper requirement for dc 2 wires than AC three phase 3 wire is

A	$3\cos^2\theta$	B	$1 / 3\cos^2\theta$
C	$\cos\theta$	D	$\cos^2\theta$
	Answer		

Ref411

$\frac{Z1}{Z2} \angle \theta1 - \theta2$ is answer of

A	$Z1\angle\theta1 + Z2\angle\theta2$	B	$Z1\angle\theta1 \times Z2\angle\theta2$
C	$Z1\lfloor\theta1 / Z2\ \theta2$	D	$Z2\lfloor\theta2 / Z1\lfloor\theta1$
	Answer		

Ref412

$Z1\ Z2 \angle \theta1 + \theta2$ is answer of

A	$Z1\angle\theta1 + Z2\angle\theta2$	B	$Z1\angle\theta1 \times Z2\angle\theta2$
C	$Z1\lfloor\theta1 / Z2\ \theta2$	D	$Z2\lfloor\theta2 / Z1\lfloor\theta1$
	Answer		

Ref413

A transmission line has 200 m span between supports. The conductor weight is 20 N/ m and tension in conductor is 20 KN. Calculate sag.

A	7 m	B	3.5 m
C	4 m	D	5 m
	Answer		

Ref414

A 15V dc source with an internal resistance of 30Ω is connected to a transmission line of length " L " having an impedance of 200Ω by switch. The transmission line is terminated with a 1000Ω resistor. T = amount of time required for signal to travel the length of the line.

Calculate third reflection at load.

A	7.488V	B	15V
C	10V	D	20V
	Answer		

Ref415

Determine the A, B, C, D constants of the network in which the following test results have been observed.

Receiver open circuit

Vs = 100 0 V

Vr = 70.7 $\angle$ -45 V

Is =1.41 $\angle$ - 30 A

Ir = 0

Receiver short circuit

V r= 0

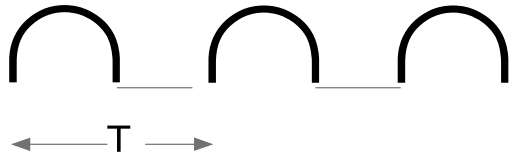
Vs = 100 $\angle$ 0 V

Is = 2 $\angle$ -90 A

Ir = 2 $\angle$ -90 A

A	1.41 (Angle – 45 deg), 0.0141 (Angle 45 deg) , 50 (Angle 0 deg) 1	B	1.41 (Angle 45 deg), 0.0141(Angle -45 deg) ,50(Angle 90 deg) 1
C	1.41 (Angle 90 deg), 0.0141 (Angle -90 deg) , 50(Angle 0 deg) 1	D	1.41 (Angle – 90deg), 0.0141 (Angle 90 deg) , 50 (Angle 0 deg) 1
	Answer		

Ref416



T = 10 ms

Find the frequency

A	10HZ	B	!000HZ
C	100HZ	D	10000HZ
	Answer		

Ref417

A voltage is given by e= 30 sin wt + 60 sin (3wt+45) + 10 sin (5wt – 60) volt is applied to a circuit & the resulting current is given by

I = 0.8 sin (wt-20) + 0.15 sin (3wt-25) + 0.09 sin (5wt -120)

Find total power applied and overall power factor.

A	12.18W, 0.43	B	20W, 0.5
C	30W, 0.6	D	6W, 0.4
	Answer		