

G001 Online Test

Ref137

The flux is equal to

A	$\phi = F_m \times R_m$	B	$\phi = F_m / R_m$
C	$\phi = R_m / F_m$	D	$\phi = F_m + R_m$
Answer			

Ref 138

Rm is equal to

A	$l\mu / A$	B	$L\mu A$
C	$L/\mu A$	D	$\mu A/l$
Answer			

Ref139

Flux density is equal to

A	ϕ/A	B	A/ϕ
C	ϕA	D	$\phi+A$
Answer			

Ref140

The torque produced in electric motor is equal to

A	$T = Br/ L$	B	$T = BL r$
C	$T = BL/ r$	D	$T + Br + L$
Answer			

Ref141

A plunger brake electro-magnetic operates at a flux density of 12 tesla. If the CSA of the magnetic circuit is 0.04 sq-m and reluctance is 12000 amp-turn / wb, what current is required to operate the magnet if the coil has 1000 turns.

A	0.576A	B	0.288A
C	1.3A	D	2.8A
Answer			

Ref142

The induced voltage in conductor moving in magnetic field is

A	$E = BI \sin\theta$	B	$E = BLV \cos\theta$
C	$E = BLV$	D	$E = BLV \sin\theta$
Answer			

Ref143

The voltage induced in coil of N turns is

A	$V = N \times d\phi / dt$	B	$V = NI$
C	$V = N\phi$	D	$V = N^2\phi$
Answer			

Ref144

What is the velocity of a conductor 150 mm long and moving at right angle to magnetic field having a flux density of 0.4 tesla? The induced voltage is 4V.

A	6 m/s	B	3.3 m/s
C	12 m/s	D	1.5 m/s
Answer			

Ref145

The force between two current carrying conductors is

A	$F = 10^{-7} I / d$	B	$F = 2 \times 10^{-7} I / d$
C	$F = NI / d$	D	$F = 4 \pi 10^{-7} I / d$
Answer			

Ref146

A transformer has 50 turns on the primary and 600 turns on secondary . If a flux of 0.25 wb is induced to zero in 10 ms, calculate the induced emf in each coil.

A	E1 = 2500V, E2 = 30000V	B	E1 = 250V, E2 = 3000V
C	E1 = 300V, E2 = 25000V	D	E1 = E2 = 3000V
Answer			

Ref147

If a conductor is being rotated at 2000 RPM in magnetic field and induces 400V . If it is rotated at 1000 RPM.. Find the induced emf.

A	400V	B	200V
C	100V	D	50V
Answer			

Ref148

A 240 V coil 5000T produces magnetizing force 4000AT/ m . The magnetic circuit is 200 mm long. CSA 500 sq-mm. Find the resistance of the coil.

A	3000Ω	B	1500Ω
C	750Ω	D	150Ω
Answer			