

G012 Online Test

Ref160

The force produced in three phase winding of AC machine is

A	$3 \text{ Im } N e^{j\omega t}$ ----- 2	B	$\text{Im } N e^{j\omega t}$ ----- 2
C	$\sqrt{3} \text{ Im } N e^{j\omega t}$ ----- 2	D	$\sqrt{3} \text{ Im } N e^{j\omega t}$
Answer			

Ref161

Three phase , 4 poles , 36 slots, 50HZ winding . The coil span is

A	7	B	8
C	9	D	10
Answer			

Ref162

The speed of 2 poles, 25 HZ motor is

A	3000 rpm	B	1500 rpm
C	750 rpm	D	1000 rpm
Answer			

Ref163

The measured speed of three phase , 4215V, 50HZ, 2 poles motor is 2700 rpm. . Slip and % slip are

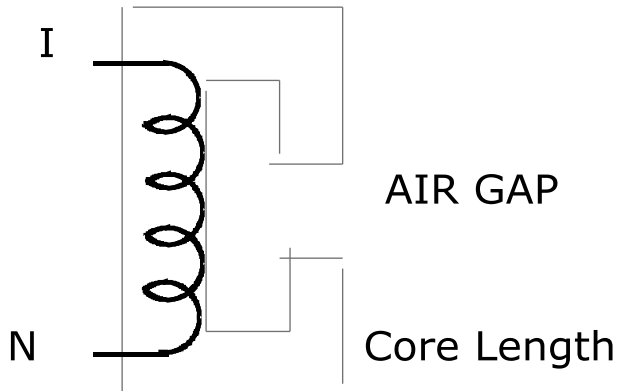
A	0.2, 20%	B	0.15, 15%
C	0.3, 30%	D	0.1, 10%
Answer			

Ref164

The relationship between voltage, current and number of turns of a transformer is

A	$V_1/V_2 = N_1/N_2 = I_2/I_1 = a$	B	$V_1/V_2 = N_2/N_1 = I_2/I_1 = a$
C	$V_1/V_2 = N_1/N_2 = I_1/I_2 = a$	D	
Answer			

Ref165



$N = 350$ Turns, Air Gap = 0.15mm, Core length = 1250mm, Flux density = 1.105 T , $\mu = 1800$

The current I is

A	6.2 A	B	9.3A
C	1.26A	D	3.16A
Answer			

Ref166

The voltage regulation of a synchronous generator is

A	$\frac{E_f - V}{V} \times 100\%$	B	$\frac{E_f}{V} \times 100\%$
C	$\frac{V - E_f}{V} \times 100\%$	D	
Answer			

Ref167

Synchronous impedance is

A	$Z_s = V_{oc} / I_{sc}$	B	$Z_s = V_{sc} / I_{oc}$
C	$Z_s = V_{oc} / I_{oc}$	D	
Answer			

Ref168

The voltage equation for synchronous generator is

A	$E_f = V + I Z_s$	B	$E_f = V - I Z_s$
C	$E_f = V \times I Z_s$	D	$E_f = V / I Z_s$
Answer		A	

Ref169

The voltage equation for synchronous motor is

A	$E_f = V + I Z_s$	B	$E_f = V - I Z_s$
C	$E_f = V \times I Z_s$	D	$E_f = V / I Z_s$
Answer			

Ref45

The weight of a tabular steel column 120 mm outside diameter and 100 mm inside diameter and 3 m height is

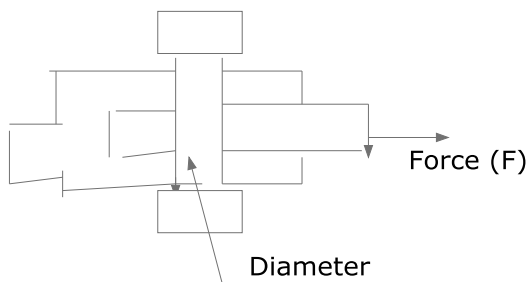
A	1000N	B	500N
C	400N	D	793.3N
Answer			

Ref46

A steel specimen 10 mm diameter rupture under 37KN , the ultimate strength is

A	800N/mm ²	B	1200N/mm ²
C	471N/mm ²	D	1024N/mm ²
Answer			

Ref47

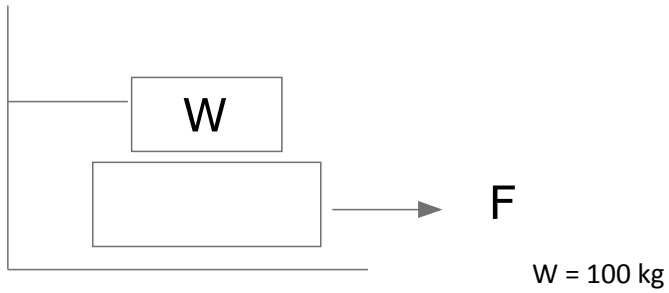


Diameter = 10 mm² Force (F) = 37 KN

The stress is

A	1200N/mm ²	B	471N/mm ²
C	1000N/mm ²	D	200N/mm ²
Answer			

Ref50



A 100 kg block rests on a plate. The coefficient of friction between all surface is 0.2. The force required to pull the plate is

A	100 N	B	392.4 N
C	800 N	D	700 N
Answer			

Ref51

The total stopping distance of a car for total time taken from the point where the driver sights the danger if the driver's reaction time before applying the brake is 0.9 sec with initial velocity 60 km/ hr and retardation due to brake is 7.5 m/s^2

A	60m	B	33.5m
C	100m	D	150m
Answer			