G037+G038+G039 Online Test

Ref260

Which step will you do first to protect the insulation from external voltage?

A	Study the break down voltage	B	Provide band pass filter and band stop filter
C	Provide chemical leakage protection	D	Investigate the source of impact
	Answer	D	

Ref265

Harmonic distribution depends on

A	Level of harmonic generation	B	System frequency response characteristics
C	Temperature rise, vibration, life time shortage, heating	D	All above
	Answer	D	

Ref290

Which protection system is not assigned to substation?

A	Differential protection	B	Voltage surge diverter
C	Distance relaying	D	Booster
	Answer	C	

Ref295

Two power systems A & B each has a regulation R1 of 0.1 pu on respective capacity base and a stiffness U of 1 pu. The capacity of system (a0 is 1500MW and B 1000MW. The systems are interconnected through a tie line and are initially at 60HZ if there is 100MW load change in the (a), calculate the change in steady state value of frequency and power transformer.

A	-0.034 Hz, - 6 MW	B	1 HZ, 6 MW
C	0.5 HZ, 132 MW	D	-0.34 HZ, 6 MW
	Answer	A	

Ref300

Voltage variation is caused by

A	Voltage at the source can not be controlled	B	Voltage at secondary transformer varies
C	Voltage drop in transmission & distribution lines	D	All above
	Answer	D	

Ref305

Which one can not reduce harmonic?

A	Delta connected 3 limbs transformer	B	Five limbs transformer
C	Harmonic filter	D	Bigger size neutral wire
	Answer	A	

Ref310

$f_n = (K_p +/- 1) \ f_1$

A	f_n is fundamental frequency and f_1 is harmonic frequency	B	f_n is nth harmonic frequency and f_1 is fundamental frequency
C	f_n is synchronous frequency and f_1 is normal frequency	D	All above
	Answer	D	

Ref315

The main objective of earthing electrical system at the power system is

A	To provide the equipotential bonding	B	To allow earth leakage current to flow
C	To protect voltage surge	D	To establish a common reference potential for power supply system
	Answer	D	

Ref320

Sudden frequency change in steady condition of voltage , current or both is

A	Impulsive transient	B	Oscillatory transient
C	Voltage imbalance	D	
	Answer	A	

Ref325

To improve power quality

A	Provide harmonic cancellation	B	Filtering
C	Use of isolation transformer and derating	D	All above
	Answer	D	

Ref330

To improve reliability

A	Use fast interrupting switch and fault current limiter	B	Reduction of voltage sag during short circuit
C	Improvement of power system stability	D	All above
	Answer	D	

Ref335

A 250 MVA , 25 KV three phase steam turbine generator has a synchronous reactance 1.6pu and a transient reactance Xd ' of 0.23 pu , it delivers it's rated output at a power factor of 100%. A short circuit suddenly occurs on the line close to generator station.

Calculate steady state value of short circuit current.

A	3400A	B	1700A
C	5000A	D	6800A
	Answer	D	

Ref336

An isolated 75MVA synchronous generator feeds it's own load and operates initially at no load at 3000 RPM, 50HZ. A 20 MW load is suddenly applied and the steam valve to the turbine commence to open after 0.5 sec due to the time lag in the governor system. Calculate the frequency to which the generated voltage drops before the steam flow meets the new load. The stored energy for the machine is 4KW – S- per KVA of generator capacity

A	30HZ	B	49.2HZ
C	56HZ	D	70HZ
	Answer	B	