

GE3 Electrical Distribution

Part 1 Lessons

Electrical Power Systems I

EE114	Electrical Power Principle	1
EE118	Electrical Energy Supply System	3

G015/ IS67+68+ IS74

Page 196 to 231 of

http://www.filefactory.com/file/cf9bf8f/n/Video_Lessons.pdf

Power System (1)

[G015\(AA\)Lesson 1-Distribution system.zip](#)

<http://youtu.be/VuzjXkRx4UI>

http://www.filefactory.com/file/c0ba282/n/G015_AA_Lesson_1-Distribution_system.zip

[G015\(AA\)Lesson 2-Demand factor.zip](#)

<http://youtu.be/cUGbxhBT-Dc>

<http://youtu.be/DCCI4cO3Vu8>

http://www.filefactory.com/file/c0ba4a1/n/G015_AA_Lesson_2-Demand_factor.zip

[G015\(AA\)Lesson 3-Sag.zip](#)

<http://youtu.be/1s496h-luu8>

http://www.filefactory.com/file/c0ba4ec/n/G015_AA_Lesson_3-Sag.zip

[G015\(AA\)Lesson 4-OH Line mechanical design.zip](#)

<http://youtu.be/T0BnyqV9T6E>

http://youtu.be/hu1TrUv2_OY

http://www.filefactory.com/file/c0ba5e1/n/G015_AA_Lesson_4-OH_Line_mechanical_design.zip

G015(AA)Lesson 5-UG Cable.zip

<http://youtu.be/hHCLzMnVmT0>

<http://youtu.be/A5AieaBBZHo>

http://www.filefactory.com/file/c0ba577/n/G015_AA_Lesson_5-UG_Cable.zip

G015(AA)Lesson 6-Voltage control.zip

<http://youtu.be/y1vTM5fvyU>

<http://youtu.be/Z9HBGsVgymA>

http://www.filefactory.com/file/c0ba7a1/n/G015_AA_Lesson_6-Voltage_control.zip

Electrical Power Systems II

CLASS LESSONS

Power System 1-G015+G046+A010

[AA.zip](#)

<http://www.filefactory.com/file/c0b7e92/n/AA.zip>

Exercise

Do G015AA Page 117 to 123 of the following link

http://www.filefactory.com/file/c0b7da3/n/Advanced_Diploma_in_Electrical_Engineering_Exercises.zip

Part 2 References

Module Book

7762AA Module Book Modified Jan 08.pdf (4.86MB)

http://www.filefactory.com/file/ib5mm6zpbzbz/n/7762AA_Module_Book_Modified_Jan_08.pdf

Typed Notes

AA_Typed_Note_1.doc (7.95MB)

http://www.filefactory.com/file/52th5qky2xbr/n/AA_Typed_Note_1.doc

AA_Typed_Note_2.doc (6.29MB)

http://www.filefactory.com/file/xykhrisfb03/n/AA_Typed_Note_2.doc

AA_Typed_Notes_3-.doc (2.78MB)

http://www.filefactory.com/file/4jghtvdh2fz3/n/AA_Typed_Notes_3-.doc

7762AA_Typed_Note_4.doc (3.71MB)

http://www.filefactory.com/file/6tbh0m3nkgz9/n/7762AA_Typed_Note_4.doc

AA_Typed_note_5.doc (2.64MB)

http://www.filefactory.com/file/3m9oxnu841s1/n/AA_Typed_note_5.doc

AA_Typed_note_6.doc (2.34MB)

http://www.filefactory.com/file/1r05x6wifsmj/n/AA_Typed_note_6.doc

AA_typed_note_7.doc (4.81MB)

http://www.filefactory.com/file/3h5no70cmf3z/n/AA_typed_note_7.doc

AA_typed_note_8.doc (3.48MB)

http://www.filefactory.com/file/1tl431wzp1wr/n/AA_typed_note_8.doc

Part 3 Practicals

Erecting OH Line Tower

http://youtu.be/4Oa_TYE03AA

High Power Transformer

<http://youtu.be/nkdMjGlq0eM>

<http://youtu.be/r6SiiiEM3U8>

<http://youtu.be/dK-co0rn28E>

HV DC Line

<http://youtu.be/LYWQOG1GI0A>

Line Breaker Action

<http://youtu.be/vGd9zOd1hVU>

Line Fault+ Switch Board Fault

<http://youtu.be/8DUGjhDMkiU>

Line Maintenance

<http://youtu.be/jP1ALtd8EJM>

<http://youtu.be/he29KVwB84w>

Line to Line Fault

<http://youtu.be/JOOxxmndQB0>

OH Line Installation

<http://youtu.be/G-iepsQ6wOw>

<http://youtu.be/IU63aXhAqYk>

<http://youtu.be/zG63ZtB5ZOQ>

Power Line Accident Due to Ladder

<http://youtu.be/csV1qiMskSQ>

Removal of link to disconnect 132KV Circuit Breaker

<http://youtu.be/mP11llkpxs>

UG Line Construction

<http://youtu.be/6VTxreRZFkQ>

Power Transformer

Power Transformers.mp4 (76.55MB)

http://www.filefactory.com/file/10vwwztf8xxn/n/Power_Transformers.mp4

Power Transformer Installation.mp4 (7.52MB)

http://www.filefactory.com/file/5xwru7hc6ix1/n/Power_Transformer_Installation.mp4

High Power Transformer.mp4 (84.3MB)

http://www.filefactory.com/file/4jk3tfh10mnn/n/High_Power_Transformer.mp4

Electrical Safety & Electric Fire Awareness

Power line accident due to ladder.mp4 (10.96MB)

http://www.filefactory.com/file/60bpbqkz651tr/n/Power_line_accident_due_to_ladder.mp4

Electric Fire 1.mp4 (62.65MB)

http://www.filefactory.com/file/3k0nyrn8l68n/n/Electric_Fire_1.mp4

Electric Fire 2.mp4 (38.11MB)

http://www.filefactory.com/file/e82aysxd83d/n/Electric_Fire_2.mp4

High Voltage Electrical Works

- **Practical Demonstration Videos**

- **Over Head & Under Ground Lines**

- **UG Line Construction.mp4 (25.19MB)**

http://www.filefactory.com/file/1s4i34cumc0h/n/UG_Line_Construction.mp4

- **Erecting the OH Line tower.mp4 (62.3MB)**

http://www.filefactory.com/file/4p282vhl2ch/n/Erecting_the_OH_Line_tower.mp4

OH Line wire installation.mp4 (52.97MB)

http://www.filefactory.com/file/4gahulyah75z/n/OH_Line_wire_installation.mp4

Operation of UHV Line Circuit Breaker.mp4 (5.58MB)

http://www.filefactory.com/file/5jnob6ztcsv/n/Operation_of_UHV_Line_Circuit_Breaker.mp4

OH Line Installation.mp4 (27.07MB)

http://www.filefactory.com/file/860b1wmjmv/n/OH_Line_Installation.mp4

OH Line Installation 1.mp4 (91.93MB)

http://www.filefactory.com/file/22cxautkqj3z/n/OH_Line_Installation_1.mp4

OH Line cable installation.mp4 (43.12MB)

http://www.filefactory.com/file/48uu8mcub9cf/n/OH_Line_cable_installation.mp4

Line maintenance.mp4 (56.41MB)

http://www.filefactory.com/file/wy2q54pngwr/n/Line_maintenance.mp4

Line to line fault.mp4 (4.96MB)

http://www.filefactory.com/file/pxeio9jnwb3/n/Line_to_line_fault.mp4

Line maintenance 2.mp4 (38.39MB)

http://www.filefactory.com/file/3r0myz0nshxj/n/Line_maintenance_2.mp4

Line faults+ Switchboard fault-Fire.mp4 (61.36MB)

http://www.filefactory.com/file/1rwyqzfpn/n/Line_faults+ Switchboard_fault-Fire.mp4

HV DC Line.mp4 (18.73MB)

http://www.filefactory.com/file/uppn6jee7s5/n/HV_DC_Line.mp4

Online Practical

4.Power System Practicals

Circuit Connection Assessment Number 4.1 Power Practical CT PT Ratio Measurement

<http://www.filefactory.com/file/798ausrs1m6p/n/4.1.doc>

<http://www.filefactory.com/file/57e2el72is2v/n/4.1.xls>

<http://www.filefactory.com/file/798ausrs1m6p/n/4.1.doc>

<http://www.filefactory.com/file/c4779istkit/n/Power Practical-CT PT Ratio measurement.pdf>

Circuit Connection Assessment Number 4.3 Power Practical-UG Cable capacitance test

<http://www.filefactory.com/file/4j2n7y7bf97x/n/4.8.doc>

<http://www.filefactory.com/file/5b9oxsvj9xnb/n/4-8.pdf>

UG_Cable_capacitance_test

<http://www.filefactory.com/file/3noygi3n1zjh/n/Power Practical-G015-UG Cable capacitance test pdf>

Circuit Connection Assessment Number 4.4 Power Practical-Voltage profile chart

http://www.filefactory.com/file/1iz5ji67vspn/n/4_9.xls

http://www.filefactory.com/file/3inaw8r1nvol/n/4_9.doc

<http://www.filefactory.com/file/3j63fse42vzb/n/4-9.pdf>

<http://www.filefactory.com/file/6u4eb773sext/n/Power Practical-G015-Voltage profile chart pdf>

Circuit Connection Assessment Number 4.5 Power Practical-Line air capacitance test

Line_air_capacitance_test

<http://www.filefactory.com/file/37uh3x1uj3d7/n/4-3.pdf>

http://www.filefactory.com/file/4011j0tou8mx/n/4_3.doc

<http://www.filefactory.com/file/2cysmkof0a5t/n/Power Practical-Line air capacitance test pdf>

Circuit Connection Assessment Number 4.6 Power Practical-Line Insulator Capacitance Measurement

Circuit Connection Assessment Number 4.2 Power Practical-OH Insulator capacitance

Line_Insulator_Capacitance_Measurement_.zip

http://powersemester2.zoomshare.com/files/Line_Insulator_Capacitance_Measurement_.zip

http://www.filefactory.com/file/1zjy9yt8hlqn/n/4-5_pdf

http://www.filefactory.com/file/4tc3qi51b2yv/n/4_5_doc

Circuit Connection Assessment Number 4.7 Power Practical-Real power, reactive power, apparent power

3_ph_power

Connection_of_V_I_F_PF_Meter

Reactive_power

http://www.filefactory.com/file/7kx9i3f2mx6n/n/4-2_pdf

http://www.filefactory.com/file/nsdk910ui4f/n/4_2_doc

http://www.filefactory.com/file/7kx9i3f2mx6n/n/4-2_pdf

http://www.filefactory.com/file/nsdk910ui4f/n/4_2_doc

http://www.filefactory.com/file/5w7jcny20kn9/n/Power_Practical-Real_power_reactive_power_apparent_power_pdf

Circuit Connection Assessment Number 4.8 Power Practical-Tr Polarity OCT SCT

TrPolarity_OCT_SCT

http://www.filefactory.com/file/2hidr69inf67/n/4_12_doc

http://www.filefactory.com/file/5s68gn2m8lfr/n/4-12_pdf

http://www.filefactory.com/file/5gcxv439m5in/n/Power_Practical-TrPolarity_OCT_SCT_pdf

Auto_Tr_Test

Circuit Connection Assessment Number 3-4 Over Current Relay

Over_current_relay_test

Relay_Trade_Reference

CT_Ratio

http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf

http://www.filefactory.com/file/6fhmwq8kenzx/n/3-4_pdf

http://www.filefactory.com/file/2ncfb8i5jlh/n/3_4_xls

http://www.filefactory.com/file/n2vd5iew8ob/n/3_4_doc

Circuit Connection Assessment Number 3-5 Comparing AC and DC system

http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf

http://www.filefactory.com/file/2w77umiyif33/n/3_5_xls

http://www.filefactory.com/file/3wkarewtrwnh/n/3_5_doc

http://www.filefactory.com/file/dn69z51p0m7/n/3-5_pdf

Circuit Connection Assessment Number 3-9 Effect of transformer on power line

http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf

Tr_effect_on_line_loss

http://www.filefactory.com/file/1otej68edvix/n/3_9_xls

http://www.filefactory.com/file/6d9b519ms1cj/n/3_9_doc

http://www.filefactory.com/file/71uzi338gzqt/n/3-9_pdf

Circuit Connection Assessment Number 3-10 Tee and Pi Equivalent Line

http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf

http://www.filefactory.com/file/1pyk08zwbib1/n/3_10_doc

http://www.filefactory.com/file/6w79kxk982a5/n/3-10_pdf

HT_Line_Design.

Capacitance_Effect_on_Long_Line

Capacitive_load_effect_on_long_line

Load_Centre

Online Test

G015+G046

[G015+G046 MCQ Practice 1](#)

[G015+G046 MCQ Practice 2](#)

[G015+G046 MCQ Practice 3](#)

[G015+G046 MCQ Practice 4](#)

[G015+G046 MCQ Practice 5](#)

G037+G038+G039

[G037+G038+G039 MCQ Practice 1](#)

[G037+G038+G039 MCQ Practice 2](#)

[G037+G038+G039 MCQ Practice 3](#)

[G037+G038+G039 MCQ Practice 4](#)

[G037+G038+G039 MCQ Practice 5](#)

G015+G046 Test 1-----UETTDRIS 67+68+74

http://www.filefactory.com/file/4jzmn6sa4rkd/n/G015_G046_Online_Test_1_Answer_doc

http://www.filefactory.com/file/50ox6xeklufp/n/G015_G046_Online_Test_1_Question_pdf

http://www.filefactory.com/file/5eai2er97faz/n/G015_G046_Online_Test_1_Marking_doc

<http://www.classroomclipboard.com/503511/Home/Test/67dbfd25caa3484498a850f3b1050457#/InitializeTest.xml>

G9UCJ

G015+G046 Test 2-----UETTDRIS 67+68+74

http://www.filefactory.com/file/1s822zs1jz89/n/G015_G046_Online_Test_2_Question_pdf

http://www.filefactory.com/file/46fd21gaqbrz/n/G015_G046_Online_Test_2_Marking_doc

http://www.filefactory.com/file/72nnb9tokazx/n/G015_G046_Online_Test_2_Answer_doc

<http://www.classroomclipboard.com/503511/Home/Test/204b4231f0ea4492986ce2ec11302704#/InitializeTest.xml>

FSXU

G015+G046 Test 3-----UETTDRIS 67+68+74

http://www.filefactory.com/file/4vsjt10eyxbr/n/G015_G046_Online_Test_3_Marking_doc

http://www.filefactory.com/file/670cmx5aiqd9/n/G015_G046_Online_Test_3_Answer_doc

http://www.filefactory.com/file/6pcivv5e0y05/n/G015_G046_Online_Test_3_Question_pdf

<http://www.classroomclipboard.com/503511/Home/Test/542fb0501a334d8788c68c19208e96e1#/InitializeTest.xml>

JE3W

G015+G046 Test 4-----UETTDRIS 67+68+74

http://www.filefactory.com/file/11r4pppif5fz/n/G015_G046_Online_Test_4_Marking_doc

http://www.filefactory.com/file/4obspr3n1kfn/n/G015_G046_Online_Test_4_Question_pdf

http://www.filefactory.com/file/11r4pppif5fz/n/G015_G046_Online_Test_4_Marking_doc

<http://www.classroomclipboard.com/503511/Home/Test/faf4fd339f25425784a5c04d186fe5db#/InitializeTest.xml>

CCLV2SN

G015+G046 Test 5-----UETTDRIS 69

http://www.filefactory.com/file/5t1q4kveec4v/n/G015_G046_Online_Test_5_Question_pdf

http://www.filefactory.com/file/6kjomzcb4z/n/G015_G046_Online_Test_5_Marking_doc

http://www.filefactory.com/file/1059gjdiyfqf/n/G015_G046_Online_Test_5_Answer_doc

<http://www.classroomclipboard.com/503511/Home/Test/0fd45546932d49dbb628fee5cbbaed7b#/InitializeTest.xml>

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G037+G038+G039 Test 1-----UETTDRIS 67+68+69

http://www.filefactory.com/file/22ti8gb92ekf/n/G037_G038_G039_Online_Test_1_Answer_doc

http://www.filefactory.com/file/23tfp2egn4f3/n/G037_G038_G039_Online_Test_1_Marking_doc

http://www.filefactory.com/file/73d338io59lr/n/G037_G038_G039_Online_Test_1_Answer_pdf

http://www.G037+G038+G039_Test_1_Question.pdf

http://www.filefactory.com/file/6o7ow8er4f9l/n/G037_G038_G039_Online_Test_1_Question_pdf

<http://www.classroomclipboard.com/503511/Home/Test/9696759cec624be1a7793b7d1edd87c2#/InitializeTest.xml>

HYCEUE

G037+G038+G039 Test 2-----UETTDRIS 67+68+69

http://www.filefactory.com/file/34mz6a80pwix/n/G037_G038_G039_Online_Test_2_Marking_doc

http://www.filefactory.com/file/5by85g9rxmoh/n/G037_G038_G039_Online_Test_2_Question_pdf

http://www.filefactory.com/file/7cgx58m1iz59/n/G037_G038_G039_Online_Test_2_Answer_doc

<http://www.classroomclipboard.com/503511/Home/Test/8ea510a583bf41b5b6a994378eeb912f#/InitializeTest.xaml>

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G037+G038+G039 Test 3-----UETTDRIS 67+68+69

http://www.filefactory.com/file/3cf98pio9dqt/n/G037_G038_G039_Online_Test_3_Answer_doc

http://www.filefactory.com/file/5fy0regqoh0n/n/G037_G038_G039_Online_Test_3_Question_pdf

http://www.filefactory.com/file/71gtpe18hqd/n/G037_G038_G039_Online_Test_3_Marking_doc

<http://www.classroomclipboard.com/503511/Home/Test/adae49f2f39c4158925fe7010b460540#/InitializeTest.xaml>

S947G

G037+G038+G039 Test 4-----UETTDRIS 67+68+69

http://www.filefactory.com/file/3mznyjrflzz/n/G037_G038_G039_Online_Test_4_Marking_doc

http://www.filefactory.com/file/q1sn4hitpb/n/G037_G038_G039_Online_Test_4_Question_pdf

http://www.filefactory.com/file/3zbh1e894r2f/n/G037_G038_G039_Online_Test_4_Answer_doc

<http://www.classroomclipboard.com/503511/Home/Test/f1486f63ce8f4e349919659cd7bd4a98#/InitializeTest.xaml>

49JL

G037+G038+G039 Test 5-----UETTDRIS 67+68+69

http://www.filefactory.com/file/738vtwzyd3qp/n/G037_G038_G039_Online_Test_5_Question_pdf

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http://www.filefactory.com/file/5gdkh0ptdimd/n/G037_G038_G039_Online_Test_5_Answer_doc

<http://www.classroomclipboard.com/503511/Home/Test/029dcf4b117c47109ff8d981a108e5c6#/InitializeTest.xaml>

KV6K3G

EE114 Electrical Power Principle

Tutoring Lessons

[Lesson 1](#) [Lesson 2](#) [Lesson 3](#)

Test & Assessment

http://www.filefactory.com/file/789ejsif1yq1/n/G012_Online_Test_3_Question_pdf

http://www.filefactory.com/file/5hurvxj3u09r/n/G012_Online_Test_3_Answer_doc

Do the tests and send the answer sheet in soft copy by e-mail to
iqytechnicalcollege@gmail.com

Password- **[iqytechnicalcollege](#)**

Study the files EE114

Do the exercises

Ref163

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

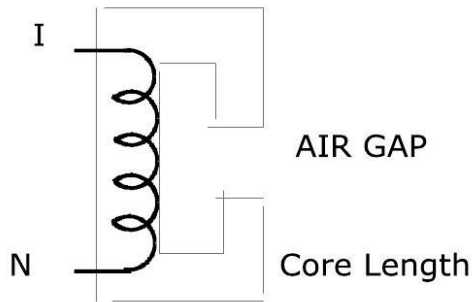
A	0.2, 20%	B	0.15, 15%
C	0.3, 30%	D	0.1, 10%
Answer			

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			

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			

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	$Z_s = V_{sc} / I_{sc}$
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

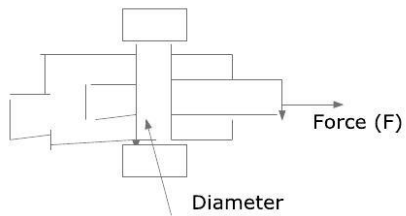
A	1000N	B	500N
C	400N	D	793.3N
Answer			

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			

EE118 Electrical Energy Supply System

Tutoring Lessons

[Lesson 1](#) [Lesson 2](#) [Lesson 3](#)

Test & Assessment

http://www.filefactory.com/file/50ox6xeklufp/n/G015_G046_Online_Test_1_Question_pdf

http://www.filefactory.com/file/4jzmn6sa4rkd/n/G015_G046_Online_Test_1_Answer_doc

Do the tests and send the answer sheet in soft copy by e-mail to **iqytechnicalcollege@gmail.com**

Password- **[iqytechnicalcollege](#)**

Then do the following exercises

G015+G046 Online Test

Ref186

The transformer supplies a group of 4 feeders which have individual maximum demands of 2.5, 2.4, 4.3 and 1.6 MVA. If the diversity factor is 1.82, determine the maximum demand on transformer

A	5.93MVA	B	4.3MVA
C	10.8MVA	D	2.4MVA
Answer			

Ref191

Find the insulation resistance per km of conductor diameter 1.6 cm and internal sheath diameter 5.08 cm. $\rho = 6 \times 10^{-14} \Omega/\text{cm}$.

A	500 M Ω	B	100 M Ω
C	1103 M Ω	D	2000 M Ω
Answer			

Ref196

The formula to calculate voltage regulation is

A	$\%Reg = \frac{IR \cos\phi_r + IX \sin\phi_r}{E_r}$	B	$\%Reg = \frac{R \cos\phi_r + IX \sin\phi_r}{E_r}$
C	$\%Reg = IR \cos\phi_r + IX \sin\phi_r$	D	$\%Reg = \frac{R \cos\phi_r - IX \sin\phi_r}{E_r}$
Answer			

Ref201

Which equipments is not included in trip circuit?

A	Sensor, potential transformer, current transformer	B	Battery
C	Relay contact	D	Circuit breaker
Answer			

Ref206

Differential relay senses

A	Only one input	B	Three inputs
C	Two inputs	D	Four inputs
Answer			

Ref 211.

Maximum reach and maximum reach angle are found in

A	Over current relay	B	Differential relay
C	Directional relay	D	Distance relay
Answer			

Ref212

The operation of distance relay is based on

A	Based on impedance	B	Based on current
C	Based on frequency	D	Based on power
Answer			

Ref213

The characteristics curve of distance relay is

A	Concentric circles	B	Parabola
C	Straight line	D	Hyperbola
Answer			

Ref214.

Zone protection of distance relay is based on

A	Zoning in accordance with voltage	B	Zoning in accordance with current
C	Zoning in accordance with power	D	Zoning in accordance with impedance
Answer			

Ref215.

Operating & restraining voltage and current are utilized in

A	Over current relay	B	Differential relay
C	Directional relay	D	Thermal over load relay
Answer			

Ref216

Power line can be effectively protected by

A	Over current relay	B	Differential relay
C	Directional relay	D	Distance relay
Answer			

Ref217

Explain the operation of distance relay is based on .

A	Based on impedance	B	Based on current
C	Based on frequency	D	Based on power
Answer			

Ref218.

The shape of characteristics of over current relay is

A	Straight line	B	Circle
C	Curve	D	Pulse
Answer			

Ref219.

Directional relay is also called

A	Distance relay	B	Reverse power relay
C	Differential relay	D	Over current relay
Answer			

Ref220

Earthing transformer is utilized at

A	Star connected winding side	B	Delta connected winding side
C	Zigzag connected winding side	D	None of above
Answer			

Ref225

In CT, primary and secondary windings

A	Closely linked	B	Loosely linked
C		D	
Answer			

Ref230

The following equation

$M_c \frac{d^2\delta}{dt^2} = P_o - P_m \sin \delta$ is utilized to determine

A	Stability of generation	B	Power flow
C	Phase sequence	D	
Answer			

Ref231

The suitable winding method for earthing transformer is

A	Star/ Delta	B	Delta/Star
C	Delta/Delta	D	Zig Zag
Answer			

Ref232

Reactors are utilized at busbar to

A	Provide inductance	B	Limit short circuit current
C	Increase disruptive critical voltage	D	Earth leakage current flow path
Answer			

Ref233

The best way to increase the level of disruptive critical voltage to reduce the possibility of corona is

A	To increase conductor diameter	B	To use longer cross arm
C	To use hollow conductor that increase the conductor diameter	D	To increase insulation resistance
Answer			

Ref234

Switching voltage velocity is

A	$V = 1/\sqrt{LC}$	B	$V = \sqrt{LC}$
C	$V = L/C$	D	$V = 1/LC$
Answer			

Ref235

Which equipment is used in static VAR compensation system?

A	Magnetic contactor	B	Thermal switch
C	Hall effect switch	D	Silicon Controlled Rectifier
Answer			

Ref236

Poor power will cause

A	Unnecessary over current flow in line	B	Smoother voltage
C	Ripple reduction	D	Wrong phase sequence
Answer			

Ref237

Lighting strike near power transformer is protected by

A	Arcing horn	B	Lightning arrester
C	Surge absorber	D	Arcing ring
Answer			

Ref238

Lightning protection for power line is provided by

A	Arcing horn	B	Lightning arrester
C	Surge absorber	D	Arcing ring
Answer			

Ref239

Power surge protection is provided by

A	Arcing horn	B	Lightning arrester
C	Surge absorber	D	Arcing ring
Answer			

Ref244

In large power distribution system, reactive power control is provided by

A	Synchronous motor	B	Capacitor bank
C	Static VAR Compensation System	D	Induction motor
Answer			

Ref249

To withstand the voltage surge due to lightning strike, the power system equipments must have

A	High VA value	B	High voltage rating
C	High current rating	D	Appropriate base impulse insulation level
Answer			

Ref254

The following formula $E_g = m\delta g_b r \ln D/r$ is utilized to calculate

A	Sending end voltage	B	Breakdown voltage to neutral
C	Visual critical voltage	D	Disruptive critical voltage.
Answer			

Ref208

Can over current & earth fault protections be combined?

A	Not sure	B	No
C	Yes	D	Not applicable
Answer			

Ref222

Buchholz relay should be utilized for

A	Transformer protection	B	Motor protection
C	Generator protection	D	Power line protection
Answer			

Ref224

For given CT , % composite error, secondary voltage and rated accuracy are 10P 150 F15

A	10%, 150V, 15	B	150%, 10V, 15
C	15%, 15V, 10	D	
Answer			

Ref226

For 2000/1000/500/1 current transformer 10 Ps 250 is classified as

A	2.5 Ps 1000	B	5 Ps 500
C	2.5Ps 500	D	10 Ps 250
Answer			