# GE8 Electronics

| | | |
|---|---|---|
| EE115 | Basic Analogue & Digital Electronics | 2 |
| EE209 | Analogue Electronics | 1 |

# Part 1 Lessons

Page 374 to 377 of
http://www.filefactory.com/file/cf9bf8f/n/Video_Lessons.pdf

H011 DC Power Supply

| | | |
|---|---|---|
| UEENEEH114A | | Troubleshoot resonance circuits in an electronic apparatus |
| UEENEEH102A | | Repairs basic electronic apparatus faults by replacement of components |
| UEENEEH111A | | Troubleshoot single phase input d.c. power supplies |

## DC Power supplies

H011 Lesson 1 DC Power supply principle.zip

http://youtu.be/S1no7ZshUwA

http://www.filefactory.com/file/c0b06d1/n/H011_Lesson_1_DC_Power_supply_principle.zip

H011 Lesson 2 Load regulation.zip

http://youtu.be/9yCpkrbJdtQ

http://www.filefactory.com/file/c0b06f8/n/H011_Lesson_2_Load_regulation.zip

H011 Lesson 3 Current limiter.zip

http://youtu.be/fV2cEqYot74

http://youtu.be/qy9TXslvE1E

http://www.filefactory.com/file/c0b1c72/n/H011_Lesson_3_Current_limiter.zip

**The links contain the following lessons**

H011 Lesson 1 DC Power supply principle

H011 Lesson 2 Load regulation

H011 Lesson 3 Current limiter

H013

Page 378 to 386 of http://www.filefactory.com/file/cf9bf8f/n/Video_Lessons.pdf

# Amplifier

H013 Lesson 1 Amplifier model.zip

http://youtu.be/3kZUZrXytwo

http://www.filefactory.com/file/c0b0641/n/H013_Lesson_1_Amplifier_model.zip

H013 Lesson 2 Amplifier biasing.zip

http://youtu.be/Xk34pnOIgZ4

http://youtu.be/QGGw2_K38BY

http://www.filefactory.com/file/c0b067a/n/H013_Lesson_2_Amplifier_biasing.zip

## H013 Lesson 3 Amplifier configuration.zip

http://youtu.be/PmGrqK94xks

http://www.filefactory.com/file/c0b068d/n/H013_Lesson_3_Amplifier_configuration.zip

## H013 Lesson 4 Amplifier parameters.zip

http://youtu.be/6CivoozCPu4

http://youtu.be/R8TouJvv6OA

http://www.filefactory.com/file/c0b0697/n/H013_Lesson_4_Amplifier_parameters.zip

## H013 Lesson 5 JFET.zip

http://youtu.be/XW1bcn99zZ0

http://youtu.be/yb-qM5jE0Oc

http://www.filefactory.com/file/c0b07c3/n/H013_Lesson_5_JFET.zip

**The links contain the following lessons**

H013 Lesson 1 Amplifier model

H013 Lesson 2 Amplifier biasing

H013 Lesson 3 Amplifier configuration

H013 Lesson 4 Amplifier parameters

H013 Lesson 5 JFET

Power Electronics I

| | |
|---|---|
| EE109 | Electrical Control Circuits |

| | |
|---|---|
| EE208 | Operational Amplifiers |

H025+ H & I units in UEE11

| | | |
|---|---|---|
| UEENEEI148A | | Solve problems in single phase electronic power control circuits |
| UEENEEI149A | | Solve problems in polyphase electronic power control circuits |

Page 387 to 403 of http://www.filefactory.com/file/cf9bf8f/n/Video_Lessons.pdf

## Operational amplifier+ single phase power control equipments

H025 Lesson 1-Differential Amplifier.zip

http://youtu.be/ad_3bdF0zds

http://youtu.be/O5in0xvrnPQ

http://www.filefactory.com/file/c39b73b/n/H025_Lesson_1-Differential_Amplifier.zip

## H025_Lesson_2-Comparator.zip

http://youtu.be/pePuim3kqKQ

http://www.filefactory.com/file/c0b072e/n/H025_Lesson_2-Comparator.zip

## H025 Lesson 3-Timer IC.zip

http://youtu.be/KMaFIzaoUm4

http://youtu.be/CbUWCd6fP9A

http://www.filefactory.com/file/c0b077e/n/H025_Lesson_3-Timer_IC.zip

## H025 Lesson 4-Op Amp Circuit 1 & 2.zip

http://youtu.be/wl-jVz30LSc

http://youtu.be/b8pjTG9Om_w

http://www.filefactory.com/file/c0b08c8/n/H025_Lesson_4-Op_Amp_Circuit_1_2.zip

## H025 Lesson 5-Op amp characteristics+Band widthe compensation.zip

http://youtu.be/1t6fdXK5i_0

http://youtu.be/Htq19FqAxSA

http://www.filefactory.com/file/c0b09da/n/H025_Lesson_5-Op_amp_characteristics_Band_widthe_compensation.zip

## H025 Lesson 6-Op amp diode characteristics.zip

http://youtu.be/uHkiUpemhPs

http://www.filefactory.com/file/c0b09e1/n/H025_Lesson_6-Op_amp_diode_characteristics.zip

## H025 Lesson 7-Sine & square wave oscillators.zip

http://youtu.be/lOWhEW2THxw

http://www.filefactory.com/file/c0b090a/n/H025_Lesson_7-Sine_square_wave_oscillators.zip

## H025 Lesson 8-Op amp ckt-Integrator+Differentiator.zip

http://youtu.be/3GFksg5MYUU

http://www.filefactory.com/file/c0b0909/n/H025_Lesson_8-Op_amp_ckt-Integrator_Differentiator.zip

## H025 Lesson 9-Active filter.zip

http://youtu.be/VedHWINE60Q

http://www.filefactory.com/file/c0b0916/n/H025_Lesson_9-Active_filter.zip

## H025 Lesson 10-Multistage Op amp ckt.zip

http://youtu.be/SpHOroXrQf0

http://youtu.be/_GQzAZw15oM

http://youtu.be/TAwRmz298iM

http://www.filefactory.com/file/c0b0948/n/H025_Lesson_10-Multistage_Op_amp_ckt.zip

## H025 Lesson 11-Transducers.zip

http://youtu.be/ojsZNBOoX3U

http://youtu.be/7vAOB8pNXhQ

http://www.filefactory.com/file/c0b0978/n/H025_Lesson_11-Transducers.zip

## H025 Lesson 12-Introduction to control.zip

http://youtu.be/dr1kfNW0TFc

http://www.filefactory.com/file/c0b0986/n/H025_Lesson_12-Introduction_to_control.zip

**The links contain the following lessons**

H025 Lesson 1-Differential Amplifier

H025 Lesson 2-Comparator

H025 Lesson 3-Timer IC

H025 Lesson 4-Op Amp Circuit 1 & 2

H025 Lesson 5-Op amp characteristics+ Band width compensation

H025 Lesson 6-Op amp diode characteristics

H025 Lesson 7-Sine & square wave oscillators

H025 Lesson 8-Op amp ckt-Integrator+ Differentiator

H025 Lesson 9-Active filter

H025 Lesson 10-Multistage Op amp ckt

H025 Lesson 11-Transducers

H025 Lesson 12-Introduction to control

## Analogue Electronics

| | |
|---|---|
| EE209 | Analogue Electronics |

H045+ H & I units in UEE11

| | | |
|---|---|---|
| UEENEEH114A | | Troubleshoot resonance circuits in an electronic apparatus |
| UEENEEH147A | | Assess electronic apparatus compliance |

Page 416 to 428 of
http://www.filefactory.com/file/cf9bf8f/n/Video_Lessons.pdf

# Analogue Electronics

H045 Lesson 1 Op-amp.zip

http://youtu.be/Z5WuKH6IKQE

http://youtu.be/mDmxHibHJC8

http://www.filefactory.com/file/c39ccc7/n/H045_Lesson_1_Op-amp.zip

H045 Lesson 2 DC Non idealities.zip

http://youtu.be/rnmW34QublU

http://youtu.be/BbDgNqd13ek

http://youtu.be/RYJiLQ32RhY

http://www.filefactory.com/file/c39cdef/n/H045_Lesson_2_DC_Non_idealities.zip

H045 Lesson 3 Bias compensation.zip

http://youtu.be/QYzuMasWWbg

http://www.filefactory.com/file/c0b1b86/n/H045_Lesson_3_Bias_compensation.zip

H045 Lesson 4 Slew rate.zip

http://youtu.be/NERLYuZYVv0

http://www.filefactory.com/file/c0b1ca0/n/H045_Lesson_4_Slew_rate.zip

H045 Lesson 5 AC Noise.zip

http://youtu.be/XZKFddOSPTg

http://www.filefactory.com/file/c39cebc/n/H045_Lesson_5_AC_Noise.zip

## H045 Lesson 6 Source noise resistance.zip

http://youtu.be/3_08GpV4P-w

http://www.filefactory.com/file/c268af2/n/H045_Lesson_6_Source_noise_resistance.zip

## H045 Lesson 7 Signal to noise ratio.zip

http://youtu.be/_pT6i7gYUQU

http://youtu.be/u7ilW7Os-Mc

http://www.filefactory.com/file/c0b1cff/n/H045_Lesson_7_Signal_to_noise_ratio.zip

## H045 Lesson 8 Frequency compensation.zip

http://youtu.be/rHz2fwkDPNw

http://www.filefactory.com/file/c39ce16/n/H045_Lesson_8_Frequency_compensation.zip

## H045_Lesson_9_Stability_analysis.zip

http://youtu.be/wugrGy-eHD4

http://www.filefactory.com/file/c0b1c95/n/H045_Lesson_9_Stability_analysis.zip

## H045 Lesson 10 Feedforward compensation.zip

http://youtu.be/XmHxvyCL-Zw

http://youtu.be/PS4TLDPL9GI

http://www.filefactory.com/file/c0b1c56/n/H045_Lesson_10_Feedforward_compensation.zip

**The links contain the following lessons**

H045 Lesson 1 Op-amp

H045 Lesson 2 DC Non idealities

H045 Lesson 3 Bias compensation

H045 Lesson 4 Slew rate

H045 Lesson 5 AC Noise

H045 Lesson 6 Source noise resistance

H045 Lesson 7 Signal to noise ratio

H045 Lesson 8 Frequency compensation

H045 Lesson 9 Stability analysis

H045 Lesson 10 Feedforward compensation

# CLASS LESSONS

Amplifier+Power Supply+Digital H011+H012+H013.zip

http://www.filefactory.com/file/c0b64d1/n/Amplifier_Power_Supply_Digital_H011_H012_H013.zip

Power Electronics -H025+H026.zip

http://www.filefactory.com/file/c0b6857/n/Power_Electronics_-H025_H026.zip

## Exercise

Do UEENEEH011+12+13 Page 213 to 225 of the following link

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

# Part 2 References

Amplifier

## Analog Electronics

**Amplifier.pdf (20.1MB)**
http://www.filefactory.com/file/3mnlb6cf8kt1/n/Amplifier.pdf

**basic logic gate.mht (0.05MB)**
http://www.filefactory.com/file/6a92lwdjnc0t/n/basic_logic_gate.mht

**Analog2.pdf (10.47MB)**
http://www.filefactory.com/file/6ialb81anl3t/n/Analog2.pdf

**Analog1.pdf (6.83MB)**
http://www.filefactory.com/file/6rrv5fbmet9z/n/Analog1.pdf

**Class_A-B_Amplifier.zip (2.18MB)**
http://www.filefactory.com/file/2bsdmxua3bwl/n/Class_A-B_Amplifier.zip

## Operational Amplifier

**H025 Operational Amplifier.pdf (19.57MB)**
http://www.filefactory.com/file/2pch4iu5yxbf/n/H025_Operational_Amplifier.pdf

**Inverting_Non_inverting_amplifier.zip (3.96MB)**
http://www.filefactory.com/file/1gghh7f88yhf/n/Inverting_Non_inverting_amplifier.zip

## Digital Electronics

**simple sequential.mht (0.03MB)**
http://www.filefactory.com/file/1s54vmeqwb5h/n/simple_sequential.mht

**Rectification.zip (2.37MB)**
http://www.filefactory.com/file/2fyk3c4ckfd1/n/Rectification.zip

**Simple sequential.htm (0.01MB)**
http://www.filefactory.com/file/5gt4travuuwn/n/Simple_sequential.htm

**sequential circuit state diagram.mht (0.03MB)**
http://www.filefactory.com/file/3riucrnaof3t/n/sequential_circuit_state_diagram.mht

**SDR Latch.htm (0.03MB)**
http://www.filefactory.com/file/5509cqxqjupl/n/SDR_Latch.htm

**RESISTOR CIRCUITS.mht (0.03MB)**
http://www.filefactory.com/file/5tcvxeilour7/n/RESISTOR_CIRCUITS.mht

**Rectification.1zip.zip (2.37MB)**
http://www.filefactory.com/file/ffe1omccd5n/n/Rectification.1zip.zip
**Microprocessor_References_to_upload.zip (11.59MB)**
http://www.filefactory.com/file/5vgaum66ma2l/n/Microprocessor_References_to_upload.zip

**INDUSTRIAL COMPUTER SYSTEM.mht (0.06MB)**
http://www.filefactory.com/file/3dce988xa2jp/n/INDUSTRIAL_COMPUTER_SYSTEM.mht

**Digital_IC_Reference_2-Part_2.zip (6.99MB)**
http://www.filefactory.com/file/2kmfa2loj06p/n/Digital_IC_Reference_2-Part_2.zip

**ESD_Review_Questions.zip (0.93MB)**
http://www.filefactory.com/file/2bbnkj43yhbl/n/ESD_Review_Questions.zip

**Digital_Logic_Simplification.zip (0.97MB)**
http://www.filefactory.com/file/4s6cv4bfusa7/n/Digital_Logic_Simplification.zip

**Digital_IC_Reference_2-Part_1.zip (8.02MB)**
http://www.filefactory.com/file/i5xu0kiu58t/n/Digital_IC_Reference_2-Part_1.zip

**Digital_IC_Ref_1-Part_2_0.zip (7.45MB)**
http://www.filefactory.com/file/3x9ifveckxe9/n/Digital_IC_Ref_1-Part_2_0.zip

**Digital_IC_Ref_1-Part_1.zip (8.16MB)**
http://www.filefactory.com/file/6o3q4lvathf/n/Digital_IC_Ref_1-Part_1.zip

**Digital_counter.zip (2.41MB)**
http://www.filefactory.com/file/7jdqib629fob/n/Digital_counter.zip

**Digital_circuit.zip (1.95MB)**
http://www.filefactory.com/file/iyas2lo8v2x/n/Digital_circuit.zip

**DE2-SR_Flip_Flop_Notes.zip (4.31MB)**
http://www.filefactory.com/file/46hj7vhtfhjf/n/DE2-SR_Flip_Flop_Notes.zip

**de-morgan.mht (0.02MB)**
http://www.filefactory.com/file/1qz2q0h8e5h5/n/de-morgan.mht

**DE2-Shift_Register.zip (3.21MB)**
http://www.filefactory.com/file/76pj9n4r4hf/n/DE2-Shift_Register.zip

**DE2-Schmitt_Trigger_Device_Exercise.zip (3.09MB)**
http://www.filefactory.com/file/5zubzvb8c6r5/n/DE2-Schmitt_Trigger_Device_Exercise.zip

**DE2-Multiplexer_Lesson.zip (4.59MB)**

http://www.filefactory.com/file/4p23ty4byglx/n/DE2-Multiplexer_Lesson.zip

**DE2Notes.zip (1.52MB)**
http://www.filefactory.com/file/2b70shxmtenf/n/DE2Notes.zip

**DE2-Logic_Level_TotemPole_Note_Exercise.zip (5.67MB)**
http://www.filefactory.com/file/542v4ta44wgz/n/DE2-Logic_Level_TotemPole_Note_Exercise.zip

**DE2-Logic_Level_Note_Exercise.zip (5.64MB)**
http://www.filefactory.com/file/50jjwfs1s09z/n/DE2-Logic_Level_Note_Exercise.zip

**DE2-Encoder_Lesson.zip (4.42MB)**
http://www.filefactory.com/file/4yvvyd5nwvsp/n/DE2-Encoder_Lesson.zip

**DE2-DecoderMultiplexer_Assignment.zip (1.7MB)**
http://www.filefactory.com/file/x41lwr6tysb/n/DE2-DecoderMultiplexer_Assignment.zip

**DE2-Data_Transfer_Q.zip (0.92MB)**
http://www.filefactory.com/file/27ia1hr5r9n/n/DE2-Data_Transfer_Q.zip

**DE2-Data_Transfer_Note.zip (3.15MB)**
http://www.filefactory.com/file/6u4wkmsdjrgt/n/DE2-Data_Transfer_Note.zip

**DE2-D_J_K_Flip_Flop.zip (3.1MB)**
http://www.filefactory.com/file/6r4lgvykt0rv/n/DE2-D_J_K_Flip_Flop.zip

**DE2-D_Flip_Flop_Q.zip (0.75MB)**
http://www.filefactory.com/file/2otd66ttkua3/n/DE2-D_Flip_Flop_Q.zip

**DE2-Counter_Exercise.zip (0.64MB)**
http://www.filefactory.com/file/6ejv4pcmbaex/n/DE2-Counter_Exercise.zip

**DE2-7_Segment_Display.zip (4.54MB)**
http://www.filefactory.com/file/1p91632gcyvl/n/DE2-7_Segment_Display.zip

**DE2-7_Segment_Display_Review_Q.zip (2.09MB)**
http://www.filefactory.com/file/4kdbqw8dfsav/n/DE2-7_Segment_Display_Review_Q.zip

**DE2-1_2_Notes.zip (4.8MB)**
http://www.filefactory.com/file/1fnpxdw1dxo3/n/DE2-1_2_Notes.zip

**DE2_Logic_Families_Part_I_Part_II_Note_Exercise.zip (7.99MB)**
http://www.filefactory.com/file/6jq909a2cv8t/n/DE2_Logic_Families_Part_I_Part_II_Note_Exercise.zip

**DE2_SR_Flip_Flop_Q.zip (0.7MB)**
http://www.filefactory.com/file/16vy9xnhhiyx/n/DE2_SR_Flip_Flop_Q.zip

**DE2_Shift_Register_Exercise.zip (0.69MB)**
http://www.filefactory.com/file/5hf60vk9huoh/n/DE2_Shift_Register_Exercise.zip

**DE1-5.zip (9.57MB)**
http://www.filefactory.com/file/ul270mlpdrx/n/DE1-5.zip

**DE1-4_Review_Question.zip (2.43MB)**
http://www.filefactory.com/file/1s76i3v4cfgp/n/DE1-4_Review_Question.zip

**DE1-3.zip (3.13MB)**
http://www.filefactory.com/file/k5m78otut8t/n/DE1-3.zip

**DE1-3_Review_Question.zip (1.86MB)**
http://www.filefactory.com/file/fhqc71se655/n/DE1-3_Review_Question.zip

**DE1-2Review_Questions.zip (1.99MB)**
http://www.filefactory.com/file/4ph24pc0thlz/n/DE1-2Review_Questions.zip

**DE1-2.zip (3.18MB)**
http://www.filefactory.com/file/7k12bimr02j7/n/DE1-2.zip

**DE1-1_Review_Question.zip (1.94MB)**
http://www.filefactory.com/file/3dblia0fjec5/n/DE1-1_Review_Question.zip

**DAC-Encoder-Multiplexer.zip (17.84MB)**
http://www.filefactory.com/file/1ovg6gatny5l/n/DAC-Encoder-Multiplexer.zip

**DE1-1.zip (4.56MB)**
http://www.filefactory.com/file/366wkgv427ib/n/DE1-1.zip

**DE1.zip (0.97MB)**
http://www.filefactory.com/file/791tzi9f5scx/n/DE1.zip

**DE.zip (0.97MB)**
http://www.filefactory.com/file/1h5abets34s1/n/DE.zip

**de morgan.mht (0.02MB)**
http://www.filefactory.com/file/47lw4da6ki79/n/de_morgan.mht

**De morgan.htm (0.01MB)**
http://www.filefactory.com/file/2j6mg4b2ordz/n/De_morgan.htm

**D and JK Flip flop.mht (0.05MB)**
http://www.filefactory.com/file/1pnb9b2apmg1/n/D_and_JK_Flip_flop.mht

**Binary_Number_Lesson.zip (3.39MB)**
http://www.filefactory.com/file/6rrjf54r2q3f/n/Binary_Number_Lesson.zip

**C8 Electronics.doc (0.1MB)**
http://www.filefactory.com/file/2v6e6qy389y3/n/C8_Electronics.doc

**7794C  DIGITAL ELECTRONICS  I.mht (0.05MB)**
http://www.filefactory.com/file/1w4wlphemw2j/n/7794C_DIGITAL_ELECTRONICS_I.mht

# Part 3 Practical

Digital+ Analog Practicals

**Practical-H045-Mini lab Op-amp.zip (2.04MB)**
http://www.filefactory.com/file/5lfqabj6x2bh/n/Practical-H045-Mini_lab_Op-amp.zip

**Practical-H025-Precision half wave amplifier.pdf (1.97MB)**
http://www.filefactory.com/file/3uspkswlfo19/n/Practical-H025-Precision_half_wave_amplifier.pdf

**Practical-H025-Variable frequency drive.pdf (0.8MB)**
http://www.filefactory.com/file/3kxjovk0sfy9/n/Practical-H025-Variable_frequency_drive.pdf

**Practical-H025-Op-amp comparator.pdf (0.76MB)**
http://www.filefactory.com/file/6durnon9su67/n/Practical-H025-Op-amp_comparator.pdf

**Practical-H025-Inverting amplifier.pdf (2.03MB)**
http://www.filefactory.com/file/10r7jn0ceg75/n/Practical-H025-Inverting_amplifier.pdf

**Microprocessor_Notes_upload.zip (16.03MB)**
http://www.filefactory.com/file/1oti3kat6cib/n/Microprocessor_Notes_upload.zip

**Practical-H025+H026-SCR Phase Control.pdf (1.74MB)**
http://www.filefactory.com/file/57fef41m3yqp/n/Practical-H025+H026-SCR_Phase_Control.pdf

**MPLAB_User_Guide_51519c.pdf (4.13MB)**
http://www.filefactory.com/file/4alc4zaho5f9/n/MPLAB_User_Guide_51519c.pdf

**MPLAB_Integrated_Development_Environment.doc (0.33MB)**
http://www.filefactory.com/file/3t3d9gbt7erf/n/MPLAB_Integrated_Development_Environment.doc

http://www.filefactory.com/file/6a92lwdjnc0t/basic%20logic%20gate.mht

ONLINE PRACTICALS

**6.Power Electronics  Practicals**

**Circuit Connection Assessment Number  6-1 Class A B Rectifier**

Class_A-B_Amplifier

http://www.filefactory.com/file/52bujy6mxnvf/n/6-1_pdf

http://www.filefactory.com/file/650fxy60dm2z/n/6_1_doc

http://www.filefactory.com/file/72af0kxilwf3/n/Class_A-B_Amplifier_pdf

Amplifier1_2Practical

Amplifier_current_gain

**Circuit Connection Assessment Number_6-2 Inverting Non Inverting Amplifier**

Inverting_Non_inverting_amplifier

http://www.filefactory.com/file/3wpu100m0a1h/n/6_1_doc

http://www.filefactory.com/file/6adx40ktscin/n/6-2_pdf

http://www.filefactory.com/file/19ebzs7t83gf/n/Inverting_Non_inverting_amplifier_pdf

**Circuit Connection Assessment Number_6-3 SCR Phase control**

http://www.filefactory.com/file/17tuqx051l2v/n/6-3_pdf

http://www.filefactory.com/file/5fvgvvka1y07/n/Practical-H025_H026-SCR_Phase_Control_pdf

http://www.filefactory.com/file/5qq2fze0fqah/n/6_3_doc

Power_Control_Devices

**Circuit Connection Assessment Number_6-5 Inverting amplifier**

http://www.filefactory.com/file/2iojycy6bf6z/n/6-5_pdf

http://www.filefactory.com/file/45732kme9l4f/n/Practical-H025-Inverting_amplifier_pdf

http://www.filefactory.com/file/j0zl13ttmed/n/6_5_doc

**Circuit Connection Assessment Number_6-6 Op Amp Comparator**

http://www.filefactory.com/file/1o98rt5t7qsx/n/6-6_pdf

http://www.filefactory.com/file/3mu42ptkavap/n/6_6_doc

http://www.filefactory.com/file/4bewi75grfjd/n/Practical-H025-Op-amp_comparator_pdf

**Circuit Connection Assessment Number_6-7 Precision half wave rectifier**

http://www.filefactory.com/file/21egwl9rthgr/n/6-7_pdf

http://www.filefactory.com/file/406iyxvrc1eb/n/Practical-H025-Precision_half_wave_amplifier_pdf

http://www.filefactory.com/file/5rzsi012bw39/n/6_7_doc

## Rectification

### Circuit Connection Assessment Number 6-8 Variable frequency drive

http://www.filefactory.com/file/icwoyr7ctpv/n/6_8_doc

http://www.filefactory.com/file/6jsb8h0q6aqt/n/Variable_speed_drive_pdf

http://www.filefactory.com/file/vrdtaixekxn/n/6-8_pdf

### Circuit Connection Assessment Number 6-9 Three phase rectifier

http://www.filefactory.com/file/1w2ax659q7ov/n/6_9_doc

http://www.filefactory.com/file/37wu1n67f35j/n/Practical-H026-3_phase_rectifier_pdf

http://www.filefactory.com/file/59hev8r7yoyl/n/6-9_pdf

## Rectification

### Circuit Connection Assessment Number 6-11 PWM

http://www.filefactory.com/file/47cqe7k6vnt7/n/Practical-H026-PWM_Practical_pdf

http://www.filefactory.com/file/bliscj4bvjr/n/6-11_pdf

http://www.filefactory.com/file/u8uibrn5135/n/6_11_doc

### Circuit Connection Assessment Number 6-12 Mini Lab

http://www.filefactory.com/file/42e878f0kjgd/n/H045Day3Practical_pdf

http://www.filefactory.com/file/7hr25f7o5an9/n/6-12_pdf

http://www.filefactory.com/file/5mbfi4xigxf1/n/6_12_doc

### Circuit Connection Assessment Number 6-13 Variable drive system

http://www.filefactory.com/file/7godr6j3fr7h/n/Variable_speed_drive_pdf

http://www.filefactory.com/file/3j1en9gle79f/n/6-13_pdf

http://www.filefactory.com/file/45r5k466yosd/n/6_13_doc

### Circuit Connection Assessment Number 3-2 Amplifier Gain

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

http://www.filefactory.com/file/2xikhzj6xuzx/n/3-2_pdf

http://www.filefactory.com/file/33ntwrs3o7e3/n/3_2_xls

http://www.filefactory.com/file/57di74j6zk7p/n/3_2_doc

**Circuit Connection Assessment Number 3-3 SCR**

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

http://www.filefactory.com/file/4l191vthkhdx/n/3_3_doc

http://www.filefactory.com/file/fe3dnguragj/n/3-3_pdf

**Circuit Connection Assessment Number 3-6 Three Phase Rectification**

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

Rectification

http://www.filefactory.com/file/4h4d1hrfhogv/n/3_6_doc

http://www.filefactory.com/file/9bevf2n3hu1/n/3-6_pdf

**Circuit Connection Assessment Number 3-7 Three Terminal Regulator**

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

http://www.filefactory.com/file/65maa6x3hkzj/n/3_7_doc

http://www.filefactory.com/file/75znot255nq7/n/3_7_xls

http://www.filefactory.com/file/1u8jqxxi95tp/n/3-7_pdf

# ONLINE TESTS

**H011**

H011 MCQ Practice 1

H011 MCQ Practice 2

**H013**

H013 MCQ Practice 1

H013 MCQ Practice 2

**H045**

H045 MCQ Practice 1

H045 MCQ Practice 2

# ONLINE TESTS MARKING

**H011Test 1---------UENEEH111**

http://www.filefactory.com/file/5ht8f5ih8lvr/n/H011_Online_Test_1_Answer_doc

http://www.filefactory.com/file/74ma7pvjy4un/n/H011_Online_Test_1_Question_pdf

http://www.filefactory.com/file/2twhah27ibzl/n/H011_Online_Test_1_Marking_doc

http://www.classroomclipboard.com/503511/Home/Test/4e875e18c7bb47cfba6c48c04a7198e0#/InitializeTest.xaml

DH8JTB7

**H011Test 2---------UENEEH111**

http://www.filefactory.com/file/229n33ldqwah/n/H011_Online_Test_2_Answer_doc

http://www.filefactory.com/file/3e54mrgli7ft/n/H011_Online_Test_2_Question_pdf

http://www.filefactory.com/file/vucne1lllwf/n/H011_Online_Test_2_Marking_doc

http://www.classroomclipboard.com/503511/Home/Test/367cc44c01944cb59982be0255dca5bd#/InitializeTest.xaml

65TG

**H013Test 1---------UEENEEH118A**

http://www.filefactory.com/file/4ii61mml1phv/n/H013_Online_Test_1_Answer_doc

http://www.filefactory.com/file/4ze60r57ea9/n/H013_Online_Test_1_Question_pdf

http://www.filefactory.com/file/8mgrsb39abl/n/H013_Online_Test_1_Marking_doc

http://www.classroomclipboard.com/503511/Home/Test/eaa8db99cb2b44c49d016f6c8eee5910#/InitializeTest.xaml

SN3T84

**H013Test 2---------UEENEEH118A**

http://www.filefactory.com/file/26vc6psid6gn/n/H013_Online_Test_2_Marking_doc

http://www.filefactory.com/file/65f6z3zdm2uj/n/H013_Online_Test_2_Answer_doc

http://www.filefactory.com/file/sutmaakz949/n/H013_Online_Test_2_Question_pdf

http://www.classroomclipboard.com/503511/Home/Test/957b751abb4641cf9ae0a79176936549#/InitializeTest.xaml

6LYXKLE

**H045Test 1----------UEENEEH147A**

http://www.filefactory.com/file/3vpq08cwj73/n/H045_Online_Test_1_Question_pdf

http://www.filefactory.com/file/43pv8gh9ctw5/n/H045_Online_Test_1_Answer_doc

http://www.filefactory.com/file/4fk3igvgik87/n/H045_Online_Test_1_Marking_doc

http://www.classroomclipboard.com/503511/Home/Test/bd50d0b35eb241518cdddc8e23c0b593#/InitializeTest.xaml

8S359V

**H045Test 2----------UEENEEH147A**

http://www.filefactory.com/file/6pxixn406w51/n/H045_Online_Test_2_Question_pdf

http://www.filefactory.com/file/11xvzgzt7rrj/n/H045_Online_Test_2_Answer_doc

http://www.filefactory.com/file/2l8j74x05iw7/n/H045_Online_Test_2_Marking_doc

http://www.classroomclipboard.com/503511/Home/Test/f059c6212cc94ca098b61d5ef8188826#/InitializeTest.xaml

L9UMJM6

## EE115 Basic Analogue & Digital Electronics

## EE116 Process Control System

# Tutoring Lessons

Lesson 1 Lesson 2 Lesson 3 Lesson 4 Lesson 5 Lesson 6 Lesson 7

Lesson 8 Lesson 9 Lesson 10

### Test & Assessment

http://www.filefactory.com/file/46zzpcym7uqz/n/I006_H012_Online_Test_1_Question_pdf

http://www.filefactory.com/file/4e2chw2sf343/n/I006_H012_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**

## Study the followings

EE115+EE116 Files

And do the following exercises.

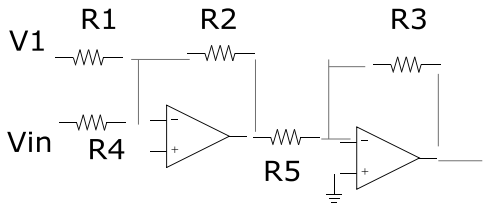
**I006+ H012 Online Test**

Ref501

_____ provides the operation necessary to transform the sensor output into a form necessary to interface with other elements of process control lop.

| | | | |
|---|---|---|---|
| A | Analogue signal conditioning | B | Digital signal conditioning |
| C | | D | |
| | Answer | | |

Ref504




V1=5V, R1=R2=34KΩ, ,R3=R4=R5=10 KΩ,

Vout for above circuit is

| | | | |
|---|---|---|---|
| A | Vout= 1.7 Vin + 5 | B | Vout = 3.4 Vin |
| C | Vout = 1.7 Vin | D | Vout= 3.4 Vin +5 |
| | Answer | | |

Ref507

TTL 74LS 193 A CMOS 4035 ICs are used for

| | | | |
|---|---|---|---|
| A | Parallel in / Parallel out function | B | Serial in / Parallel out function |
| C | Parallel in / Serial out function | D | Serial in / Serial out function |
| | Answer | | |

Ref510

The number of data signal lines required for 7 segments display is

| | | | |
|---|---|---|---|
| A | 7 | B | 8 |
| C | 9 | D | 10 |
| | Answer | | |

Ref513

Events occur after the previous event is completed. The device is_____.

| | | | |
|---|---|---|---|
| A | Combinational logic | B | Sequential logic |
| C | Synchronous logic | D | Asynchronous logic |
| | Answer | | |

Ref516

$45_{10}$ =

| | | | |
|---|---|---|---|
| A | $101101_2$ | B | $100101_2$ |
| C | $111001_2$ | D | $101010_2$ |
| | Answer | | |

Ref519

The device in which only one input at a time is activated to produce specific code at output is

| | | | |
|---|---|---|---|
| A | Decoder | B | Encoder |
| C | Multiplexer | D | Demultiplexer |
| | Answer | | |

Ref522

Latch can store

| | | | |
|---|---|---|---|
| A | Only one bit of information | B | A number of bits at one time |
| C | | D | |
| | Answer | | |

Ref525

Decimal equivalence of 47H is

| | | | |
|---|---|---|---|
| A | 71 | B | 781 |
| C | 29 | D | 112 |
| | Answer | | |

Ref528

Temperature is measured by a sensor with output 0.02 V/ ° C . Determine ADC Reference & word size to measure 0 to 100°C resolution.

| | | | |
|---|---|---|---|
| A | 0.039V/ step | B | 0.078V/ step |
| C | 0.156V/ step | D | 0.312V/ step |
| | Answer | | |

Ref531

What is the HEX output of a bipolar 12 bit ADC with a 5 V reference for input -0.85V

| | | | |
|---|---|---|---|
| A | 54H | B | 108H |
| C | 27H | D | 39H |
| | Answer | | |

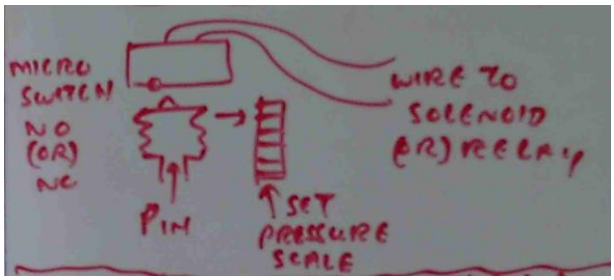
Ref534

ADC has been developed to interface with microprocessor. Data from ADC is placed on _____. When appropriate command is issued.

| | | | |
|---|---|---|---|
| A | Address bus | B | Data bus |
| C | Control bus | D | |
| | Answer | | |

Ref537

The following is called_____.




| | | | |
|---|---|---|---|
| A | Bellow operated on-off controller | B | On-off pressure control loop |
| C | Pnuematic force balance proportional controller | D | |
| | Answer | | |

Ref540

Derivative mode

| | | | |
|---|---|---|---|
| A | Stabilizes the process | B | Resets the process |
| C | Compensates time lag in control loop | D | |
| | Answer | | |

http://www.filefactory.com/file/5ht8f5ih8lvr/n/H011_Online_Test_1_Answer_doc

http://www.filefactory.com/file/74ma7pvjy4un/n/H011_Online_Test_1_Question_pdf

http://www.filefactory.com/file/229n33ldqwah/n/H011_Online_Test_2_Answer_doc

http://www.filefactory.com/file/3e54mrgli7ft/n/H011_Online_Test_2_Question_pdf

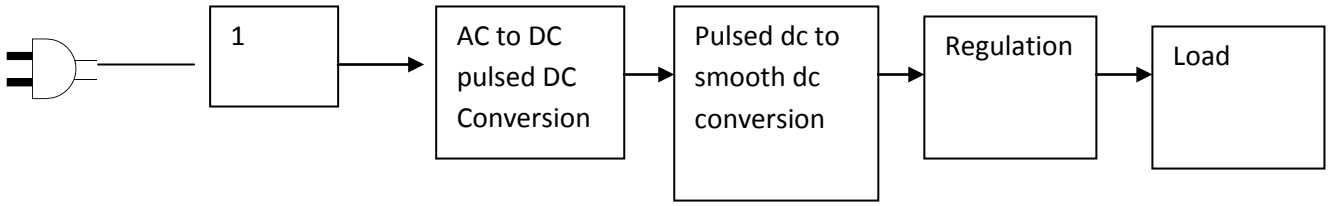
Do the tests and send the answer sheet in soft copy by e-mail to
**iqytechnicalcollege@gmail.com**

Password- **iqytechnicalcollege**

Study the EE209 file notes & do the exercises

H011 Online Test

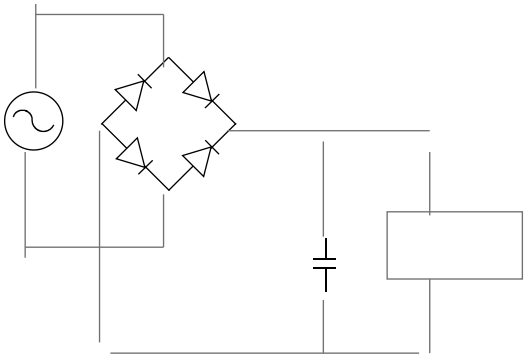
Ref435




The stage 1 is

| | | | |
|---|---|---|---|
| A | DC level conversion | B | AC level conversion |
| C | Input sensor | D | Providing protection |
| | Answer | | |

Ref436



The name of given circuit is

| | | | |
|---|---|---|---|
| A | Single phase full wave rectifier | B | Single phase half wave rectifier |
| C | Three phase full wave rectifier | D | Three phase half wave rectifier |
| | Answer | | |

Ref437

The dc output voltage produced by centre tapped transformer rectifier is

| | | | |
|---|---|---|---|
| A | Vdc= 0.5 Vmax | B | Vdc= 0.73 Vmax |
| C | Vdc= 0.636 Vmax | D | Vdc= 0.707 Vmax |
| | Answer | | |

Ref438

For bridge rectifier , ripple frequency is equal to

| | | | |
|---|---|---|---|
| A | Supply frequency | B | Three times supply frequency |
| C | Half of supply frequency | D | Two times supply frequency |
| | Answer | | |

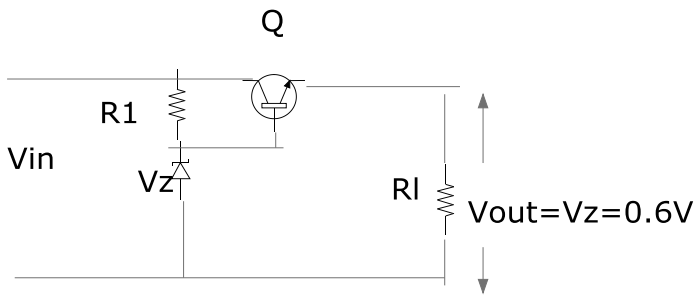
Ref439

Calculate the load resistance & capacitance size of a full wave rectifier that supplies 40V dc with 3% ripple voltage at 250mA to a resistance load. The rectifier circuit is supplied with 60HZ AC. Ripple frequency 50HZ.

| | | | |
|---|---|---|---|
| A | 160Ω, 31.25µF | B | 320Ω, 62.5µF |
| C | 100Ω, 10µF | D | 60Ω, 15µF |
| | Answer | | |

Ref440

The following circuit is




| | | | |
|---|---|---|---|
| A | Shunt transistor regulator | B | Regulator with feedback |
| C | Operational amplifier | D | Series transistor regulator |
| | Answer | | |

Ref441

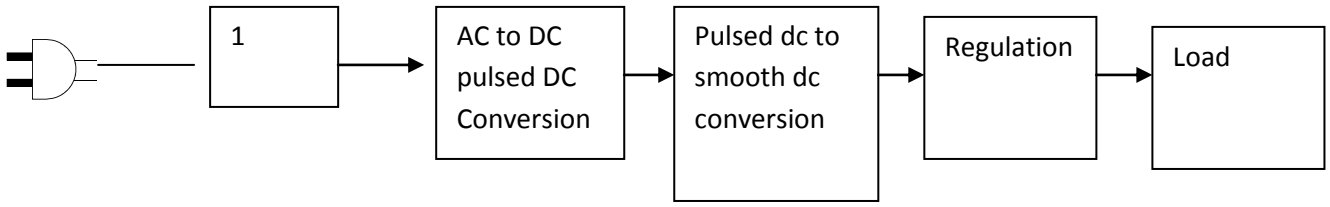
The regulator with feedback is constructed with the following values. R2= 1 KΩ, R3= 2 KΩ, Rsc=0.6Ω

Calculate power output Pd

| | | | |
|---|---|---|---|
| A | 30W | B | 60W |
| C | 90W | D | 15W |
| | Answer | | |

H011 Online Test

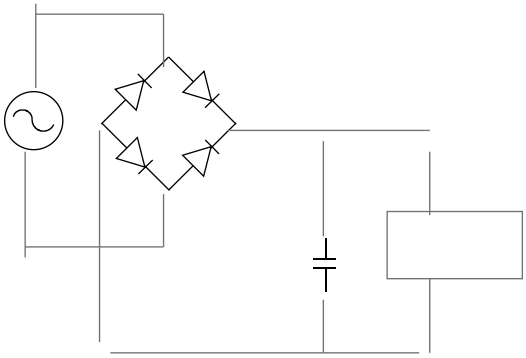
Ref435




The stage 1 is

| | | | |
|---|---|---|---|
| A | AC level conversion | B | DC level conversion |
| C | Input sensor | D | Providing protection |
| | Answer | | |

Ref436



The name of given circuit is

| | | | |
|---|---|---|---|
| A | Single phase half wave rectifier | B | Single phase full wave rectifier |
| C | Three phase full wave rectifier | D | Three phase half wave rectifier |
| | Answer | | |

Ref437

The dc output voltage produced by centre tapped transformer rectifier is

| | | | |
|---|---|---|---|
| A | Vdc= 0.5 Vmax | B | Vdc= 0.73 Vmax |
| C | Vdc= 0.707 Vmax | D | Vdc= 0.636 Vmax |
| | Answer | | |

Ref438

For bridge rectifier , ripple frequency is equal to

| | | | |
|---|---|---|---|
| A | Two times supply frequency | B | Three times supply frequency |
| C | Half of supply frequency | D | Supply frequency |
| | Answer | | |

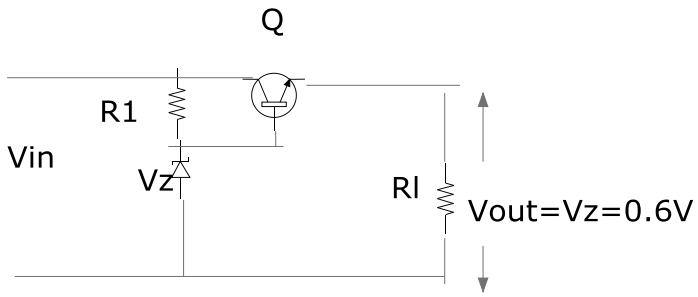
Ref439

Calculate the load resistance & capacitance size of a full wave rectifier that supplies 40V dc with 3% ripple voltage at 250mA to a resistance load. The rectifier circuit is supplied with 60HZ AC. Ripple frequency 50HZ.

| | | | |
|---|---|---|---|
| A | 60Ω, 15µF | B | 320Ω, 62.5µF |
| C | 100Ω, 10µF | D | 160Ω, 31.25µF |
| | Answer | | |

Ref440

The following circuit is




| | | | |
|---|---|---|---|
| A | Shunt transistor regulator | B | Regulator with feedback |
| C | Series transistor regulator | D | Operational amplifier |
| | Answer | | |

Ref441

The regulator with feedback is constructed with the following values. R2= 1 KΩ, R3= 2 KΩ, Rsc=0.6Ω

Calculate power output Pd

| | | | |
|---|---|---|---|
| A | 90W | B | 60W |
| C | 30W | D | 15W |
| | Answer | | |