BBA and MBA contents and videos

http://aimslibrary.blogspot.com/p/digital-library.html

B.Sc - ELECTRONICS

WEBSITE REFERENCES

II SEM BSC **ELECTRONICS**

WEBSITE REFERENCES

Unit 1

Small Signal Amplifiers

Classification of amplifiers based on different criteria

https://www.youtube.com/watch?v=CjjBr0CbjQc

Small signal CE amplifier-circuit, working,

https://www.youtube.com/watch?v=NESchIntkR8

https://www.youtube.com/watch?v=0BRjXG6B3-w

Frequency response

https://www.youtube.com/watch?v=L6BZEJ4wH4I&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=63

re model for CE configuration,

https://www.youtube.com/watch?v=aLofpeLAIeo

Derivation for Av, Expressions for Zin and Zout. Of CE amplifier
https://www.youtube.com/watch?v=wbDUDRlmUuM (till 12 minutes)

CC amplifier -circuit diagrams & applications

https://www.youtube.com/watch?v=tTPRbtJJV0o&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=112&t=0s

Multistage amplifiers-qualitative study of cascaded stages, overall gain of multistage Amplifier

https://www.youtube.com/watch?v=V_2rQ_EftIQ&t=18s

Types of coupling-RC coupled, transformer coupled and direct coupled (only circuit diagrams and frequency response graph, advantages and disadvantages for each). https://www.youtube.com/watch?v=PW2BowMDfa0

Darlington amplifier-circuit diagram and its characteristic features.

https://www.youtube.com/watch?v=hC57Pclhk3A

JFET amplifier in CS mode – circuit and operation, equivalent circuit and expression for Voltage gain (derivation).

https://www.youtube.com/watch?v=PMOaS967Yus&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=124&t=0s

https://www.youtube.com/watch?v=_DZ7baOhNFQ&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=124

https://www.youtube.com/watch?v=szXElVSlJmk&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=125

https://www.youtube.com/watch?v=NRBBRbhsiqc&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=127

Unit 2

Power and Tuned amplifier

Voltage and power amplifier

https://www.youtube.com/watch?v=CjjBr0CbjQc&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=83

Classification of power amplifiers-Class A, Class B, Class C and their comparisons.

https://www.youtube.com/watch?v=hzGRkhscQ9k&list=PLaw_G9VPLLHvs5mDWUH_hZ2TMEDboHaTp

Class A single ended power amplifier–working. Transformer coupled Class A power amplifier-working, overall efficiency (derivation). -https://www.youtube.com/watch?v=HU9MlJcJ4fA&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=106

https://www.youtube.com/watch?v=1pv3NJjI-ac&list=PLaw_G9VPLLHvs5mDWUH_hZ2TMEDboHaTp&index=3

Circuit operation of complementary symmetry class B push pull power amplifier (no derivation),

Crossover distortion

https://www.youtube.com/watch?v=JtlSLEUWQQ4

Tuned amplifiers

https://www.youtube.com/watch?v=DNK0GIm2ZvI

https://www.youtube.com/watch?v=iat53DqIOcU –Single Tuned

https://www.youtube.com/watch?v=KjqUtL7hAHk –Double Tuned

Unit 3

Differential amplifier

Differential Amplifier

https://www.youtube.com/watch?v=QzeH0exPi-c

https://www.youtube.com/watch?v=i372GQxIto0&list=PLZvLSclgk4yIyTakda4mbtQeo6OeT1Ptq&index=6&t=0s

https://www.youtube.com/watch?v=MWLW960lgr4&list=PLZvLSclgk4yIyTakda4mbtQeo6OeT1Ptq&index=7

Current Mirror – circuit diagram and working, differential amplifier with current mirror–

https://www.youtube.com/watch?v=VnJHXQCPIvs

Unit 4

Feedback and Oscillators

Feedback-concept of feedback, types of feedback-positive & negative feedback

https://www.youtube.com/watch?v=E4-HldjE268&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=95

Advantages and Disadvantages of Negative Feedback

https://www.youtube.com/watch?v=aVaBe4FqBwA&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=89

Negative feedback configurations:-

Voltage series

https://www.youtube.com/watch?v=pgTjpr4jxt4&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=90

Voltage shunt

https://www.youtube.com/watch?v=EYRW8jyi9_Q&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=92

Current series

https://www.youtube.com/watch?v=zzCugacycIY&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=91

Current shunt

https://www.youtube.com/watch?v=Sg51aREQZ3Y&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=98

Sinusoidal Oscillators, Basic principle of oscillator

https://www.youtube.com/watch?v=A2SEkPus6Gc&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=93 - oscillator

https://www.youtube.com/watch?v=f-XpPHsX-dc&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=97 – oscillatory circuit

Barkhausen criterion

https://www.youtube.com/watch?v=iOl-EYq02W0&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=99

Collpitt's oscillator https://www.youtube.com/watch?v=d1hjkIHuT9M&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=102

Hartley oscillators using transistors – circuit diagrams, working (no derivations) - https://www.youtube.com/watch?v=Jf1rprWFVsA&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=101

Multivibrator–types, block diagrams of astable, monostable&bistablemultivibrators with waveforms. Circuit diagram and working of astableMultivibrator using transistors

https://www.youtube.com/watch?v=5clfiJtRhR8

https://www.youtube.com/watch?v=6J2tid_Frr4

Unit 5

Special purpose devices

MOSFET

https://www.youtube.com/watch?v=4_nGFY7zgDM&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=135

https://www.youtube.com/watch?v=ybPQ1IDfTb8&list=PLBlnK6fEyqRiw-GZRqfnlVIBz9dxrqHJS&index=136

UJT

https://www.youtube.com/watch?v=D6-ikJFUoFc&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=81

SCR

https://www.youtube.com/watch?v=8OgHY4-gcQw&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=78

Triac

https://www.youtube.com/watch?v=ld8j1_IVh6s&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=79

Diac

https://www.youtube.com/watch?v=je_4qj5xl7E&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=80

LED

https://www.youtube.com/watch?v=u3H9Z7ABVKU&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=29

Tunnel diode

https://www.youtube.com/watch?v=hNzLQdFW-FI&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=27

Varactor diode

https://www.youtube.com/watch?v=A6kgfyeC5Qg&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=25

Photo diode

https://www.youtube.com/watch?v=8k9UIlwo7W4&list=PL0n2jBUgUVhvsXil-D-V8LvNX6X5K00bL&index=28

Photo Transistor

https://www.youtube.com/watch?v=ouGbgDxJN4U

Solar cell

https://www.youtube.com/watch?v=v37-kcydd98

IV SEM B.Sc **DE&VERILOG**

WEBSITE REFERENCES
Unit 1: Boolean algebra and Logic gates

Positive & Negative logic
https://www.youtube.com/watch?v=gtucOKD1pHA&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=20

Basic Boolean logic
https://www.youtube.com/watch?time_continue=1844&v=DJbyy89a3Qk&feature=emb_logo

Boolean Theorems
https://www.youtube.com/watch?time_continue=479&v=7wJX9g7LLy8&feature=emb_logo

Boolean expressions-SOP and POS
https://www.youtube.com/watch?v=xnLBbOYYnHM&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=12
https://www.youtube.com/watch?v=NGgNoa0_zns&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=13
https://www.youtube.com/watch?v=nXsiLPJfDZ4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=14
https://www.youtube.com/watch?v=ihTH1C6qCYI&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=15
https://www.youtube.com/watch?v=K2cpJex0o_A&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=16
https://www.youtube.com/watch?v=Km5pTz67uGc&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=17
https://www.youtube.com/watch?v=f0trF1LtYZ4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=18
https://www.youtube.com/watch?time_continue=49&v=wIWTuywrEGc&feature=emb_logo
https://www.youtube.com/watch?time_continue=1469&v=Hwe3W_qhL5I&feature=emb_logo

Universal property of NOR and NAND gates, rearranging of truth tables etc
https://www.youtube.com/watch?v=ChtmE09BSy0&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=78
https://www.youtube.com/watch?v=Z6Nds10n7rs&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=80
https://www.youtube.com/watch?time_continue=970&v=wZi-gvmB84g&feature=emb_logo

K-map-3 and 4 variable expressions
https://www.youtube.com/watch?time_continue=1200&v=iJ9cFDoXajw&feature=emb_logo
https://www.youtube.com/watch?v=6HTN3IDi2Fw&feature=emb_logo
https://www.youtube.com/watch?time_continue=136&v=VY9J3qYbky4&feature=emb_logo
https://www.youtube.com/watch?v=C3yak1p6Fvk&feature=emb_logo

Characteristics of logic families
https://www.youtube.com/watch?v=9Rt7iuqSVJ8

Logic Families-classification of digital ICs Circuit description of TTL NAND gate with totem

pole and open collector. TTL IC terminology. Circuit description of CMOS inverter, comparision of TTL and CMOS families.
https://www.youtube.com/watch?v=PM-4emVKbQg

Unit 2: Combinational logic circuits

Comparison of combinational and sequential logic circuits
https://www.youtube.com/watch?v=SzV4l0_1MCQ&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=100
Half adder & full Adder
https://www.youtube.com/watch?v=aLUY-s7LSns&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=101
https://www.youtube.com/watch?v=S91WnV2wCbA&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=107
https://www.youtube.com/watch?v=RK3P9L2ZXk4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=102
https://www.youtube.com/watch?v=Z_DYRgtAXfw&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=103
Half subtractor& full subtractor.
https://www.youtube.com/watch?v=SV4VTYWxKV4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=105
https://www.youtube.com/watch?v=TWhRqp8eVhU&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=110
https://www.youtube.com/watch?v=dBXGGWbtt6U&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=106

4:1 multiplexer using gates
https://www.youtube.com/watch?v=FKvnmxte98A&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=118
https://www.youtube.com/watch?v=g1Lfz1XgrH8&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=119
https://www.youtube.com/watch?v=McYy-IRM6a0&feature=emb_logo

1:4 demultiplexer using gates.
https://www.youtube.com/watch?v=t3Ed13z9uz8&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=128
https://www.youtube.com/watch?v=4kgPMT9k3bg&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=129

Two bit comparator
https://www.youtube.com/watch?v=BhUUmbz76P0&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=132

Encoders & Decoders
https://www.youtube.com/watch?v=feBvhLFQEDk&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=133

https://www.youtube.com/watch?v=kEj-m3YuGa4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=134
https://www.youtube.com/watch?v=I_-3HN1ueNk&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=135

3:8 decoder using NAND gates
https://www.youtube.com/watch?v=AFBoQ0zSdTI

Seven segment Display Decoder
https://www.youtube.com/watch?v=smeUN1Bxj3M&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=97

D-A conversion 4 bit binary weighted resistor type, circuit and working. Circuit of R-2R ladder concept only.
https://www.youtube.com/watch?v=jDn1eXijQdY

Unit 3: Sequential logic circuits

Introduction to sequential circuits and SR latch explanations
https://www.youtube.com/watch?time_continue=177&v=ibQBb5yEDlQ&feature=emb_logo
SR latch
https://www.youtube.com/watch?v=kt8d3CYWGH4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=145
https://www.youtube.com/watch?time_continue=3&v=zamCV7GFPw8&feature=emb_logo
https://www.youtube.com/watch?v=-aQH0ybMd3U
SR and D flip flops
https://www.youtube.com/watch?v=HZg7fNu-l24&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=150
https://www.youtube.com/watch?v=uiKKRPZbuXA&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=151
https://www.youtube.com/watch?v=dnfXXpW7tIw&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=152
https://www.youtube.com/watch?v=4c6z9RKrC8Q&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=153
https://www.youtube.com/watch?v=k4-LYtQS0jY&feature=emb_logo
SR, D & JK flip flops
https://www.youtube.com/watch?v=j6krFp511HA&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=154
https://www.youtube.com/watch?v=lnQD2_M9uDI&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=155
https://www.youtube.com/watch?v=trPGhO7MPnw&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=156
https://www.youtube.com/watch?time_continue=1&v=2ecMG_OciLo&feature=emb_logo
Master slave JK and T flip flops
https://www.youtube.com/watch?v=t2LZtaNck_g&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=157

https://www.youtube.com/watch?v=4CRPlaBnfV0&feature=emb_logo
https://www.youtube.com/watch?v=wcfnEla_Y78&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=159
https://www.youtube.com/watch?v=9mh-2QwxmF4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=160
Latch and flip flop
https://www.youtube.com/watch?v=m1QBxTeVaNs&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=149
Preset and clear inputs in flip flops
https://www.youtube.com/watch?v=9mh-2QwxmF4&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=160
SISO shift register
https://www.youtube.com/watch?v=SsKGr9iqxAQ
SIPO & PIPO shift registers
https://www.youtube.com/watch?v=Qo3x41US0KI
PISO shift registers
https://www.youtube.com/watch?v=zUBYXdOnDrw
Introduction to counters
https://www.youtube.com/watch?v=iaIu5SYmWVM&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=179
https://www.youtube.com/watch?v=yqg1sqhZG3M&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=180
https://www.youtube.com/watch?v=R6As6A4jZHQ
3 bit Ripple counter
https://www.youtube.com/watch?v=s1DSZEaCX_g&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=181
Up – down asynchronous counters
https://www.youtube.com/watch?time_continue=1&v=PnwYW3RWARw&feature=emb_logo
BCD ripple counter
https://www.youtube.com/watch?v=fKVZpupyP_o&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=187
Ring counter
https://www.youtube.com/watch?v=yOW-JsJL1Ks&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=191
Johnson counter
https://www.youtube.com/watch?v=X4mx7J1ckyU&list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&index=192
Design of synchronous counter
https://www.youtube.com/watch?v=MiuMYEn3dpg&feature=emb_logo
https://www.youtube.com/watch?time_continue=2&v=t1_rhFnKAeo&feature=emb_logo

UNIT 4: Introduction to Verilog

A Brief History of HDL, Structure of HDL Module, Comparison of VHDL and Verilog
Introduction to Simulation and Synthesis Tools, Test Benches.
https://www.youtube.com/watch?v=FWE0-FOoE4s&list=PLUtfVcb-iqn-

EkuBs3arreilxa2UKIChl
https://www.youtube.com/watch?time_continue=2&v=HqdNKZ5BVlY&feature=emb_logo
https://www.youtube.com/watch?v=-WakXw6jUXk&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=2
https://www.youtube.com/watch?v=CbAOllGdpHA&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=4

Verilog: Module, Delays, Brief description - data flow style, behavioral style, structural style, mixed design style, simulating design.
https://www.youtube.com/watch?v=wiNDn19GpRU&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=3

Language Elements- Introduction, Keywords, Identifiers, White Space Characters, Comments, format, Integers, reals and strings. Logic Values, Data Types-net types, undeclared nets, scalars and vector nets, Register type, Parameters.
https://www.youtube.com/watch?v=LShyZaqCuVg&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=6
https://www.youtube.com/watch?v=fFT1JCgzVA8&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=7

Expressions: Operands, Operators, types of Expressions
https://www.youtube.com/watch?v=VS9JzfJ6Oxg&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=9

Gate level modeling - Introduction, built in Primitive Gates, multiple input gates, Tri-state gates, pull gates, MOS switches, bidirectional switches, gate delay, array instances, implicit nets
https://www.youtube.com/watch?v=8U5HVkd9EWg&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=8

UNIT 5: Data flow Modeling and BehavioralModeling

BehavioralModeling – Procedural assignments - initial and always statements
https://www.youtube.com/watch?v=6rY1jMtalpY&list=PLUtfVcb-iqn-EkuBs3arreilxa2UKIChl&index=13

Always statement, Verilog programs for few sequential elements
https://www.youtube.com/watch?time_continue=3&v=A3aHO6CX-HQ&feature=emb_logo

conditional statement, loop statement, procedural continuous assignment, Illustrative Examples
https://www.youtube.com/watch?v=PJGvZSlsLKs

Full Verilog concepts covered
https://www.youtube.com/watch?v=PJGvZSlsLKs

VI SEM BSC **Micro controllers**

WEBSITE REFERENCES

UNIT 1: Introduction to Microcontrollers

Basic block diagram, comparison of microcontroller with microprocessors
https://www.youtube.com/watch?v=d0e6ScoS3Sw&list=PLZv8x7uxq5XaKFWRF9Q_AUn7zQmBq1Sfn&index=2
https://www.youtube.com/watch?v=7mtt4bdfQk4
https://www.youtube.com/watch?v=i_g1dD5fFLo

8051- architecture-internal block diagram, key features of 8051
https://www.youtube.com/watch?v=O-UALuVyyLY&list=PLZv8x7uxq5XaKFWRF9Q_AUn7zQmBq1Sfn&index=3
https://www.youtube.com/watch?v=hZDReT0vzBU
https://www.youtube.com/watch?v=pA6K5NgWTow&list=RDCMUCVkGOMGLPJZ4-k2ES43N0iA&index=4

8051 pin diagram, memory organization, Internal RAM memory, Internal ROM. General purpose data memory, , external memory.
https://www.youtube.com/watch?v=vkEUiSq1ge4&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ&index=5
https://www.youtube.com/watch?v=O-UALuVyyLY
https://www.youtube.com/watch?v=Ok55KkwafQU

Special purpose/function registers
https://www.youtube.com/watch?v=zzr0zLLeCQw
https://www.youtube.com/watch?v=G-sBK19x_xU&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ

Serial data input / output – SCON, PCON, serial data transmission modes.
https://www.youtube.com/watch?v=FOrs4ffP-Wc
https://www.youtube.com/watch?v=reeV290ChGQ&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ&index=6

Counters and timers – 8051 oscillator and clock, program counter, TCON, TMOD, timer counter interrupts, timer modes of operation.
https://www.youtube.com/watch?v=0SZPr4iGACg
https://www.youtube.com/watch?v=bBKuWuFg4-U&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ&index=7

Input / output ports and circuits/ configurations
https://www.youtube.com/watch?v=U6t6jZeseSc
https://www.youtube.com/watch?v=WcfefpCKLMg

UNIT 2: 8051- Interrupts, Addressing modes and Instruction set

Interrupts – IE, IP, time flag interrupts, serial port interrupt, external interrupts, reset, interrupt control, interrupt priority, interrupt destinations & software generated interrupts.
https://www.youtube.com/watch?v=7l3-iq6OtEE&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ&index=3
https://www.youtube.com/watch?v=rUSkQ0Bc6ms
https://www.youtube.com/watch?v=bJdUkmLxNh4

Addressing modes–immediate addressing, register addressing, direct and indirect addressing
https://www.youtube.com/watch?v=NRz4kSu1uVI&list=PLZv8x7uxq5XaKFWRF9Q_AUn7zQmBq1Sfn&index=4
https://www.youtube.com/watch?v=sLbw1stNkXM

Instruction set of 8051
https://www.youtube.com/watch?v=s5zm3-WKqcg&list=PLcYzlQJ999BklDuFv17mo-KIrOQDNvHmJ&index=4
https://www.youtube.com/watch?v=xOCjCA3kNgc&list=RDCMUCVkGOMGLPJZ4-k2ES43N0iA&index=18

Logical Instructions – byte level logical operations, bit level logical operations, rotate and swap operations
https://www.youtube.com/watch?v=IDHnDrohHV8&list=PLZv8x7uxq5XaKFWRF9Q_AUn7zQmBq1Sfn&index=9

Installation of Keil software
https://www.youtube.com/watch?v=MG595VN4r70&list=PLZv8x7uxq5XaKFWRF9Q_AUn7zQmBq1Sfn

Simple example programs in assembly language.
https://www.youtube.com/watch?v=xOCjCA3kNgc
https://www.youtube.com/watch?v=myw7ycAgJYM

UNIT 3: 8051 programming in C

Timer / Counter Programming in 8051–Programming 8051 timers, counter programming, programming timers 0 and 1 in 8051 C , example programs
https://www.youtube.com/watch?v=pAKm7TCp7es

8051 programming using C- Data types and time delays in 8051C
https://www.youtube.com/watch?v=M0VljVAfMVE
https://www.youtube.com/watch?v=t9NrRkdGaME

UNIT 4: Interfacing with 8051

Basic interfacing concepts

https://www.youtube.com/watch?v=gAAUAZiQlhQ

Schematic diagrams and basic concepts of Interfacing of 8051 to keyboard
https://www.youtube.com/watch?v=4zAmzCTN20k

Schematic diagrams and basic concepts of Interfacing of 8051 toDAC&ADC
https://www.youtube.com/watch?v=yFIiJ6bJUNE

Schematic diagrams and basic concepts of Interfacing of 8051 totraffic light controller circuits.
https://www.youtube.com/watch?v=FoOVjXVUcOA

Schematic diagrams and basic concepts of Interfacing of 8051 toseven segment display
https://www.youtube.com/watch?v=5hVjGQX7ez8&list=PLrjkTql3jnm8HbdMwBYIMAd3UdstWChFH&index=61

Schematic diagrams and basic concepts of Interfacing of 8051 tostepper motor
https://www.youtube.com/watch?v=LlpQuaQEQ8A

UNIT 5: PIC microcontrollers

Core features of PIC microcontrollers, overview of various PIC microcontroller series.
PIC 16F877A-features, interfacing with LCD.
https://www.youtube.com/watch?v=fozc9OPF_Nc

PIC 16F877A-features, pin diagram, I/O ports
https://www.youtube.com/watch?v=PzaJqj5IKtU

UNIT 1
Digital communication

Introduction to pulse and digital communications
https://www.youtube.com/watch?v=T_fOKKITaYA&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=3&t=0s
Sampling theorem
https://www.youtube.com/watch?v=VZ23yvTNjGI&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=20
PAM
https://www.youtube.com/watch?v=VMBGtCS2EGg
PCM - Quantization, advantages and applications
https://www.youtube.com/watch?v=aKl17gw_nfU&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=36
PWM - https://www.youtube.com/watch?v=DMwTgx70BJE&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=27
PPM- https://www.youtube.com/watch?v=YM4Kmyu3gVs&list=PLgwJf8NK-

2e5PngHbdEadEun5XPvnn00N&index=28
ASK - https://www.youtube.com/watch?v=ucrZlde8vtk&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=9
FSK- https://www.youtube.com/watch?v=rrgon8Qne_E&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=11
PSK-https://www.youtube.com/watch?v=CCBdeVRMip8&list=PLgwJf8NK-2e5PngHbdEadEun5XPvnn00N&index=13
Characteristics of data transmission circuits – Shannon limit for information capacity, https://www.youtube.com/watch?v=3ekWsXeZ8TM

UNIT 2
RADAR

RADAR - Principle
https://www.youtube.com/watch?v=bXcY5Kjz8Hw&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=2&t=0s
https://www.youtube.com/watch?v=sSDNKhSQ4FI&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=2
Maximum Unambiguous range
https://www.youtube.com/watch?v=9VwvfNL_Ues&list=PLZwdBSAw_GK3Q2Qy_S0BhRL40sQTHA9Xe&index=2&t=0s
Block diagram of pulsed RADAR system
https://www.youtube.com/watch?v=0rRnxTO3L9s&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=10
RADAR range equation-derivation
https://www.youtube.com/watch?v=p4gEpf8Goxs&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=3
Doppler Effect
https://www.youtube.com/watch?v=VcwZ3N9anzc
MTI RADAR-block diagram
https://www.youtube.com/watch?v=pkZf0Dsuh-E&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=11
CW RADAR-block diagram, advantages, applications and limitations
https://www.youtube.com/watch?v=Xwo1qdzwAgk&list=PLgwJf8NK-2e4KmA52Jw3-JhDhFIDQZ9Bv&index=8
FM CW RADAR
https://www.youtube.com/watch?v=wz8SiZndSxs&list=PLZwdBSAw_GK3Q2Qy_S0BhRL40sQTHA9Xe&index=7
https://www.youtube.com/watch?v=gzRnetBk3Yc&list=PLZwdBSAw_GK3Q2Qy_S0BhRL40sQTHA9Xe&index=8

UNIT 3
Satellite communication

Introduction, need, satellite orbits, advantages and disadvantages of geostationary satellites,effect

of solar eclipse
https://www.youtube.com/watch?v=Kf9cmrBtE40&list=PLZjlBaHNchvOiGj8PVi0EOzT6vrn7s85u&index=2
https://www.youtube.com/watch?v=UEUxSbANKO8&list=PLAnjLC20C-XQnoowCtt-67WmyxoQPu2Fi&index=5
Simplified block diagram of Earth station.
https://www.youtube.com/watch?v=mCGCOLs8RwY
Satellite Access – TDMA, FDMA,CDMA concepts
https://www.youtube.com/watch?v=yJho5FERZQY
GPS
https://www.youtube.com/watch?v=tgmMFgO9UKM

UNIT 4

Optical Fiber Communication

Introduction – Need for OFC.
https://www.youtube.com/watch?v=cPnKxaPAc7g&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=3&t=0s
Block diagram of OFC system,Light propagation through fiber

https://www.youtube.com/watch?v=q6_q2IBm93o&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=5&t=0s
Fiber optic cables
https://www.youtube.com/watch?v=pavBq7HIoIE
https://www.youtube.com/watch?v=KW3HSJthFws
Step index
fiberhttps://www.youtube.com/watch?v=TmDSIZUNAcg&list=PLDp9Jik5WjRuUyDT6961r8pkelgJMG8fG&index=97&t=0s
Graded index fiber
https://www.youtube.com/watch?v=kEe_7m5m2eE&list=PLDp9Jik5WjRuUyDT6961r8pkelgJMG8fG&index=98&t=0s
https://www.youtube.com/watch?v=EYtmxI8gKSI&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=10&t=0s – Refractive index
https://www.youtube.com/watch?v=og_eXK2JoT4&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=12&t=0s –Total Internal Reflection
Snell's law - https://www.youtube.com/watch?v=pKsi-wtJIUA&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=13&t=0s
Numerical Aperture(derivation). - https://www.youtube.com/watch?v=q37CpocWZyw
Light sources – requirements
https://www.youtube.com/watch?v=eoGhOgr0boQ&list=PLDp9Jik5WjRuUyDT6961r8pkelgJMG8fG&index=115
LED
https://www.youtube.com/watch?v=IEju3AT1olk
Semiconductor laser diodes.
https://www.youtube.com/watch?v=OQvIA2BWTPQ&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=49&t=0s
https://www.youtube.com/watch?v=QMW8J_uV1WQ

Photo detectors
PN photodiode
https://www.youtube.com/watch?v=eR9WntHpXZ0&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=59
PIN Photodiode
https://www.youtube.com/watch?v=zyeRCGeciVo&list=PLgwJf8NK-2e7CDIWsh61eItP9iRw1EIQc&index=63&t=0s
Avalanche photodiodes
https://www.youtube.com/watch?v=GkAvCokJ8Lo

Unit 5

Cellular Communication and Wireless LANs

Concept of cellular mobile communication – cell and cell splitting
https://www.youtube.com/watch?v=Khn7cA8pqiE
Frequency reuse, Roaming and Hand off
https://www.youtube.com/watch?v=ioj6F1v59yw
CDMA technology, CDMA overview
https://www.youtube.com/watch?v=BkThmLtjQpE
Comparative study of GSM and CDMA
https://www.youtube.com/watch?v=98OGDsot3dM
Major components of local area network
https://www.youtube.com/watch?v=w3DtrEPC1Lg
Mobile IP
https://www.youtube.com/watch?v=zRnJzvkf5gA
OSI model
https://www.youtube.com/watch?v=08Q97AHtzVo
Concept of Bluetooth
https://www.youtube.com/watch?v=HY5VdPhCWi0
Wi-Fi and WiMAX.
https://www.youtube.com/watch?v=Q93Z5-t5bYY

WEBSITES FOR REFERENCE

SUBJECT: ENGLISH

BA

II Semester BA Optional English

1. The Little Black Boy - https://www.sparknotes.com/poetry/blake/section4/

https://poemanalysis.com/william-blake/the-little-black-boy/

2. The World Is Too With Us – https://www.bachelorandmaster.com/britishandamericanpoetry/the-world-is-too-much-with-us-summary-analysis.html#.Xpb9ucgzZPY

https://www.shmoop.com/study-guides/poetry/world-is-too-much-with-us/summary

3. The Rhyme of Ancient Mariner-https://www.gradesaver.com/the-rime-of-the-ancient-mariner/study-guide/summary-part-7

https://youtu.be/Nqzf0eVhjjY

https://www.coursehero.com/lit/The-Rime-of-the-Ancient-Mariner/part-7-summary/

4. She Walks in Beauty-https://beamingnotes.com/2013/05/21/she-walks-in-beauty-analysis-by-lord-byron-summary/

https://poemanalysis.com/lord-byron/she-walks-in-beauty

5. The Cloud-https://www.bachelorandmaster.com/britishandamericanpoetry/the-cloud.html#.XpcB5sgzZPY

https://poemanalysis.com/percy-bysshe-shelley/the-cloud

6. Modern Gallantry-https://ardhendude.blogspot.com/2011/05/analysis-of-charles-lambs-essay-modern.html

7. Extract from Preface to Lyrical Ballads-https://www.litcharts.com/lit/preface-to-the-lyrical-ballads/summary-and-analysis

http://www.supersummary.com/preface-to-lyrical-ballads/summary/

https://englishsummary.com/preface-lyrical-ballads-wordworth/

8. Professions for women-https://talk.collegeconfidential.com/college-essays/1908036-rhetorical-analysis-essay-on-professions-for-women-by-virgina-woolf.html

https://phdessay.com/literary-analysis-of-virginia-wolfes-professions-for-women/

9. Wuthering Heights-https://www.sparknotes.com/lit/wuthering/

II Semester BA General English

1. The Fly

https://owlcation.com/humanities/Boss-Fly-Mansfield

http://sittingbee.com/the-fly-katherine-mansfield/

2. A Face in the Dark

https://englicist.com/notes/a-face-in-the-dark

https://www.litbug.com/2019/10/27/a-face-in-the-dark-by-ruskin-bond-summary-and-analysis/

3. Mrs. Dutta Writes a Letter

https://www.encyclopedia.com/education/news-wires-white-papers-and-books/mrs-dutta-writes-letter

4. Give All to Love

https://poemanalysis.com/ralph-waldo-emerson/give-all-to-love/

5. The Cold Within

https://englicist.com/notes/the-cold-within-james-patrick-kinney-summary

https://beamingnotes.com/2017/12/28/cold-within-analysis-james-patrick-kinney/

6. Hayavadana

https://www.litcharts.com/lit/hayavadana/act-1

https://youtu.be/ZR9oauUBso8

7. Shut Down the Shop

https://www.youtube.com/watch?v=tVkRbqtfs4w&t=840s

8. The Good Bad and In-between the Social Media

https://www.youtube.com/watch?v=fhwlHTXteJY

IV Semester B A Optional English

History of American Literature https://www.youtube.com/watch?v=qibmsTdCTaI

Poetry

1. Walt Whitman- From Dong of Myself" I have said that the soul is not more than a body"

www.literary-articles.com/2013/11/whitmans-mysticism-and-concept-of-body.html

2. Emily Dickenson"-I measure every grief I meet"

https://poets.org/poem/i-measure-every-grief-i-meet-561

3. Robert Frost

After Apple Picking

tps://www.bing.com/videos/search?q=after+apple+picking+analysis&docid=60

4. Wallace Stevens

Of Modern poetry

https://quillsliteracy.org/analysis-of-wallace-stevens-on-modern-poetry-444

5. Langston Hughes

Freedom Train

https://graduateway.com/an-analysis-of-langston-hughes-poem-freedom-train

6. Maya Angelou

And Still I Rise

https://brightdreamsjournal.com/still-i-rise-maya-angelou-analysis-poem

Short stories and Essays

7. Nathaniel Hawthorne

The Minister's Black Veil

https://artscolumbia.org/the-ministers-black-veil-essay-67831

Philip Roth

8. Defender of the Faith

*https://*www.thefreedictionary.com/Defender+of+the+Faith

9. Frederick Douglass

Chapter VI

https://www.gradesaver.com/narrative-of-the-life-of-frederick-douglass...

10. Chief Seattle's speech

*ttps://englicist.com/notes/*chief-seattles-speech-*1854*

Thoreau- Extract from Civil disobedience

https://www.gradesaver.com/civil-disobedience/study-guide/summary

Tennessee Williams- The Glass Menagerie (Drama)

*https://phd*essay.*com/*character-*analysis-of*-the-glass-menagerie

IV Semester BA General English

Literary Components

1. Lines Written in early Spring- Wordsworth

https://poemanalysis.com/william-wordsworth/lines-written-in-early-spring

2. Weaver Bird- Kofi Awonoor

https://www.angolahelpview.com/the-weaver-bird-poem-summary

3. Speech on world Humanitarian Day- Chimamanda Ngozi

https://brittlepaper.com/2016/09/full-transcript-read-word-chimamanda-adichies-powerful-world-humanitarian-day-speech/

4. The Talkative man- R K Narayan

https://www.bing.com/videos/search?q=talkative+man+analysis+video&qs=HS&cvid

Presentation skills

*ttps://www.cleverism.com/*skills-*and-tools/*presentation-skills

Interview skills

https://www.skillsyouneed.com/ips/interview-skills.html

Resume Writing

https://www.thebalancecareers.com/job-resumes-4161923

BCA/BSC II SEMESTER

1. Britain does owe Reparations- https://www.independent.co.uk/news/uk/home-news/dr-shashi-tharoor-tells-the-oxford-union-why-britain-owes-reparations-for-colonising-india-in-viral-10407997.html

https://www.bbc.com/news/world-asia-india-33647422

2. Celebrity- https://www.youtube.com/watch?v=AqmvdQlciNc

3. Shooting an Elephant- https://www.gradesaver.com/shooting-an-elephant/study-guide/summary-part-one

4. Bankers are just like anybody else- https://mastanappa.blogspot.com/2016/01/bankers-are-just-like-anybody-else.html

5. A Midsummer Night's Dream- https://www.gradesaver.com/midsummer-nights-dream/study-guide/summary

6. Hayavadana- https://classicalartsuniverse.com/girish-karnad-hayavadana-summary-analysis/

BCA/BSC IVSEMESTER

1. Untouchability is worse than slavery- https://www.ambedkaritetoday.com/2019/12/which-is-worse-slavery-or-untouchability.html

2. O, How I Love Your Streets- https://brainly.in/question/3487415

3. The Ramapuram Tiger- https://www.youtube.com/watch?v=KzREw_eNzws

4. Animal Farm- https://englishsummary.com/lesson/animal-farm-chapter-1-summary/

https://www.youtube.com/watch?v=XXkicQRl6vg&t=4146s

https://www.cliffsnotes.com/literature/a/animal-farm/book-summary

BCOM/BBA II SEMESTER

1. Freedom

https://www.enotes.com/homework-help/read-freedom-by-rabindranath-tagore-analyze-poem-

2. Endymion

https://poemanalysis.com/john-keats/endymion-book-one/

3. The Happy Prince

https://www.learncram.com/english-summary/the-happy-prince-summary/

4. Definitions of Feminity and Masculinity

https://www.youtube.com/watch?v=Pyr-XKQG2CM

5. The Sunderbans

https://www.youtube.com/watch?v=gwNtUnM6kas

6. Hayavadana

https://www.litcharts.com/lit/hayavadana/act-1

https://youtu.be/ZR9oauUBso8

7. Charlie Chaplin –An extract from Autobiography

https://www.youtube.com/watch?v=6-T7y5A5e7Y&t=404s

https://youtu.be/v_ibx52DgoA

8. A Cut Above

https://blog.evergalax.com/business/entrepreneur/biba-meena-bindra-success-story/

BCOM/BBA IV SEMESTER

1. Jonathan Livingston Seagull

http://www.supersummary.com/jonathan -livingston-seagull/summary/

https://www.bookreports.info/ jonathan -livingston-seagull/summary/

https://janelliguiang.wordpress.com

https://www.enotes.com

https://www.bartleby.com

2. Phoenix of Beauty

https://www.youtube.com/watch?v=LjPM7jD04Xk

3. The Hoop

www.online-literature.com

https://www.scribd.com

https://www.amazon.in

https://www.kobo.com

4. How Soon Hath Time

https://www.litcharts.com

https://englishpoetsummary.blogspot.com

https://poemanalysis.com

https://www.enotes.com

5. Give us a Role Model

https://www.youtube.com/watch?v=PG9AD9i74PQ

https://www.youtube.com/watch?v=V4vFfvDEjck

6. How Kacha Got the Secret

https://en.m.wikipedia.org

https://brainly.in

https://youtu.be/VL2RfEWOq-U

7. Nationalism-An Interview

https://youtu.be/1bZv3pSaLtY

https://youtu.be/OhVrT_NeF74