OUT Syllabus of EVS for Electrical Engineering 2ND YR

Semester: 4th

Subject code: MC-EE-401

2019-2020

- 1. Basic Environment
- 2. Ecology
- 3. Eco-system: Concept and Structure
- 4. Air Pollution and Control
- 5. Water Pollution and Control
- 6. Land Pollution and Control
- 7. Noise Pollution and Control

Syllabus Covered :95% (13/05/2020)

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 2nd year

Course Name: Electric Machine I

Course Code: PC-EE-401

Exam Date: 19.05.2020 Exam Time: 10.15-11.15 Exam Duration: 1hour

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Transformer (Single phase and three phase)

% of Completion of total Syllabus: 95%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 2019-20

Course Name: Electrical Machine I

Course Code: PC-EE 401

Exam Date: 19/05/2020 Exam Time: 10:15am-11:15 am Exam Duration: 1 Hr

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google form

Syllabus of the Course for this OUT:

For sec A

DC Machine: Basic construction of a DC machine, magnetic structure - stator yoke, stator poles, pole-faces or shoes, air gap and armature core, visualization of magnetic field produced by the field winding excitation with armature winding open, air gap flux density distribution, flux per pole, induced EMF in an armature coil. Derivation of back EMF equation, armature MMF wave, derivation of torque equation, voltage build-up in a shunt generator, critical field resistance and critical speed. V-I characteristics and torque-speed characteristics of separately excited, shunt and series motors

For Sec B

Transformers:

Principle, construction and operation of single-phase transformers, equivalent circuit, phasor diagram, voltage regulation, losses and efficiency Testing - open circuit and short circuit tests, Three-phase transformer - construction, types of connection and their comparative features, Parallel operation of single-phase and three-phase transformers, Phase conversion - Scott connection

% of Completion of total Syllabus: 90%

[Repeat for all courses for a particular year and then for all year]

Please email the compiled data of your Department by May 15, 2020 (5PM) to Prof. Indranil Ghosh (indranil74@rediffmail.com) and CC to pspal@nsec.ac.in

Online Unit Test (OUT), MAY 2020

Name of the Department: ELECTRICAL ENGINEERING

Year: 2ND, 4TH SEM

Course Name: DIGITAL ELECTRONICS: FACULTY: SUS & SOC

Course Code: PC(EE)-402

Exam Date: 18-MAY-2020 Exam Time: 10:15 AM Exam Duration: 1 HR.

Exam Mode: Google Form / GATEtutor / Other (Please mention): GOOGLE-FORM

Syllabus of the Course for this OUT: Combinational Logic (includes NAND implementation, H/F adder, look-ahead generator, subtractor, multiplier, encoder, multiplexer), A/D converter, D/A Converter, SR latch using NAND & NOR gate, SR Flip Flop, JK flip flop, Race around, Master slave JK flip flop.

% of Completion of total Syllabus: 95 %

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 2nd Year

Course Name: Electrical and Electronics Measurements

Course Code: PC-EE-403

Exam Date: 20.05.2020 Exam Time: 10:15-11:15 Exam Duration: 1hour

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT:

• Instrument transformer

- Energy meter with numerical
- Measurement of low and high resistances
- Potentiometer with numerical
- AC Bridges with numerical
- Cathode ray oscilloscope
- Sensors

% of Completion of total Syllabus: 95%

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year:2nd

Course Name: ELECTRICAL & ELECTRONICS MEASUREMENTS

Course Code:PC-EE-403

Exam Date: 20/05/2020 Exam Time: 10.15AM — 11.15AM Exam Duration: 1 Hour

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Measurement of Power -Principle of operation of Electrodynamic& Induction type wattmeter, Wattmeter errors. Measurement of Energy - Construction, theory and application of AC energy meter, testingof energy meters. Sensors & Transducers - Introduction to sensors & Transducers, Strain gauge, LVDT, Temperature transducers, Flow measurement using magnetic flowmeasurement.

Instrument transformer: • Disadvantage of shunt and multipliers, Advantage of Instrument transformers, Principle of operation of Current & Potential transformer, errors. Potentiometer, AC Bridges, Cathode ray oscilloscope (CRO), Electronic Instruments.

% of Completion of total Syllabus: 100%

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

[Repeat for all courses for a particular year and then for all year]						
% of Completion of total Syllabus: 95 %						
3) Lyapunov Stability Analysis						
2) Describing Function Analysis						
1) State Space Analysis						
Syllabus of the Course for this OUT:						
Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form						
Exam Date: 18/05/2020	Exam Time:	11:45-12:45	Exam Duration: 60 mins			
Course Code: EE 601						
Course Name: Control System II	Course Name: Control System II					
Year: 3rd						
Name of the Department: EE						

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering Department

Year: B.Tech

Course Name: Control System-II

Course Code: EE-601

Exam Date: 18/05/2020 Exam Time: 11.30 – 12.30 Exam Duration: 1 Hour

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: State space Technique, Describing Function Analysis, Lyapunov

Method.

% of Completion of total Syllabus:95%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 3rd Year

Course Name: Power System II

Course Code: **EE-602**

Exam Date: **19.05.2020** Exam Time: **10:15-11:15** Exam Duration: **1hour**

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT:

Symmetrical unsymmetrical components of transformers

- Symmetrical unsymmetrical faults
- Load flow studies till G-S method.
- Protective Relay
- Protection of AlternatorTransformer and Busbar
- Circuit Breaker

% of Completion of total Syllabus: 95%

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 2019-20

Course Name: Power System II

Course Code: EE 602

Exam Date: 19/05/2020 Exam Time: 10:15am-11:15 am Exam Duration: 1 Hr

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google form

Syllabus of the Course for this OUT:

For sec A

Load flow studies:

Network model formulation, formation of Ybus, load flow problem, Gauss-Siedel method, Newton-Raphson method, Decoupled load flow studies, comparison of load flow methods.

Power system stability:

Steady state stability, transient stability, equal area criteria, swing equation, multi machine stability concept,

% of Completion of total Syllabus: 90%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

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[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department:EE

Year:3rd SecA

Course Name:Power Electronics

Course Code:EE 603

Exam Date: 20-05-20 Exam Time: 10.15 am to 11.15 am Exam Duration: 1 hr

Exam Mode: Google Form /GATEtutor / Other (Please mention): GoogleForm

Syllabus of the Course for this OUT: Thyristor, series parallel operation of thyristor, Commutation,

1phase controlled and uncontrolled ac-dc converter (SM)

% of Completion of total Syllabus: 75%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 3rd (sec-A)

Course Name: Database Management system

Course Code: EE604B

Exam Date: 19.05.2020 Exam Time:11.45 a.m.-12.45 p.m Exam Duration: 1 hour

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Introduction part, DBMS constraints, ER diagram, Relational algebra

% of Completion of total Syllabus: 85

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department: EE

Year: 3rd

Course Name: DATA BASE MANAGEMENT SYSTEM

Course Code: EE-604 (b)

Exam Date: Exam Time: Exam Duration:

Exam Mode: Google Form /GATEtutor / Other (Please mention):

Syllabus of the Course for this OUT:

Introduction:

Concept & Overview of DBMS, Data model, Database language, Database administrator, Database users, Three Schema architecture of DBMS.

Entity-Relationship Model:

Basic concepts, Design Issues, Mapping Constraints, Keys, Entity-Relationship Diagram, Weak Entity sets, Extended E-R features.

Relational Model:

Structure of relational Databases, Relational Algebra, Relational; calculus, Extended Relational Algebra operations, Views, Modification of the Database.

SQL and **Integrity Constraints**:

Concept of DDL, DML, DCL. Basic structure, Set operations, Aggregate functions, Null values, Domain constraints, Referential integrity, Constraints, assertions, views, Nested sub queries, Data base security application development using SQL, Stored procedures and triggers.

% of Completion of total Syllabus: 60

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 3rd year

Course Name: Digital Signal Processing (elective)

Course Code: EE605A

Exam Date: 20/05/2020 Exam Time: 11.45am-12.45pm Exam Duration: 1 hr

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google form

Syllabus of the Course for this OUT:

Part A:

- a) Discrete Fourier Transform
- b) Circular Convolution
- c) FFT with only DIT Radix-2 FFT

Part B:

- a)Convolution of LTI systems with interconnections
- b) Z transform
- c) Filters(Except Butterworth Filter design)

% of Completion of total Syllabus:95%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 4th year

Course Name: HVDC Transmission

Course Code:EE-801A

Exam Date: 18.5.20 Exam Time: 2.30-3.30 Exam Duration: 1Hour

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Harmonics and Faults (Module IV & Module V)

% of Completion of total Syllabus: 100%

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department:EE

Year: 4th

Course Name: HVDC transmission system

Course Code:EE 801A

Exam Date: 18-05-20 Exam Time: 2.30 pm to 3.30pm Exam Duration: 1 hr

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT:Module 2- Analysis of HVDC converter; Module 3- Control of HVDC converter and systems; Module 6-Multiterminal HVDC systems (Except FACTS and FACTS converter controllers)

% of Completion of total Syllabus: 95%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 4th

Course Name: SENSORS & TRANSDUCERS

Course Code: EE 802B

Exam Date: 19/05/2020 Exam Time: 1PM – 2PM Exam Duration: 1 Hour

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT:

Module 1: Sensors & Tranducers, strain gauge, magnetostrictive effect, LVDT

Module 2: capacitive sensors, plate, cylindrical type, piezoelectric effect

Module 3: Thermal sensors, RTD, Bi-metallic, Thermister, Thermocouple

Module 4: Villari effect, Hall efect, LDR, photodiodes

% of Completion of total Syllabus: 95%

[Repeat for all courses for a particular year and then for all year]

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Online Unit Test (OUT), MAY 2020

Name of the Department: EE Year: 2nd Course Name: Electric Machine-I Course Code: PC-EE-401 Exam Date: 19/05/20 Exam Time: (10:15am -11:15am) Exam Duration: 1hr Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form Syllabus of the Course for this OUT: Module 3 % of Completion of total Syllabus: 95% and More Name of the Department: EE Year: 3rd Course Name: Communication Engineering Course Code: EE-605b Exam Date: 20/05/20 Exam Time: (11:30am -12:30 pm) Exam Duration: 1hr Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form Syllabus of the Course for this OUT: Module 1&2 % of Completion of total Syllabus: 95% and More

Name of the Department: EE

Year: 3rd

Course Name: POWER PLANT INSTRUEMENTATION AND CONTROL

Course Code: EE-802A

Exam Date: 19/05/20 Exam Time: (1-2 pm) Exam Duration: 1hr

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Module 1&2

% of Completion of total Syllabus: 95% and More

Online Unit Test (OUT), MAY 2020

Name of the Department:EE

Year: 3rd

Course Name:Power Electronics - TN Sir

Course Code: EE 603

Exam Date: 20-05-20 Exam Time: 10.15 am to 11.15 am Exam Duration: 1 hr

Exam Mode: Google Form / GATEtutor / Other (Please mention): Google Form

Syllabus of the Course for this OUT: Module 2- Gate characteristics, SCR ratings, SCR protection, series and parallel operation of SCR, gate triggering circuits, different commutation techniques of SCR.; Module 3- Phase controlled converters (up to External Performance parameters of converter)

% of Completion of total Syllabus: 93%

[Repeat for all courses for a particular year and then for all year]

Online Unit Test (OUT), MAY 2020

Name of the Department: Electrical Engineering

Year: 4th year

Course Name: Energy management and audit (elective)

Course Code: EE801C

Exam Date: 18/05/2020 Exam Time: 2.30pm-3.30pm Exam Duration: 1 hr

Exam Mode: Google Form /GATEtutor / Other (Please mention): Google form

Syllabus of the Course for this OUT:

Module 1:Energy Management & Audit

Module 2: Energy Scenario

Module 3: Energy Conservation Act-2001 and related policies

Module 4: Energy Efficiency and Climate changes:

Module 5: Non-Conventional Energy Sources

Module 6: Non-Conventional Energy Sources:

% of Completion of total Syllabus: 95% and more

[Repeat for all courses for a particular year and then for all year]