# BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

SIVARAM VIHAR, GHATAKESWAR HILLS
MOHADA, BERHAMPUR (GM.)

## STUDENT'S ATTENDANCE REGISTER

| Time / Day | | 9:55 to 10:45 | 10:45 11:35 | | 12:25 to 1:15 |
|---|---|---|---|---|---|
| Mon | | | ✓ | | |
| Tue | | | | | ✓ |
| Wed | | ✓ | | | |
| Thu | | ✓ | | | |
| Fri | | | | | ✓ |
| Sat | | | | | |

| | |
|---|---|
| Year/ Session : 2023 (winter) | Semester from Date: 01/08/2023 To Date : 30/11/2023 |
| Semester & Branch | 3rd Sem & Electrical. |
| Subject with Code | TH.2, CNT. |
| Name of the Faculty Member | Srinibasa Panda. |
| No of Weeks: | No of Class Allotted/Week : 5 |

# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| Aug | 1st | 1/8/23 | 1. Magentic circuits<br>1.1 Introduction |
| | | 2/8/23 | 1.2 magnetizing force, Intensity, mmf, flux and their relations. |
| | | 3/8/23 | 1.3 permeability, reluctance and permeance. |
| | | 4/8/23 | 1.4 Analogy between electric and magnetic circuits. |
| | and | 7/8/23 | 1.5 B-H curve |
| | | 8/8/23 | 1.6 Series and Parallel magnetic circuit |
| | | 9/8/23 | 1.7 Hysteresis loop |

Seen
Academic
9.7.23

Signature of the Faculty:

S. K. Chadhury
7/8/23

Signature of the Principal/Course Co-ordinator/HOD:

# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 2. Coupled circuits |
| | | 10/8/23 | 2.1. Self inductance and mutual Inductance |
| | | 11/8/23 | 2.2 Conductively coupled circuit and mutual impedance |
| | 3rd | 14/8/23 | 2.3 Dot convention |
| | | 16/8/23 | 2.4 Coefficient of coupling |
| | | 17/8/23 | 2.5 Series and Parallel |
| | | 18/8/23 | Connection of coupled Inductors. |
| | 4th | 21/8/23 | 2.6 Solve numerical Problems. |

Signature of the Faculty:

S. K. Chowdhury 7/8/23

Signature of the Principal/Course Co-ordinator/HOD:

# B.I.E.T.,COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 3. CIRCUIT ELEMENTS AND ANALYSIS |
| | | 22/8/23 | 3.1 Active, Passive, unilateral & bilateral, Linear & non linear elements. |
| | | 23/8/23 | 3.2 mesh Analysis, mesh Equations by inspection |
| | | 24/8/23 | 3.3 Super mesh Analysis. |
| | | 25/8/23 | 3.4 nodal Analysis, Nodal Equations by inspection |
| | 5th | 28/8/23 | 3.5 Super node Analysis |
| | | 29/8/23 | 3.6 Source transformation |
| | | 31/8/23 | Technique. |
| Sept | | 1/9/23 | 3.7 Solve numerical Problems |
| | 1st | 4/9/23 | (with independent Sources only). |

Signature of the Faculty:

S.K.Choudhary 7/8/23

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# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 4. Network Theorems |
| Sept | 2nd | 5/9/23 | 4.1 Star to delta and delta to Star Transformation. |
| | | 7/9/23 | |
| | | 8/9/23 | 4.2 Super position Theorem |
| | 3rd | 11/9/23 | 4.3 Thevenin's Theorem |
| | | 12/9/23 | 4.4 Norton's Theorem |
| | | 13/9/23 | 4.5 maximum power Transfer Theorem. |
| | | 14/9/23 | |
| | 4th | 15/9/23 | 4.6 Solve numerical problems (with independent source only). |
| | | 18/9/23 | |
| | | 21/9/23 | |

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S. K. Choudhury 7/8/23

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# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 5. AC circuit and Resonance |
| | | 22/9/23 | 5.1 AC through R-L, R-C & R-L-C circuit |
| | 5th | 25/9/23 | 5.2 Solution of problems of |
| | | 26/9/23 | AC through R-L, R-C & R-L-C Series circuit by Complex Algebra method |
| | | 27/9/23 | 5.3 Solution of problems |
| | | 28/9/23 | of AC through R-L, R-C, & R-L-C Parallel & Composite circuits. |
| Oct | 1st | 3/10/23 | 5.4 Power factor & power triangle. |
| | | 4/10/23 | 5.5 Deduce Expression for |
| | | 5/10/23 | Active, reactive, Apparent powers. |
| | | 6/10/23 | 5.6 Derive the resonat |
| | 2nd | 9/10/23 | frequency of Series resonance and Parallel |

Signature of the Faculty:

S. Roychaudhury 7/8/23
Signature of the Principal/Course Co-ordinator/HOD:

# B.I.E.T., COURSE PLAN

| Month | Week | Class. Day | Theory/Practical Topic |
|---|---|---|---|
| | | | resonance circuit |
| | | 10/10/23 | 5.7 Define Bandwidth, |
| | | 11/10/23 | Selectivity & Q-factor in series circuit |
| | | 12/10/23 | 5.8 Solve numerical problem |
| | | | 6. Polyphase circuit |
| Oct | 3rd | 13/10/23 | 6.1 Concept of poly-phase system and phase Sequence. |
| | | 16/10/23 | 6.2 Relation between phase and line quantites in Star & Delta Connection |
| | | 17/10/23 | 6.3 Power equation in 3-phase balanced circuit |
| | | 18/10/23 | 6.4 Solve numerical problems |
| | | 19/10/23 | 6.5 measurement of 3-Phase Power by two wattmeter method. |

Signature of the Faculty:

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# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | 5th. | 30/10/23 | 6.6 Solve numerical problems. |
| | | 31/10/23 | 7. Transients |
| NOV | 1st | 1/11/23 | 7.1 Study State & transient State response. |
| | | 2/11/23 | 7.2. Response to R-L, R-C & R-L-C circuit under DC condition. |
| | | 3/11/23 | |
| | 2nd | 6/11/23 | 7.3 Solve numerical problems. |

S. K. Choudhury 7/8/23.

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Faculty:

# B.I.E.T., COURSE PLAN

| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 8. TWO Port network |
| | | 7/11/23 | 8.1 open circuit impedance (Z) Parameter |
| | | 8/11/23 | 8.2 Short circuit Admittance (Y) Parameter. |
| | | 9/11/23 | 8.3 Transmission (ABCD) Parameters. |
| | | 10/11/23 | 8.4 Hybrid (h) Parameters. |
| NOV | 3rd. | 14/11/23 | 8.5 Inter relationship of different Parameters. |
| | | 15/11/23 | 8.6 T and π representation |
| | | 16/11/23 | 8.7 Solve numerical Problems. |

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| Month | Week | Class Day | Theory/Practical Topic |
|---|---|---|---|
| | | | 9. Filters |
| | | 17/11/23 | 9.1 Define filter |
| | 4th. | 20/11/23 | 9.2 classification of pass. Band, stop band & cut-off frequency. |
| | | 21/11/23 | 9.3 classification of filter. |
| | | 22/11/23 | 9.4 Constant-K low pass filter |
| | | 23/11/23 | 9.5 Constant-K high pass filter |
| | | 24/11/23 | 9.6 constant-K Band pass filter |
| | 5th | 28/11/23 | 9.7 constant-K Band |
| | | 29/11/23 | elemination filter. |
| | | 30/11/23 | 9.8 Solve Numerical problems. |

Seen
Prof. Iyer mrs 29.7.23
S. Kichaudhury
7/8/23

Signature of the Faculty:

Signature of the Principal/Course Co-ordinator/HOD: