**DAILY ASSESSMENT FORMAT**

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| **Date:** | **2 JUNE 2020** | **Name:** | **K Gaurav Shet** |
| **Course:** | **ELECTRICAL NETWORK THEORY** | **USN:** | **4AL18EC023** |
| **Topic:** | **1.network theorems**  **2.resonance** | **Semester & Section:** | **4TH SEM**  **‘A’ SECTION** |
| **Github Repository:** | **Gaurav-shet** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report – Report can be typed or hand written for up to two pages.**  **Superposition theorem : “The voltage across(or current through) an element in a linear circuit is the algebraic sum of the voltages across(or currents through)that element due to each independent source acting alone”**  **Thevenin’s theorem : “A linear and bidirectional two-terminal network can be replaced by an equivalent network consisting of a voltage source vth connected in series with a resistor Rth”**  **Norton’s theorem : “A linear and bidirectional two terminal network can be replaced by an equivalent circuit consisting of a current source In in parallel with a resistor RN”**  **Reciprocity theorem : “In a linear bidirectional single source network the ratio of response to excitation remains the same even when the positions of response and excitation are interchanged”**  **Millman’s theorem : “ If n voltage sources with voltages E1,E2,E3,……En and internal resistance R1,R2,R3,…..Rn are connected in parallel, then these voltages sources can be replaced by a single voltage source E in series with resistance R”**  **Maximum power transfer theorem : “Maximum power will be transferred to the load when the value of load resistance is equal to the thevenin’s equivalent resistance of circuit”**  **Compensation theorem : “compensation theorem is useful in finding the changes in current or voltage when the value of resistance is changed in the circuit**  **Resonance:**     * **The resonant frequency the impedance seen by the source is purely resistive** * **At resonance the inductor/capacitor combination acts as a short circuit** * **The current flowing in the system is in phase with the source voltage** |