Lesson Plan Form

**Course Title: Digital and Satellite Communication**

**Course Code: ETE-452**

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| **Title:** Satellite Link Design- Basic Transmission Theory* System Noise Temperature and G/T Ratio
 | **Ref. No:** ETE 452/06 |
| Target Population: 25 | **Duration:** 90 minutes |
| **Aims/Rationale:** To teach the students about the satellite link design including the basics transmission theory and system noise Temperature and G/T Ratio. |
| **Learning Outcomes:** At the end of the session participant will be able to :1. Understand the Basic Transmission theory for satellite communication system.
2. Understand System Noise Temperature and G/T Ratio.
3. Find out the Calculation of system Noise Temperature with example.
4. Draw noise figure and Noise Temperature.
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| **Content** | **Method or Technique** | **Resource or Aid** | **Time** |
| **Introduction:** Welcome addressRapport buildingBridging topicLayout/ content outlineAttendancePre-assessment | LectureQ/A | W/B | 10 minutes |
| **Development:****Section-A**Introduction all over the lesson Basic Transmission TheoryExample **Section-B**System Noise Temperature and G/T RatioNoise Temperature **Section-C**Calculation of system Noise TemperatureExample**Section-D**Noise Figure and Noise TemperatureExample G/T Ratio for Earth StationsExample | LectureDiscussionDoDoDo | W/BMMPVideo | 15 minutes20 minutes20 minutes15 minutes |
| **Conclusion:**Recap main pointsFeedback & answerAssessment of LOsReferenceForward plan | LectureDiscussionQ/A |  | 10 minutes |
| **Equipment & aids:** Optional |