**Lesson Plan Form**

**Course Title:** Digital and Satellite Communication

**Course Code:** ETE-452

|  |  |
| --- | --- |
| **Title:** Multiple Access  | **Ref. No**: ETE 452/14 |
| **Target** Population: 25 | **Duration:**90 minutes |
| **Aims/Rationale:** Upon completion of the lesson students are able to understand the basic working principle of Multiple Access. Multiple access techniques are used to allow a large number of mobile users to sharethe allocated spectrum in the most efficient manner. |
| **Learning Outcomes:** At the end of the session participant will be able to :1. Understand Frequency Division Multiple Access (FDMA).
2. Understand Time Division Multiple Access (TDMA).
3. Understand Code Division Multiple Access (CDMA).
 |
| **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**Frequency Division Multiple Access (FDMA).Intermodulation.Channel Capacity with Demand Access FDMA.**Section-B**Time Division Multiple Access (TDMA).Bits, Symbols, and Channels.TDMA Frame Structure.**Section-C**Code Division Multiple Access (CDMA).Spread Spectrum Transmission and Reception.DS-SS CDMA Capacity. | LectureDiscussionDoDo | W/BMMPVideo | 20 minutes25 minutes25 minutes |
| **Conclusion:**Recap main pointsFeedback & answerAssessment of LOsReferenceForward plan | LectureDiscussionQ/A |  | 10 minutes |
| **Equipment & aids:** Optional |