

COMP9336\4336
Assignment 1
Marking Rubric

Task 1 Single Tone Detection [5 marks]

- Selectable frequency input in transmitter (by text input, drop-down button and etc.) **0.5 mark**
- Sending True frequency by transmitter **1 mark**
- Receiving correct frequency in receiver **1.5 mark**
- Working on less audible frequency **1 mark**
- Clear explanation of implementation (no more than 2 pages) **1 mark**

Task 2 Extension of Single Tone Detection [5 marks]

- Appropriate interface for transmitter to input 1 digit value (text input, dial pad, ...) **0.5 mark**
- Appropriate interface in receiver to show received number **0.5 mark**
- Transmit correct digit **1.5 mark**
- Working on less audible frequency **1 mark**
- Report - Clear explanation of implementation including less audible efforts (no more than 2 pages) **1.5 mark**

Task 3 Dual Tone Detection [5 marks]

- Appropriate interface for transmitter to input 1 digit value (text input, dial pad, ...) **0.25 mark**
- Appropriate interface in receiver to show received number **0.25 mark**
- Transmit correct digit with a pair of tones (Table 1) **1.5 mark**
- Working on less audible frequency **1.5 mark**
- Report - Clear explanation of implementation including less audible efforts (no more than 2 pages) **1.5 mark**

Task 4 Packetized Data Communication with Audio Tones [10 marks]

- Appropriate interface for transmitter to input few characters (alphabet and numbers) **0.5 mark**
- Appropriate interface in receiver to show received text **0.5 mark**
- Transmit correct data (Table 1) **7 mark** *
- Report - Clear explanation of implementation (no more than 4 pages) **2 mark**

* Creative modulation and synchronization method in this task can have some extra marks.

Task 5 Error correction [Optional, but carries a bonus mark of 5]

- Correct implementation **3 mark**
- Report - Clear explanation of implementation (no more than 2 pages) **2 mark**