CARA can also calculate and evaluate the acoustic ambiance of the room and further recommends room modifications to improve the reverberation time at the end comparison between the original room and modified room. Based on that standard, there are two methods that can be applied to decrease the reverberation time of the room, which is by increasing the sound absorption or by reducing the volume of the classroom. This is due to the fact that increasing the sound absorption can directly decrease the reverberation time.

## 5.3 RESULTS AND DISCUSSIONS

### 5.3.1 Reverberation Time

It was found that only two classrooms have RT less than 1.2 s which are acoustically comfortable. The first is C1 with at frequency 1000 Hz and 2000 Hz, the reverberation time were gained 0.68 second and 0.49 second respectively. The second room was for the C7 classroom with 1.21 second and 1.10 second respectively.

The other 27 classrooms were not acoustically comfortable with high reverberation time was the C28 Seminar Room B. For 1000 Hz and 2000Hz, this class has 2.71 second and 2.15 second reverberation time. The second longest reverberation time was for C26 Smart classroom that has 2.63 second and 2.38 second. The third longest reverberation time was showed by the classroom C18 for 2.51 second and 2.54 second. Table 5 (c) shows the reverberation time for all classrooms that were obtained using theoretical calculation.