**Dan Otieno**

**EE 316.**

**Lab 5: Prelab Assignment.**

Assignment details: Read lab manual, fill the theoretical data for tables 5.1 and 5.2.

**LOW-PASS FILTER**

|  |  |  |
| --- | --- | --- |
| **F (Hz)** | **Gain (dB)** | **Phase Angle (Degree)** |
| **25** | **-0.106** | **-8.93** |
| **50** | **-0.409** | **-17.44** |
| **75** | **-0.871** | **-25.23** |
| **100** | **-1.445** | **-32.14** |
| **150** | **-2.761** | **-43.3** |
| **200** | **-4.115** | **-51.49** |
| **300** | **-6.583** | **-62.05** |
| **500** | **-10.362** | **-72.34** |
| **600** | **-11.822** | **-75.14** |
| **700** | **-13.084** | **-77.19** |
| **800** | **-14.194** | **-78.75** |
| **900** | **-15.182** | **-79.97** |
| **1000** | **-16.072** | **-80.96** |

**HIGH-PASS FILTER**

|  |  |  |
| --- | --- | --- |
| **F (Hz)** | **Gain (dB)** | **Phase Angle (Degree)** |
| **25** | **-16.183** | **81.07** |
| **50** | **-10.466** | **72.56** |
| **75** | **-7.406** | **64.77** |
| **100** | **-5.481** | **57.86** |
| **150** | **-3.275** | **46.7** |
| **200** | **-2.131** | **38.51** |
| **300** | **-1.077** | **27.95** |
| **500** | **-0.419** | **17.66** |
| **600** | **-0.295** | **14.86** |
| **700** | **-0.219** | **12.81** |
| **800** | **-0.169** | **11.25** |
| **900** | **-0.134** | **10.03** |
| **1000** | **-0.109** | **9.04** |

Values were calculated using the formulas provided in the lab manual.