Jawad parts

First 4 parts of task 1 is done by jawad ahmed

Asim Parts

Last 4 parts of task 1 is done by asim Hussain

Band pass Filters Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequencies | BPF for 3kHz | BPF for 9kHz | BPF for 15kHz | BPF for 21kHz |
| Fstop1 | 0.001 | 4977 | 11950 | 17500 |
| Fpass1 | 0.9 | 6000 | 12973 | 18000 |
| Fpass2 | 6000 | 12000 | 17027 | 23000 |
| Fstop2 | 6000.001 | 13023 | 18050 | 23999 |
| W/Dstop1 | 10 | 10 | 40 | 0.001 |
| W/Dpass | 40 | 40 | 10 | 0.057501127785 |
| W/Dstop2 | 800 | 800 | 700 | 0.0001 |

LOWPASS FILTERS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Frequencies | LPF for 3kHz | LPF for 9kHz | LPF for 15kHz | LPF for 21kHz |
| Fpass | 9600 | 0 | 0 | 1 |
| Fstop | 12000 | 9000 | 11973 | 6600 |
| Dpass | 0.057501127785 | 0.1 | 0.057501127785 | 0.057501127785 |
| Dstop | 0.0001 | 0.001 | 0.0001 | 0.0001 |

GRAPHS:









    