|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Categories** | **Sub-Categories** | | | | | | | | | | | | | | | | | | | | **Score** |
| **Generation of Typical Signals** | **Unit Sampling Signal** | | | | **Unit Step Signal** | | | | **Real Exponential Signal** | | | **Complex Exponential Signal** | | | **Sinusoidal Signal** | | | | **Summary & Discussion** | | 20 |
| Expression | Codes | | Results | Expression | Codes | | Results | Expression | Codes | Results | Expression | Codes | Results | Expression | Codes | | Results | 5 | |
| 0.5 | 2 | | 0.5 | 0.5 | 2 | | 0.5 | 0.5 | 2 | 0.5 | 0.5 | 2 | 0.5 | 0.5 | 2 | | 0.5 |
| **Frequency Analysis** | **Discrete Time Fourier Transform (DTFT)** | | | | | | | | **Discrete Fourier Transform (DFT)** | | | | | | **Summary & Discussion** | | | | | | 30 |
| Concept | | Expression | | Codes | | Results | | Concept | | Codes | | Results | | 10 | | | | | |
| 2 | | 1 | | 6 | | 1 | | 2 | | 6 | | 2 | |
| **Speech Signal Analysis** | **Codes** | | | | | | | | **Results** | | | | | | **Summary & Discussion** | | | | | | 20 |
| 6 | | | | | | | | 4 | | | | | | 10 | | | | | |
| **Additional Tasks** | **Complex Exponential Signal 3-D Plotting** | | | | | | | | **Realize the DFT** | | | | | | **Compare Performance** | | | | | | 20 |
| Codes | | | Results | | Summary | | | Codes | | Results | | Summary | | Codes | | Results | | | Summary |
| 2 | | | 1 | | 1 | | | 3 | | 1 | | 4 | | 3 | | 1 | | | 4 |
| **Experience and Overview** | 10 | | | | | | | | | | | | | | | | | | | | 10 |
| **Total** |  | | | | | | | | | | | | | | | | | | | | 100 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Categories** | **Sub-Categories** | | | | | | | | | | | | | | | | | | | | **Score** |
| **Generation of Typical Signals** | **Unit Sampling Signal** | | | | **Unit Step Signal** | | | | **Real Exponential Signal** | | | **Complex Exponential Signal** | | | **Sinusoidal Signal** | | | | **Summary & Discussion** | | 16.1 |
| Expression | Codes | | Results | Expression | Codes | | Results | Expression | Codes | Results | Expression | Codes | Results | Expression | Codes | | Results | 5 | |
| 0.3 | 1.5 | | 0.3 | 0.3 | 1.5 | | 0.3 | 0.5 | 1.5 | 0.3 | 0.5 | 1.5 | 0.3 | 0.5 | 1.5 | | 0.3 |
| **Frequency Analysis** | **Discrete Time Fourier Transform (DTFT)** | | | | | | | | **Discrete Fourier Transform (DFT)** | | | | | | **Summary & Discussion** | | | | | | 23.5 |
| Concept | | Expression | | Codes | | Results | | Concept | | Codes | | Results | | 6 | | | | | |
| 2 | | 0.5 | | 5.5 | | 0.5 | | 2 | | 5.5 | | 1.5 | |
| **Speech Signal Analysis** | **Codes** | | | | | | | | **Results** | | | | | | **Summary & Discussion** | | | | | | 11 |
| 3 | | | | | | | | 2 | | | | | | 6 | | | | | |
| **Additional Tasks** | **Complex Exponential Signal 3-D Plotting** | | | | | | | | **Realize the DFT** | | | | | | **Compare Performance** | | | | | | 0 |
| Codes | | | Results | | Summary | | | Codes | | Results | | Summary | | Codes | | Results | | | Summary |
| 0 | | | 0 | | 0 | | | 0 | | 0 | | 0 | | 0 | | 0 | | | 0 |
| **Experience and Overview** | 6 | | | | | | | | | | | | | | | | | | | | 6 |
| **Total** |  | | | | | | | | | | | | | | | | | | | | 56.6 |