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| **SL** | **Experiment Name** | **Page No** |
| 01 | To Explain and implement Discrete Fourier Transform (DFT) and Inverse Discrete Fourier Transform (IDFT) |  |
| 02 | Let 𝑥(𝑛) = {1, 2, 3, 4, 5, 6, 7, 6, 5, 4, 3, 2, 1}.  ↑  Determine the following Sequence and plot this:  y(𝑛) = 2𝑥 (𝑛 − 5) − 3𝑥 (𝑛 + 4). |  |
| 03 | Write MATLAB program to perform following operation-  i) Sampling, ii) Quantization, and iii) Coding. |  |
| 04 | Determine and plot the following sequence,  𝑥(𝑛) = 2𝛿 (𝑛 + 2) – 𝛿 (𝑛 − 4) ; −5 ≤ 𝑛 ≤ 5. |  |
| 05 | Plot the following signal operations on signals:  𝑥(n) = {1, 0, 3, 4}; 𝑦(n) = {1, 1, 1, 1}; 𝑧(n) = {3, −1, 0, −4} ↑ ↑ ↑  i) Signal Addition (x + y) and ii) Folding of signal z. |  |
| 06 | Plot following signal operations:  𝑥(n) = {1, 2, 3, 4}; 𝑦(n) = {1, 1, 1, 1}; 𝑧(n)= { −2, 3, 0, 1, 5};  ↑ ↑ ↑  i) Signal Multiplication (x\*y) and ii) Signal Shifting (z). |  |
| 07 | Using MATLAB to plot the Fourier Transform of a time function, the aperiodic pulse shown below: |  |
| 08 | Explain and generate sinusoidal wave with different frequency using MATLAB |  |
| 09 | Explain and implementation of following Elementary Discrete signal using MATLAB. i) The unit sample sequence ii) Unit step signal iii) Unit ramp signal |  |

**INDEX**