

Part A

Question 5

Table 1 Calculated Magnitude and phase of $X[k]$

n	x[n]	X[k]	Magnitude	Phase
0	12	20	20	0
1	0	4	4	0
2	8	20	20	0
3	0	4	4	0

Question 6

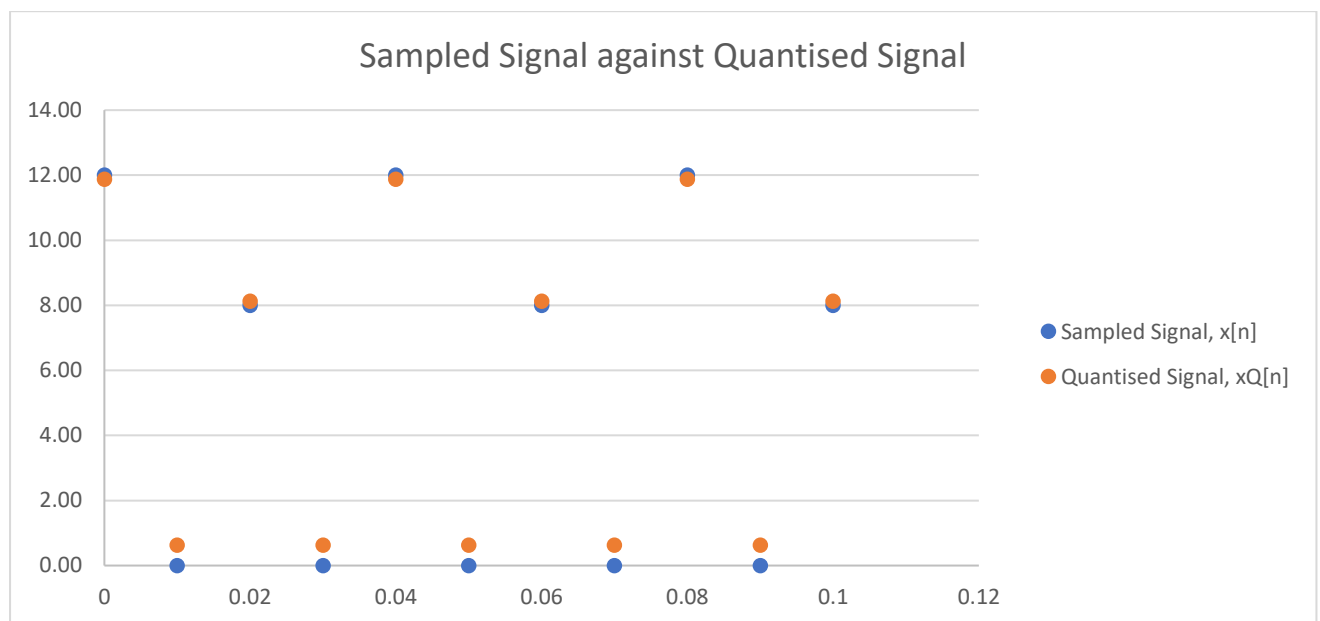


Figure 1 - Sampled Signal against Quantised Signal

Question 7

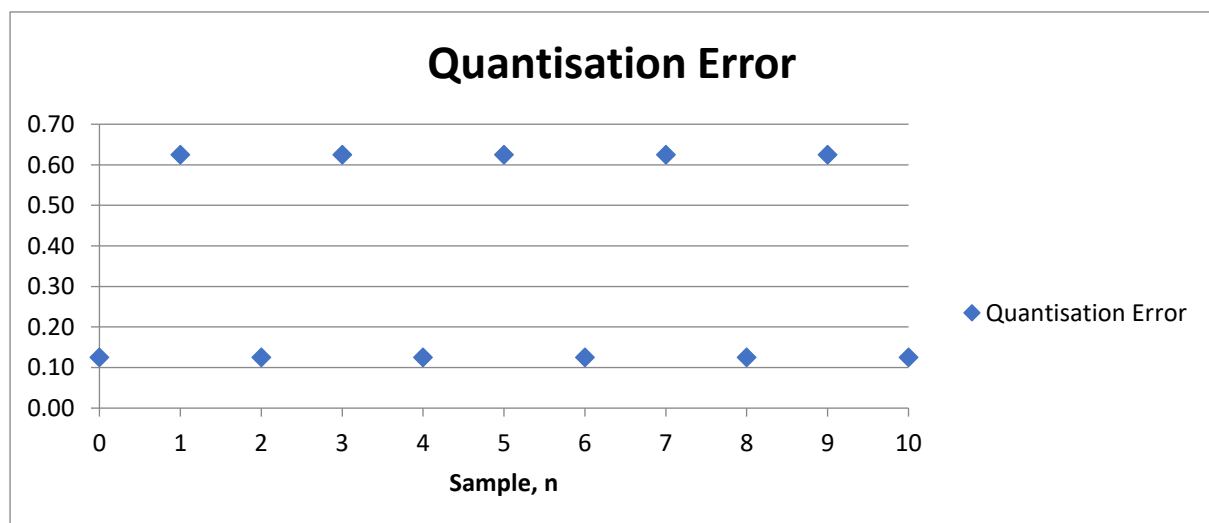


Figure 2 - Quantisation Error