Started on	State	Completed on	Time taken
Thursday, 1 May 2025, 10:45 AM	Finished	Thursday, 1 May 2025, 10:48 AM	3 mins 6 secs

Marks	Grade
5.00/5.00	10.00 out of 10.00 (100%)

Question 1

Flag question

Complete | Mark 1.00 out of 1.00

ECTE203_Q2

You can reconstruct the signal below if sampled at 70 Hz, without aliasing.

x = 3 sin (65*pi*t + pi/3);

Select one:

- (●) True
- ( ) False

Question 2

Flag question

Complete | Mark 1.00 out of 1.00

ECTE203_Q2

Triangle and Square pulses use the constant value k of _____ and _____ respectively.

- ( ) a. 0,1
- ( ) b. 1,-1
- (●) c. 1,0
- ( ) d. -1,0

Question 3

Flag question

Complete | Mark 1.00 out of 1.00

ECTE203_Q2

Which option describes the given pulse function?

$$f(t) = \begin{cases} \dfrac{3t}{(Ts)} - 1 & -0.2Ts < t < 0.2Ts \\ 0 & otherwise \end{cases}$$

a.
```
idx = find( (t > -0.2 * Ts) & (t < 0.2 * Ts));
x(idx) = 3*t/(Ts -1);
```

b.
```
idx = find( (t > -0.2 * Ts) || (t < 0.2 * Ts));
x(idx) = 3*t/Ts -1;
```

c.
```
idx = find( (t > -0.2 * Ts) & (t <= 0.2 * Ts));
x(idx) = 1-abs(t)/Ts;
```

d.
```
idx = find( (t > -0.2 * Ts) & (t < 0.2 * Ts));
x(idx) = 3*t/Ts -1;
```

Question 4

Flag question

Complete | Mark 1.00 out of 1.00

ECTE203_Q2

Signal x has been sampled at 80Hz. Find out the normalized frequency Fd.

x= 2.5 cos (16pi*t + pi/3);

Answer:

0.1

Question 5

Flag question

Complete

Mark 1.00 out of 1.00

ECTE203_Q2

Given the signal below, what is the signal frequency and Nyquist frequency?

x = 2.5 sin (80*pi*t + 2.1)

a. 40, 80

b. 80, 80

c. 80, 40

d. 80, 160

Finish review