

---

## Table of Contents

.....	1
EXPERIMENT 01 .....	1
TO PLOT THE GRAPH OF CONTINUOUS SINE WAVE .....	1
TO PLOT THE GRAPH CONTINUOUS COSINE WAVE .....	2
TO PLOT THE GRAPH DISCRETE SINE WAVE .....	3
TO PLOT THE GRAPH DISCRETE COSINE WAVE .....	3
TO PLOT THE GRAPH UNIT IMPULSE FUNCTION .....	4
TO PLOT THE GRAPH UNIT STEP FUNCTION .....	5
TO PLOT THE GRAPH UNIT RAMP FUNCTION .....	5
TO PLOT THE GRAPH PARABOLIC FUNCTION .....	6
CONCLUSION: .....	7

```
%NAME: ANAS KHAN
%EXP:01
%ROLL NO:240
%REG NO:20010316
%SEMESTER:V
%SECTION:c
%COURSE CODE:ET2257
%COURSE NAME:SIGNAL AND SYSTEMS
%DATE OF PERFORMANCE:5/08/2022
```

```
clear all;
close all;
clc;
```

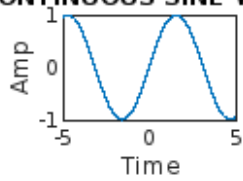
## EXPERIMENT 01

### TO PLOT THE GRAPH OF CONTINUOUS SINE WAVE

```
t=-5:0.001:5;
y=sin(t);
subplot(3,3,1);
plot(t,y);
title('CONTINUOUS SINE WAVE ');
xlabel('Time');
ylabel('Amp');
```

---

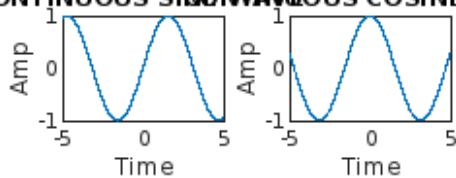
### CONTINUOUS SINE WAVE



## TO PLOT THE GRAPH CONTINUOUS COSINE WAVE

```
t=-5:0.001:5;  
y=cos(t);  
subplot(3,3,2);  
plot(t,y);  
title('CONTINUOUS COSINE WAVE ');  
xlabel('Time');  
ylabel('Amp');
```

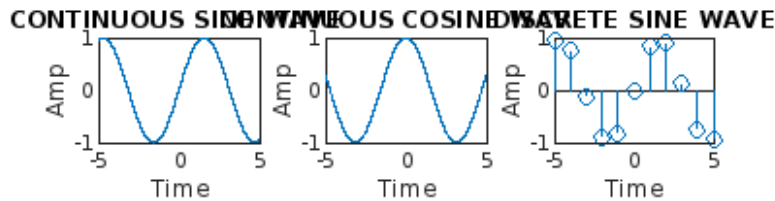
### CONTINUOUS SINE WAVE CONTINUOUS COSINE WAVE



---

## TO PLOT THE GRAPH DISCRETE SINE WAVE

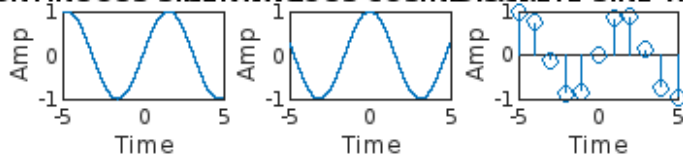
```
t=-5:1:5;  
y=sin(t);  
subplot(3,3,3);  
stem(t,y);  
title('DISCRETE SINE WAVE');  
xlabel('Time');  
ylabel('Amp');
```



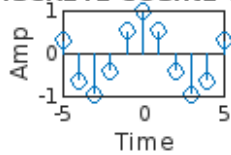
## TO PLOT THE GRAPH DISCRETE COSINE WAVE

```
t=-5:1:5;  
y=cos(t);  
subplot(3,3,4);  
stem(t,y);  
title('DISCRETE COSINE WAVE');  
xlabel('Time');  
ylabel('Amp');
```

**CONTINUOUS SINE WAVE   CONTINUOUS COSINE WAVE   DISCRETE SINE WAVE**



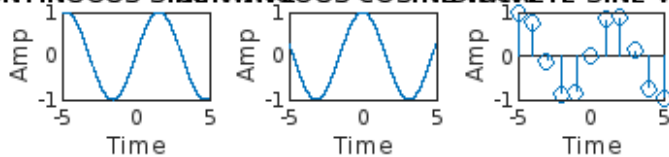
**DISCRETE COSINE WAVE**



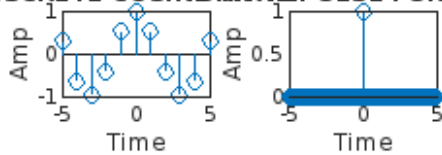
## TO PLOT THE GRAPH UNIT IMPULSE FUNCTION

```
t=-5:0.002:5;
y=[zeros(1,2500),ones(1,1),zeros(1,2500)];
subplot(3,3,5);
stem(t,y);
title('UNIT IMPULSE FUNCTION');
xlabel('Time');
ylabel('Amp');
```

**CONTINUOUS SINE WAVE   CONTINUOUS COSINE WAVE   DISCRETE SINE WAVE**



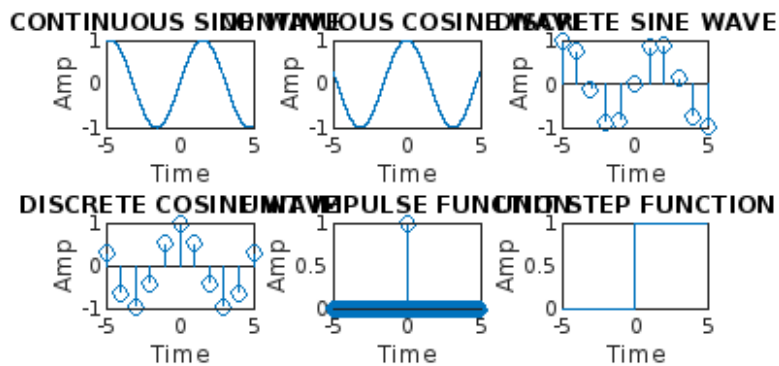
**DISCRETE COSINE WAVE   UNIT IMPULSE FUNCTION**



---

## TO PLOT THE GRAPH UNIT STEP FUNCTION

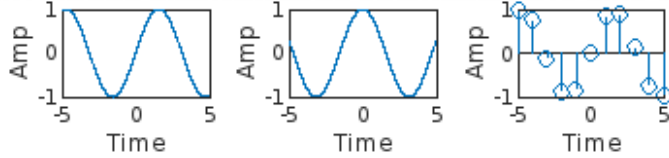
```
t=-5:0.002:5;  
y=[zeros(1,2500),(ones(1,2501))];  
subplot(3,3,6);  
plot(t,y);  
title('UNIT STEP FUNCTION');  
xlabel('Time');  
ylabel('Amp');
```



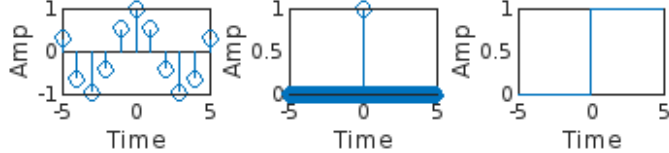
## TO PLOT THE GRAPH UNIT RAMP FUNCTION

```
t=-5:0.002:5;  
y=t;  
subplot(3,3,7);  
plot(t,y);  
title('UNIT RAMP FUNCTION');  
xlabel('Time');  
ylabel('Amp');
```

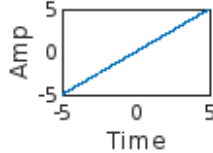
**CONTINUOUS SINE WAVE CONTINUOUS COSINE WAVE DISCRETE SINE WAVE**



**DISCRETE COSINE WAVE PULSE FUNCTION UNIT STEP FUNCTION**



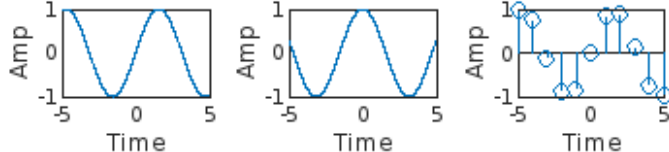
**UNIT RAMP FUNCTION**



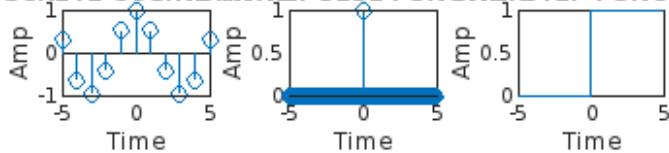
## TO PLOT THE GRAPH PARABOLIC FUNCTION

```
t=-5:0.002:5;
y=0.5*t.^2;
subplot(3,3,8);
plot(t,y);
title('PARABOLA');
xlabel('Time');
ylabel('Amp');
```

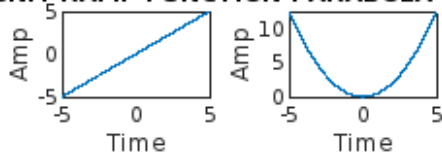
**CONTINUOUS SINE WAVE CONTINUOUS COSINE WAVE DISCRETE SINE WAVE**



**DISCRETE COSINE WAVE PULSE FUNCTION UNIT STEP FUNCTION**



**UNIT RAMP FUNCTION PARABOLA**



---

# CONCLUSION:

WE HAVE SUCCESSFULLY STUDIED THE GRAPHS OF CONTINUOUS, DISCRETE, TIME SIGNAL ALONG WITH UNIT RAMP, UNIT STEP, UNIT IMPULSE AND PARABOLIC.

*Published with MATLAB® R2022b*