**UNIT 4 – Assignment Process and Signals**

1. Explain the following with example:

(a) Process Creation

(b) Process Termination

(c) Signal function

(d) Reliable signals.

2. (a) What is an orphan process? Write a program to illustrate orphan process.

 (b) Explain various exit statuses with an example program.

3. (a) What are the signals that are not ignored or blocked? Explain the reason

behind it with an example.

(b) Illustrate SIGKILL and SIGINT with an example program.

4 (a) Differentiate between fork( ) and vfork( ).

(b) Write the syntax of six versions of exec functions and also explain how these

functions differ from each other.

5 a) What are process identifiers? Mention the commands for getting different IDs

of calling process.

(b) Write a program that demonstrates the use of exit( ).

6. (a) Differentiate between real IDs and effective IDs.

(b) What is need of exec( ) system call? Write syntax.

(c) Write a C program to illustrate exec( ) function

7 a) What is a zombie process? Write a sample program to explain about zombie process.

 b) Differentiate between fork( ) and vfork( ).

8 Write a c program that demonstrates redirection of standard output to a

file.Ex: ls > f1. ?

 9 Write a c program that accepts two small numbers as arguments and then sums

the two numbers in a child process. The sum should be returned by child to the parent as its exit status and the parent should print the sum?

10 a) Explain the Data Structures that are affected when a process gets created or deleted.

 b) What is a Zombie Process? What is its significance? Describe with an example.

11 a) Define Signals. What do you mean by Unreliable Signals? Explain.

b) Explain clearly the Signal concept with a suitable example.

12 Explain the following system calls with clear syntax and example:

1. fork( ) b) wait( ) c) exec( )

13 a) Differentiate between wait( ) and waitpid( ).

 b) Explain signal( ) function with an example.