

# ASANSOL ENGINEERING COLLEGE

Practical examination 2020-2021

Sub Code: PCC 592 Sub Name: Operating System

Full Marks: 40 Time: 11:10 AM - 12:30 PM Date: 20-03-2021

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3) Write a C program on IPC to create a pipe, the child process send a message to the parent.

Code:

```
#include <stdio.h>
#include <unistd.h>
#include <stdlib.h>

int main ()
{
    char msg[] = "Hello!";
    size_t size = sizeof(msg);
    char inp[size];
    int fd[2];
    if (pipe(fd) < 0)
        exit(1);
    if (fork() == 0)
    {
        close(fd[1]);
        printf("Message received from child : ");
        read(fd[0], inp, size);
        printf("I've finished reading message\n");
        close(fd[0]);
    }
    else
    {
        close(fd[0]);
        write(fd[1], msg, size);
        close(fd[1]);
    }
}
```

Output:

```
~/Desktop/Code/OS-lab> gcc ipc.c -o ipc
~/Desktop/Code/OS-lab> ./ipc
```

~~Output~~

~/Desktop/code/os-lab> ./ipcp

Message ~~received~~ received from child process : Hello!

Finished Reading Message.