

Dated :  
Assessment No. : 10

### Function: MPI\_Gather ( )

#### AIM

Assume the variable rank contains the process rank and root is 3. What will be stored in array b [ ] on each of four processes if each executes the following code fragment?

```
int b [4] = {0 , 0 , 0 , 0};
```

```
MPI_Gather ( & rank , 1 , MPI_INT , b , 1 , MPI_INT , root ,MPI_COMM_WORLD);
```

Hint. The function prototype is as follows:

```
int MPI_Gather (  
void * sendbuf ,           // pointer to send buffer  
int sendcount ,           // number of items to send  
MPI_Datatype sendtype ,   // type of send buffer data  
void * recvbuf ,          // pointer to receive buffer  
int recvcount ,           // items to receive per process  
MPI_Datatype recvtype ,   // type of receive buffer data  
int root ,                // rank of receiving process  
MPI_Comm comm )          // MPI communicator to use
```

#### Source Code

#### Execution

#### Remarks