

<b>Started on</b>	Thursday, 11 April 2024, 8:53 PM
<b>State</b>	Finished
<b>Completed on</b>	Thursday, 11 April 2024, 9:25 PM
<b>Time taken</b>	31 mins 59 secs
<b>Grade</b>	<b>5.00</b> out of 5.00 (100%)

### Question 1

Correct

Mark 1.00 out of 1.00

Considering *blocking communications*, which of the following assertions are true?

Select one or more:

- ☐ a. The last parameter in the MPI call returns a request identifier needed for subsequent synchronization.
- ☒ b. A call to MPI blocks until the communication completes. ✓ True! (one of them)
- ☒ c. Return from the MPI call indicates that the user is allowed to use the resources (memory buffers) specified in the call.

The correct answers are: A call to MPI blocks until the communication completes., Return from the MPI call indicates that the user is allowed to use the resources (memory buffers) specified in the call.

## Question 2

Correct

Mark 1.00 out of 1.00

For MPI\_Send, which of the following assertions are true?

Select one or more:

- ☒ Performs a blocking send operation ✓ True! (one of them)
- ☐ The send buffer buf may not be modified safely until a synchronization is ensured with a call to MPI\_Wait
- ☒ The message can be received by either MPI\_Recv or MPI\_Irecv ✓ True! (one of them)

The correct answers are: Performs a blocking send operation, The message can be received by either MPI\_Recv or MPI\_Irecv

## Question 3

Correct

Mark 1.00 out of 1.00

For MPI\_Recv, which of the following assertions are true?

Select one or more:

- ☒ MPI\_Recv can receive a message sent by either MPI\_Send ✓ True! (one of them) or MPI\_Isend
- ☒ The length of the message received must be less than or equal to the ✓ True! (one of them) length of the receive buffer buf provided as 1st parameter.
- ☒ Performs a blocking receive operation ✓ True! (one of them)
- ☒ Wildcards (MPI\_ANY\_SOURCE, MPI\_ANY\_TAG) can be used in the receive call for either the source or tag.

The correct answers are: Performs a blocking receive operation, MPI\_Recv can receive a message sent by either MPI\_Send or MPI\_Isend, The length of the message received must be less than or equal to the length of the receive buffer buf provided as 1st parameter., Wildcards (MPI\_ANY\_SOURCE, MPI\_ANY\_TAG) can be used in the receive call for either the source or tag.

#### Question 4

Correct

Mark 1.00 out of 1.00

Considering *non-blocking communications*, which of the following assertions are true?

Select one or more:

- ☒ a. Require subsequent synchronization by means of MPI\_Wait or MPI\_Test to make sure that the communication has been completed.
- ☒ b. The call to MPI may return before the communication completes and before the user is allowed to reuse the specified in the call.

The correct answers are: The call to MPI may return before the communication completes and before the user is allowed to reuse the specified in the call., Require subsequent synchronization by means of MPI\_Wait or MPI\_Test to make sure that the communication has been completed.

#### Question 5

Correct

Mark 1.00 out of 1.00

Both MPI\_Isend and MPI\_Irecv return a request identifier of type MPI\_Request that can be used for subsequent MPI\_test.

Select one:

- ☒ True ✓
- ☐ False

Well done!

The assessment is true.

The correct answer is 'True'.