

Answer the following questions:

1. Which of the following system calls are not used in a UDP connection?
 - a) bind ()
 - b) connect()
 - c) socket()
 - d) close().
2. Which of the following system calls is used to establish a connection between a client and a server in a TCP based connection?
 - a) fork()
 - b) bind()
 - c) connect()
 - d) write()
3. State True or False. In connection-less communication, each message carries the destination address and is routed independently from source to the destination.
4. State True or False. Concatenation of IP address, port and process name defines a socket.
5. State True or False. Network communications always use little-endian byte order.
6. In a Listen system call, what does the parameter Backlog define?
 - a) maximum number of pending connections allowed
 - b) maximum number of concurrent connections allowed
 - c) minimum number of concurrent connections allowed
 - d) minimum number of pending connections allowed
7. Complete the code snippet for establishing a TCP socket at a server. There are five statements that are to be completed (text in red color indicates where the code is to be inserted):

```
int sockfd, bindret, fd, clientfd;

socklen_t cliilen;
struct sockaddr_in serv_addr, cli_addr;
printf("Starting server...\n");
sockfd = socket(AF_INET, ,0); /* 1: What will be the second argument
of the socket system call to create a TCP socket */

serv_addr.sin_family = ; /* 2: What will be the value that needs to
be given to this field if the Address family is IPV4*/

serv_addr.sin_addr.s_addr = ;/* 3: What should be the value of
this field if we wish to bind all local interfaces of the host*/

serv_addr.sin_port = ; /*4: What should be the value of this field
if we want to use port no 2345 as the server port*/
[D]
bindret = bind(sockfd, ,sizeof(serv_addr)); /* 5 : What will be the
second argument of bind() system call here*/
```