

## ITS 323 – QUIZ 4 ANSWERS

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

ID: \_\_\_\_\_

Total Marks: \_\_\_\_\_

out of 5

### Question 1 [5 marks]

- |  |             |              |
|--|-------------|--------------|
| a) Datagram packet switching was developed before circuit switching.   | True        | <b>False</b> |
| b) Virtual circuit packet switching was developed before circuit switching.  | True        | <b>False</b> |
| c) A circuit switch may also use TDM on an output line.  | <b>True</b> | False        |
| d) A switched network is always a fully connected network.   | True        | <b>False</b> |
| e) A switched network will always have more than one path from every source and destination pair.                                    | True        | <b>False</b> |
| f) The control unit of a circuit switch provides the connections between input and output lines.                                     | True        | <b>False</b> |
| g) A circuit switch can only have one connection passing through it at a time.   | True        | <b>False</b> |
| h) A datagram packet switch reserves resources when it receives a connection request packet.   | True        | <b>False</b> |
| i) A virtual circuit packet switch may reserve resources for a connection during connection setup.                                   | <b>True</b> | False        |
| j) Blocking is possible in circuit switched networks.  | <b>True</b> | False        |
| k) All circuit switched networks are non-blocking.   | True        | <b>False</b> |
| l) In a virtual circuit packet switching network, the source and destination must transmit/receive at the same speed (or data rate). | True        | <b>False</b> |
| m) Guaranteed quality of service is an advantage of circuit switched networks.   | <b>True</b> | False        |

- n) The main factors contributing to delay in circuit switching are: transmission delay and propagation delay.  
**True**      **False**
- o) The main factors contributing to delay in circuit switching are: processing delay and propagation delay.  
**True**      **False**
- p) If a very small amount of data needs to be sent from source to destination, datagram packet switching will generally be faster than virtual circuit packet switching.  
**True**      **False**
- q) If a very small amount of data needs to be sent from source to destination, circuit switching will generally be faster than datagram packet switching.  
**True**      **False**
- r) Datagram packet switching uses headers; virtual circuit packet switching does not use headers.  
**True**      **False**
- s) Datagram packet switching uses headers; circuit switching does not use headers.  
**True**      **False**
- t) Packets may arrive at the destination out-of-order when using circuit switching.  
**True**      **False**
- u) Packets may arrive at the destination out-of-order when using virtual circuit packet switching.  
**True**      **False**