

ITS413 – Quiz 6 Answers

Name: _____

ID: _____

Mark: _____ (out of 8)

Question 1 [6 marks]

True or false:

- | | | |
|--|------|-------|
| a) If the availability of a torrent is 0.75 then 75% of the peers in the swarm have a complete copy of the torrent. | TRUE | FALSE |
| b) If the availability of a torrent is 0.90 then 90% of the peers in the swarm have a complete copy of the torrent. | TRUE | FALSE |
| c) If the availability of a torrent is 1.5 then all pieces of the torrent are distributed amongst the peers in the swarm. | TRUE | FALSE |
| d) If the availability of a torrent is less than 1 then a client will not be able to download the entire torrent in the current swarm. | TRUE | FALSE |
| e) A tracker will normally implement a web server, and maintains a list of peers downloading and uploading a torrent. | TRUE | FALSE |
| f) An indexer will normally implement a web server, and maintains a list of peers downloading and uploading a torrent. | TRUE | FALSE |
| g) A tracker will normally implement a web server, and maintains a list of .torrent files. | TRUE | FALSE |
| h) An indexer will normally implement a web server, and maintains a list of .torrent files. | TRUE | FALSE |
| i) A .torrent file will contain the address of the tracker as well as the address of all peers accessing that torrent. | TRUE | FALSE |
| j) A .torrent file will contain the address of the tracker as well as information about the file(s) in the torrent. | TRUE | FALSE |
| k) A .torrent file will contain the address of the indexer as well as the address of all peers accessing that torrent. | TRUE | FALSE |
| l) A .torrent file will contain the address of the indexer as well as information about the file(s) in the torrent. | TRUE | FALSE |
| m) A peer that has downloaded 200 pieces of a 300 piece torrent is considered a <i>seed</i> . | TRUE | FALSE |
| n) A peer that has downloaded 200 pieces of a 300 piece torrent is considered a <i>leech</i> . | TRUE | FALSE |
| o) A peer that has downloaded 100 pieces of a 100 piece torrent is considered a <i>seed</i> . | TRUE | FALSE |
| p) A peer that has downloaded 100 pieces of a 100 piece torrent is considered a <i>leech</i> . | TRUE | FALSE |
| q) A client peer sends a Request message to request a <i>block</i> of a torrent from a remote peer. | TRUE | FALSE |
| r) A client peer sends a Request message to request a <i>piece</i> of a torrent from a remote peer. | TRUE | FALSE |
| s) A client peer sends a Request message to request an <i>entire torrent</i> from a remote peer. | TRUE | FALSE |

- t) A client peer sends a Request message to request a *individual file* in a torrent from a remote peer. TRUE FALSE
- u) If peer X is choked by peer Y, then peer X cannot upload any blocks to peer Y. TRUE FALSE
- v) If peer X is choked by peer Y, then peer Y cannot download any blocks from peer X. TRUE FALSE
- w) If peer X is not choked by peer Y, then peer X can download blocks from peer Y. TRUE FALSE
- x) If peer X is choked by peer Y, then peer X cannot download any blocks from peer Y. TRUE FALSE

Question 2 [2 marks]

- a) Explain an advantage of a Peer-to-Peer system [1 mark]

Answer

Does not depend on a single server (no single point of failure); good scalability in resources, as addition of new users leads to new clients and servers being available; Reduces the performance load on original servers (meaning lower cost servers/links are needed for content providers).

- b) Explain a disadvantage of a Peer-to-Peer system. [1 mark]

Answer

Easy to control access to resources and functionality; simple and efficient algorithms are available for locating and accessing content; easy to maintain an index of available content.