Questions (from Past Exam Papers) on TCP/IP and Selected Topics
Note the different examples of "bookwork" questions which often occur as parts a) or b)

1. 2010 Briefly describe each of the following and also spell out the abbreviations.
(i)   SNMP
(ii)   CSMA-CD
(iii)   RSA and PGP

2. 2010 Briefly describe the difference between IPv4 and IPv6 approaches to the items (i) to (iv), making clear any benefits of the new version over the old.
(i)   Header length
(ii)   Fragmentation
(iii)   Header checksum
(iv)   Addressing

3. Clearly show, with the aid of simple formulae or otherwise, how triple DES encrypts and decrypts messages.

4. Various Explain the basic difference between TCP and UDP and, with the aid of a diagram, explain the purpose and processes of the basic 3-way TCP handshake.

5. Various With the aid of suitable figures, identify and summarise the functions of each of the layers in both the OSI and TCP/IP layer models.
Solutions

6. An extra spanning tree example
Perform a spanning tree operation on the network below. (When a tie occurs you may choose the selection which has the lowest ID.)