Memorandum: Semester test 1

Posted on: Thursday, March 16, 2023 1:07:12 PM SAST

Here is the memorandum for semester test 1. You should be able to gauge your performance well before the scripts have been marked.

1)(a-j) B D A C B E C A D D

  (k-t) B A C E D C C E B D

2)(a) 25
  (b) rcpt to: u@xx.co.za
  (c) Blank line
  (d) Full stop on a line of its own
  (e) Yes (but why? Test it. Sniff it.)

3)(a) Virtial terminal
  (b) 23
  (c) localecho
  (d) telnet www.example.com 80
  (e) Escape character

4)(a) Contention control / media access control
     Data delineation
     Error control
  (b) Ethernet, or any other example
  (c) Noisy medium requiring error correction on layer 2, vs good medium that only needs error checking on layer 2 - or any other valid example

5)(a) www IN A 10.9.8.7
  (b) yy IN CNAME xx.org.za.
  (c) @ IN MX <num1> 192.168.1.1
  (d) @ IN MX <num2> 192.168.99.99, with <num1> and <num2> any integers such that <num1> < <num2>
  (e) @ IN NS 176.16.16.16

Memorandum: Semester test 2

Posted on: Tuesday, May 16, 2023 3:43:43 PM SAST

Here is the memorandum for semester test 2.

a-e) B A E B D
f-j) A C E D C
k-o) B B A D A
p-t) B D A D B
u-y) D E E B C

Q2
a) 255.255.255.192
b) 170.170.42.128/26
c) 170.170.42.191 (191 accepted, with incorrect first three bytes)
d) 170.170.42.190 (190 accepted, with incorrect first three bytes)
e) 682
f) 255.255.252.0
g) 170.170.168.0/22
h) 672

Q3

a) U+1840 U+0041 U+F91A
b) C3 86 F0 90 80 80

Q4
Any five of: Source Port, Destination Port, Sequence Number, Acknowledgement Number, Data, Window, Checksum, Urgent Pointer, Options, Padding

Q5
a) 400
b) 550
c) 100
d) 950
e) 0