



Question 22

a) segment 1

The transmission medium for this segment is micro waves because ~~the~~ ^{australian} mobile phones work on microwaves if she was in England ~~the~~ her mobile phone would work on Radiowaves.

This is because of the different land conditions

segment 2

This segment would also work on radio waves because each Tower would have a direct line of sight which would allow microwaves to be used because microwaves are ^{have} a very small wave length and require a direct line of sight.

segment 3

This segment would work on ~~fiber optics~~ ^{normal telephone} ~~normal telephone~~ lines because it is a ~~country exchange~~ ^{country telephone exchange} so the traffic of calls would not be a great because of the shortage of people

Segment 4

This segment would use fibre optics because the head office building would have large amounts of traffic directed to it so fibre optics allow for a fast transfer also ~~loss~~ loss of data is reduced and power consumption is ^{also} reduced.

b) The advantages of using mobile technology are that communication can be made more easy due to the convenience of ~~having~~ being able to communicate from any location without the use of a fixed phone. The speed of transfer is increased due to the use of microwaves.

c) A SQL is a small program that allows the user to find certain types of data. A data dictionary is a paper based or computer based data base which includes the Name of the File the File size the type eg ~~numeric~~ numeric, Text etc and it also includes an example or the use of the specified thing. This data dictionary will allow her to write her SQL more quickly and with reduced errors. It will do this because all the information to write the language is in the data dictionary. ~~The SQL will be more~~ There will be fewer errors because The information to write the SQL will be in the data dictionary