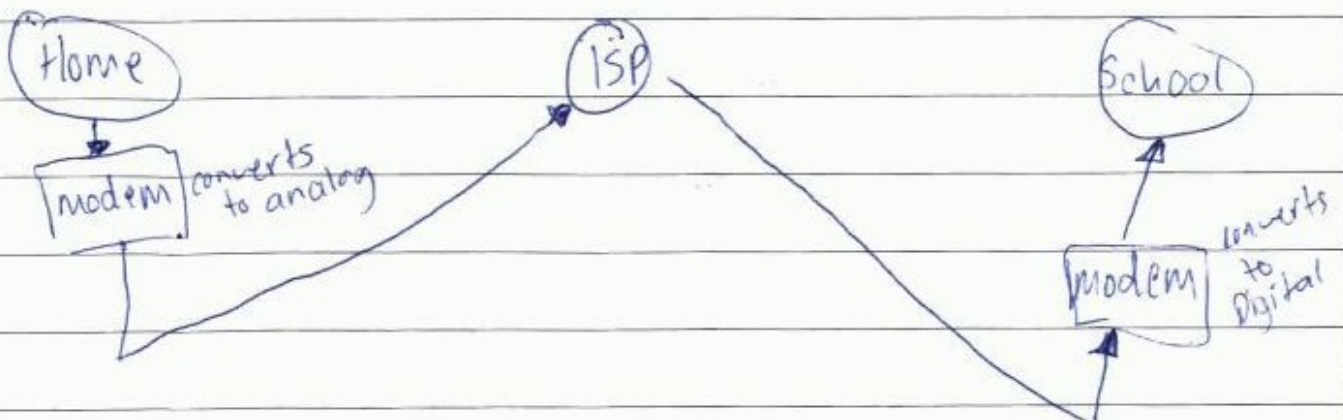


Start here for  
 Question Number: **22**

a) A ~~fat~~ thin client stores a ~~users~~ network users data (documents, pictures etc.) where a Fat client stores the Application Software for the ~~server~~ <sup>clients</sup>. (MSWord, Excel etc).

| b) | Field Name         | Data Type                                       | Size | Descriptor                |
|----|--------------------|---|------|---------------------------|
| i) | <del>Student</del> |   |      |                           |
|    | StudentID          | Number  | 8    | Students ID Number        |
|    | StudentName        | Text  | 40   | Students Full Name        |
|    | DateOfPayment      | <del>Text</del> <del>DOWN</del> <del>TEXT</del> | 6    | Date DD/MM/YY             |
|    | Fees Paid          | Text  | 140  | Course/Excursion/Fee Name |

ii) The message is first modulated by the modem into an analog signal. This signal is then sent through the ~~telephone~~ telephone wires to the ~~Internet~~ Internet Service Provider (ISP). The ISP then sends the signal to the Schools Server which is ~~then~~ received by the modem and de-modulated back ~~into~~ into a digital signal the computer can use



iii) A suitable error detection technique would be to use the Cyclic Redundancy Check (CRC) method. The CRC error check method is the most reliable and accurate way to check for transmission errors. The message is checked by dividing the data packet by a predetermined number and recording the remainder, the data packet and the remainder are sent to the receiving computer where it checks the packet by dividing it and checking the <sup>remainder</sup> ~~error~~. If the ~~data~~ remainders are different the ~~packet~~ data packet contains an error/s and ~~ask~~ the receiving end asks for the packet of data to be re-sent. This method is extremely accurate.

Additional writing space on back page.