

7 Data is sent from an employee's computer to a server. The data is correct when it is sent, but an error is detected when the data is received.

(a) Describe how an error can occur in the data during transmission.

.....
.....
..... [2]

(b) Methods of error detection and correction can be added to make sure that errors are identified after data is transmitted.

Complete the statements about methods of error detection and correction.

Use terms from the list. **Not** all terms need to be used. You should only use each term once.

- acknowledgement
- automatic repeat query (ARQ)
- binary
- bit
- byte
- calculation
- check digit
- checksum
- correct
- echo check
- error
- even
- incorrect
- negative
- number
- odd
- positive
- timeout

A parity check is set to be or

..... . A parity is

added to each byte before transmission to make it match the set parity.

An involves comparing the data sent to the data received back from the receiving device.

An uses acknowledgement and

..... . The acknowledgement system can be

..... or