NOVEMBER 27, 2012

WORKSHEET: ERROR

ERROR DETECTION

AHMAD
ELECTRICAL 7TH

KEY :

SQ: Short Question

LQ : Long Question

Questions

1. What do you mean by error while talking about data communication? (S.Q)

2. What do you mean by Error Control techniques? Can you mention few and describe them. (LQ)

3. Define some methods for redundancy checks and explain them briefly (SQ)

4. Explain with help of example how , can single parity help to detect error (SQ)

5. Differentiate between Even and ODD Parity Check methods with example (SQ)

6. Define code word , and provide it formula . (SQ)

7. Muhamad Ahmad has designed a technique in which he transmits bits in 0 or 1 , by adding 5 same bits next to transmitted data . What is the data rate of above code (SQ)

8. Provide formula for code efficiency (SQ)

9. Explain disadvantages of coding (SQ)

10. Provide relation between probability and redundancy (SQ)

11. If ABC is represented by 5 bits of data , where A=0000, Provide one bit and 2 d parity check for following

    i. AHMAD
    ii. SCET
    iii. ELECTRCIAL

Compare the data rate of all schemes and evaluate the code efficiency

12. Following Data is received at receiver end. Using Even parity Check

11111110   11011110   11101100   11011000   11001001 ?

,confirm if we need to send -ive acknowledgement

13. Define the working methodology of 2-d parity check. And explain its advantages and its disadvantages

14. What are type of Errors, and explain them with example

15. Explain in words, along with advantages and disadvantages of CRC (LQ). You may use the following diagram if you like

Zero accept
non zero reject
Receiver   **Sender**

16. Explain Hamming Code, Hamming Code error and Dmin. and how can Dmin be calculated. represent via diagram