## DIGITAL COMMUNICATION ASSIGNMENT 5-2

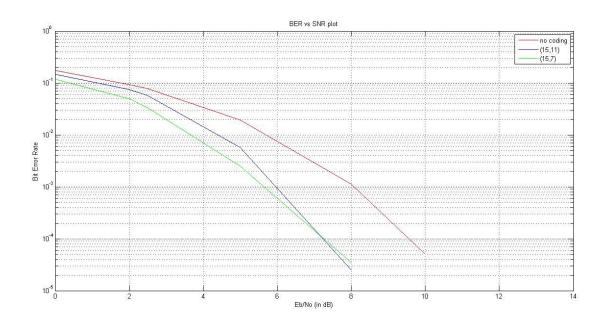
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## PLOT BER vs E/N<sub>o</sub> FOR BCH CODERS OVER AWGN CHANNEL

## Results:

Below is the graph of BER (Bit Error Rate) and  $\rm E/N_o$  ratio for three different cases, namely,

- i) No channel coding
- ii) (15,11) BCH
- iii) (15,7) BCH



We observe that BER is maximum in case of no channel coding; less in case of (15,11) BCH and even lesser in case of (15,7) BCH. This is because (15,7) code

can correct two bit errors whereas (15,11) code can correct only one bit error. These three plots are for the same range of  $\rm E/N_o$  values.