

Assignment7

- BCD 1. [2 pts] (Multiple choice) Which of the following statements is/are **FALSE**?
- A. The meaning of the information depends on its recipient.
 - B. Bandwidth can be a measure of the rate of information transmission.
 - C. Compression ratio is the size of the compressed information divided by the size of the uncompressed information.
 - D. In all cases, the higher the compression rate, the more information is lost.
 - E. Digital data is a discrete representation of data.
2. For **101**,
- 1) consider it as a binary number, what is its decimal representation? **5**
 - 2) consider it as an octal number, what is its decimal representation? **65**
3. [2 pts] Convert the decimal number **526.625** to binary and then to hexadecimal number.
4. [2 pts] Please calculate **20+ (-22)** (decimal notation) converted to two's Complement Notation using 8 bits and write the answer in decimal number. The solution process is required.
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3. [2 pts] $(10\ 0000\ 1110.101)_2$ $(20E.A)_{16}$
4. [2 pts] $20 \rightarrow 0001\ 0100$, $-22 \rightarrow 1110\ 1010$, $0001\ 0100 + 1110\ 1010 = 1111\ 1110$,
result -2