Assignment7

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?

   2) consider it as an octal number, what is its decimal representation?

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.

5. [2 pts] Write down your Student ID, treat it as a string of numbers, then encode it using the ASCII character set. (Answer in hexadecimal format)