Grade 10 | Number System | Essay Paper

1. Convert the binary 11010101_2 to the equivalent octal number. Show your steps. (2015)

2. In the ASCII code, the letter A is represented as decimal 65. Determine the binary representation of the letter D. (2015)

3. Convert the Hexadecimal number E9 to the equivalent octal number. Show the relevant steps. (2016)

4. Convert the binary number 110111001100_2 to Octal. Show steps in your calculation. (2017)

5. Convert hexadecimal number 752_{16} to binary. Show steps in your calculation. (2017)

6. Assume that 4 bits per pixel arc used to represent a colour in a colour representation system. How many colours different from each other can be represented in this system? (2017)

7. If character 'm' is represented in the ASCII table as 109_{10} write down the binary representation of the word 'no' using 7 bits for each character. (2018)

8. How many different colours can be represented if 10 bits per pixel (bpp) is used as colour depth in an image? (2018)

9. Convert 1260_{10} to its octal equivalent. (2019)

10. Convert $A1_{16}$ to its binary equivalent. (2019)

11. Convert the octal number 867_8 to its binary equivalent. Show the major steps of your calculation. (2020)

12. If 1011010_2 represents character 'Z' in ASCII code, what is the ASCII code for character 'X'? (2020)