**Q1**

1. The wavelength of blue colour is roughly between about 450 and 495 nanometers and the wavelength of red colour is roughly between 620 to 750 nanometers.
2. The relation between the wavelength (λ) and the frequency (f) of an EM wave is
3. The higher the frequency of a colour spectrum, the higher its rate of absorption in the environment, so the shorter the distance it can travel
4. Therefore, we can see a red light from a much further distance, compared to a same power blue light

**Q2**

Image: Gold1.bmp

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RGB | | | HSV | | CIE-Lab | |
| R | G | B | H | V | a | b |
| 224 | 192 | 64 | 24 | 182 | 126 | 193 |

Image: Gold2.bmp

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RGB | | | HSV | | CIE-Lab | |
| R | G | B | H | V | a | b |
| 211 | 175 | 64 | 23 | 189 | 129 | 191 |

**Q6**

1. In MSMD algorithms, scale is indeed