

Part I. Multiple choices.

1. _____ If you have two light beams consist of same amount of photons, however, beam 1 consists photons of yellow color only and beam 2 consists of photons of blue color. Which of the following statement is correct?
 - (a) Beam 1 has a larger intensity.
 - (b) Beam 2 has a higher total energy.
 - (c) Beam 1 and 2 have the same power.
 - (d) Beam 1 has a high energy/photon.
 - (e) Beam 2 has a larger spot size.

Part II. Short questions.

1. When the atoms of a material are excited, it was observed that they release some blue photon after it come back to the ground state. Student A claims that now this atom must become smaller because it is one photon less then it was. Student B thinks the material made out of this type of atoms must appears blue under the sun light. What do you think about their statement? And why?