Answer all the questions.

Consider a scenario with a set of five sellers selling idetical items with respective valuations $v_1 = 23$, $v_2 = 15$, $v_3 = 11$, $v_4 = 8$, $v_5 = 2$, and one buyer. The buyer wishes to buy 4 items. Compute VCG payments in each of the following cases.

1. Each seller can supply at most one item.

2. Each seller can sell at most 2 items.

[5 + 5 **Marks**]