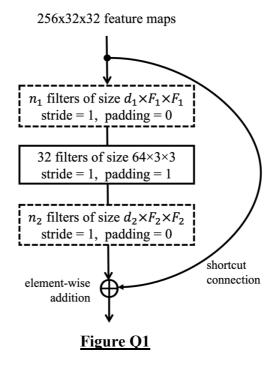
1. Figure Q1 depicts a block that consists of three convolutional layers. The input volume has a size of  $256 \times 32 \times 32$  and the second layer has 32 convolution filters each with a size of  $64 \times 3 \times 3$ , stride = 1 and padding = 1.

Provide the values of  $n_1$ ,  $d_1$ ,  $F_1$ ,  $n_2$ ,  $d_2$ , and  $F_2$  to form a valid block. Explain your design.



- 2. Study and try the tutorial t7q1.ipynb on transfer learning. In particular,
  - a. Understand how to data augmentation is performed
  - b. Review the transfer learning steps
  - c. Try the code to perform transfer learning on the classification of bees vs. ants