AI Olympiad, February 2026

1. Which of the following statements is TRUE?

   (a) The kernel or mask of a Convolutional layer is the distance between adjacent receptive fields in a specific direction (horizontal or vertical).

   (b) Average pooling is a Convolution operation where all neurons have trainable weights.

   (c) A Convolutional layer can have more than one feature maps.

   (d) Two neurons A, B within a Convolutional feature map have different weights $\mathbf{w}_A \neq \mathbf{w}_B$.

   [3 Marks]

   [Total 3 Marks]