1. Regularizing the weights increases the:
   (a) bias
   (b) variance

2. Increasing the size of the layers (more hidden units per layer) decreases the:
   (a) bias
   (b) variance

3. Using dropout to train a deep neural network increases the:
   (a) bias
   (b) variance

4. The Bayes error is a lower bound to Human-level error.
   (a) True
   (b) False

5. In which order should you perform these tasks?
   (i) data augmentation, (ii) data split, (iii) data shuffling:
   (a) i, ii, iii
   (b) ii, i, iii
   (c) iii, ii, i
   (d) i, iii, ii

6. Applying data augmentation is always beneficial.
   (a) True
   (b) False

7. Transfer learning related hyperparameters have to be tuned on the training set.
   (a) True
   (b) False
8. The space of 12x12 color images is of size:
   (a) $256^{(12 \times 12)^3}$
   (b) $(12 \times 12 \times 3)^{256}$
   (c) $256^{(12 \times 12 \times 3)}$
   (d) $((12 \times 12)^3)^{256}$

9. In transfer learning, it is sometimes better to freeze the later layers of a
   network, and fine-tune only the earlier layers.
   (a) True
   (b) False

10. Your dataset is small but similar to the dataset your pretrained model
    was trained on, you should replace the pretrained model’s last layer and:
    (a) Fine-tune the last few layers
    (b) Fine-tune the last layer
    (c) Fine-tune the whole network, including the last added layer.

11. In a GAN, the Generator and the Discriminator are trained simultaneously.
    (a) True
    (b) False

12. Stochastic Gradient Descent is a good optimization algorithm to avoid
    getting stuck in saddle points.
    (a) True
    (b) False

13. Using dropout at test time increases consistency and robustness of the
    model, leading to lower variance.
    (a) True
    (b) False

14. By computing the derivative of a neuron’s activation with respect to an
    input image, we can interpret this neuron’s influence on the output pre-
    diction
    (a) True
    (b) False