Knet Quiz by CCL

1.	Lecture 2: Which of the following is NOT true about Visual Question Answering (VQA)? (time stamp: 4:10)
	○ Models take both sequential (text) and discrete (image) data as input.
	○ Models use attention mechanisms to heed corresponding image regions and text.
	○ Models are trained recurrently via time step iterations.
	○ Models pay equal attention to every word of the input sentence to avoid biases.
2.	Lecture 2: Which of the following is NOT true about attention mechanisms in a word-level VQA model? (time stamp: $4:10$)
	○ Allows humans to better understand AI's reasoning process and inference results.
	Ocontains information on the corresponding image regions of individual words.
	○ The relationship between corresponding image regions and words is a one-to-one mapping.
	○ Attention can be visualised through plotting attention maps.
3.	Lecture 3: Which of the following is NOT true about Knet's built-in MNIST dataset? (time stamp: $2:29$)
	○ Uses mini-batches of 100.
	Uses a channels-first image representation.
	O Spatial dimensions (height, width) of images are 28x28.
	○ There are in total 10 possible predicted classes.
4.	Lecture 3: In $y = f.w * mat(x) .+ f.b$, if x is of dimensions (28,28,1) and y is (64,1), what are the dimensions of f.w, f.b respectively? (time stamp: 3:35)
	\bigcirc (64,28,28) — (64,28,28)
	\bigcirc (64,28,28) — (64,1)
	\bigcirc (64,784) — (64,1)
	\bigcirc (64,784) — (64,28,28)
5.	Lecture 3: Which of the following is a correct description of the LeNet architecture used? (time stamp: $3:46$)
	\bigcirc lenet = RNN((784, 1), 256, 64, 10)
	\bigcirc lenet = CNN((28,28,1), (14,14,16), (7,7,32), 448, 10)
	\bigcirc lenet = CNN((28,28,1), (5,5,20), (5,5,20), 500, 10)
	\bigcirc lenet = CNN((28,28,3), (5,5,20), (5,5,20), 25, 10)
6.	Lecture 4: What do $\langle unk \rangle$ tokens mainly represent? (time stamp: 2:22)
	○ Words with characters which cannot be encoded in UTF-8.
	○ Rarely seen words which are not indexed in our corpus.
	○ Words of another language, e.g. Chinese characters.
	○ Expletives which are sanitised from our dataset.
7.	Lecture 4: What is NOT a function of the test set? (time stamp: 2:47)
	○ To measure the accuracy of our model.
	○ To check for model overfitting.

O To be integrate into the trainset at later iterations for model finetuning.
\bigcirc To assess specific features of the model, such as false positives, false negatives and recall.
8. Lecture 5: Which of the following is NOT true about character-level RNNs? (time stamp: 0:47)
○ 1 new character is predicted at each time step.
\bigcirc The n'th prediction is generated using the (n-1)'th prediction, previous & current hidden state
○ A "one to one" character-level RNN can be used to generate one paragraph of text.
O Input characters are represented by one-hot vectors.
9. Lecture 5: Which of the following is NOT an insight learned by character-level RNNs (time stamp: 3:12)
○ The semantic meaning of words and sentences.
O Capitalisation rules in English syntax.
O Play transcript formats where character names are put above their lines.
○ Basic punctuation of sentences.
10. Lecture 6: Which of the following is NOT information given by examining a model's recall@5 (top-classification error)? (time stamp: 3:36)
O To determine the intraclass variance inferred by the model.
O To determine the interclass variance inferred by the model.
○ To assess performance on specific data classes.
O To assess the ratio of true positive data, to false positives and false negatives.

Answers: D, C, B, C, C, B, C, C, A, A