Started on	Friday, 7 February 2025, 1:20 PM
State	Finished
Completed on	Friday, 7 February 2025, 1:42 PM
Time taken	21 mins 38 secs
Marks	15.00/15.00
Grade	**100.00** out of 100.00

Question 1

1.00/1.00

What is the role of the `<OOV>` token?

- Delete out-of-vocabulary words
- Placeholder for numbers
- Ignore out-of-vocabulary words
- Regular expression matcher
- Placeholder for out-of-vocabulary words✔

The correct answer is: Placeholder for out-of-vocabulary words

Question 2

1.00/1.00

Which layer in the RNN model represents words as detailed feature lists?

- Embedding Layer✔
- SimpleRNN Layer
- Dense Layer
- Dropout Layer
- LSTM Layer

The correct answer is: Embedding Layer

Question 3

1.00/1.00

Why is padding used in the preprocessing step?

- To increase vocabulary size
- To handle variable review length✔
- For beautification
- To improve accuracy
- To reduce memory usage

The correct answer is: To handle variable review length

Question 4

1.00/1.00

What advantage does LSTM have over traditional RNNs?

- Tackles the vanishing gradient problem ✔
- Faster convergence
- Lower memory usage
- Simpler architecture
- Requires fewer layers

The correct answer is: Tackles the vanishing gradient problem

Question 5

1.00/1.00

What is the purpose of the Dropout layer in the LSTM with Dropout model?

- Tokenization
- Embedding
- Regularization to prevent overfitting ✔
- Activation function
- Recurrence

The correct answer is: Regularization to prevent overfitting

Question 6

1.00/1.00

What might be a concern if the training accuracy is high but validation accuracy is significantly low?

- Data is incorrectly labeled
- Model is perfectly trained
- Model is overfitting ✔
- Model is underfitting
- Model needs more layers

The correct answer is: Model is overfitting

Question 7

1.00/1.00

In which scenario might you prefer a simple RNN over an LSTM?

- Complex sentence structures
- Large datasets
- Long-range dependencies in data
- Fast training with limited resources ✔
- When high accuracy is a must

The correct answer is: Fast training with limited resources

Question 8

1.00/1.00

Which parameter in `model.fit()` signifies the number of times the model is exposed to the dataset?

- batch_size
- validation_data
- loss
- epochs ✔
- optimizer

The correct answer is: epochs

Question 9

1.00/1.00

Why is the loss function important during model compilation?

- Specifies number of epochs
- Determines model layers
- Specifies how errors are measured ✔
- Assigns weights to layers
- Adjusts learning rate

The correct answer is: Specifies how errors are measured

Question 10

1.00/1.00

How does the model handle reviews of varying lengths?

- Changes tokenizer's vocabulary
- Uses padding ✔
- Ignores reviews outside a certain length range
- Uses LSTM layers
- Uses multiple RNN layers

The correct answer is: Uses padding

Question 11

1.00/1.00

Why might the vanishing gradient problem be a challenge in RNNs?

- Reduces training speed
- Makes model evaluation faster
- Impedes learning of long-range dependencies ✔

- Increases accuracy
- Requires more memory

The correct answer is: Impedes learning of long-range dependencies

Question 12

1.00/1.00

In the given LSTM model, which layer(s) help in retaining memory and context?

- Dense layer
- Embedding layer
- SimpleRNN layer
- Dropout layer
- LSTM layer✔

The correct answer is: LSTM layer

Question 13

1.00/1.00

When using a tokenizer with a fixed number of words, what could be a potential drawback?

- Simplifies the model
- Enhances accuracy
- Slows down training
- Increases memory usage
- Limited understanding due to missed words✔

The correct answer is: Limited understanding due to missed words

Question 14

1.00/1.00

What is the primary function of an Embedding Layer?

- Handling out-of-vocabulary words
- Reducing sequence length
- Regularization
- Tokenization
- Representing words in dense vector format✔

The correct answer is: Representing words in dense vector format

Question 15

1.00/1.00

After training, what can be inferred if the validation loss keeps decreasing but training loss remains high?

- Model is underfitting✔
- Model architecture is flawed
- Model is perfectly trained
- Model is overfitting
- Training data is corrupted

The correct answer is: Model is underfitting