

## MCQ / Short Questions Module-5

1. LSTM stands for
  - i. Long short term Memory
  - ii. Length short team memory
  - iii. Load sweet term memory
  - iv. Both ii) & iii)
2. Which of the following is best suited for NLP
  - i. CNN
  - ii. RNN
  - iii. LSTM
  - iv. ii & iii
3. Which of the following are suitable for Image Processing :
  - i. Neural Net
  - ii. CNN
  - iii. RNN
  - iv. GAN
4. Fakefaces are usually can be generated by
  - i. CNN
  - ii. RNN
  - iii. GAN
  - iv. None of the mentioned
5. Spoken sentences can be identified by
  - i. CNN
  - ii. RNN
  - iii. GAN
  - iv. None of the mentioned
6. Which of the activation function has a output range -1 to +1
  - i. Sigmoid function
  - ii. RELU
  - iii. Tanh
  - iv. None
7. Which of the networks is suitable for processing sequences:
  - i. Simple neural network
  - ii. GAN
  - iii. RNN
  - iv. CNN
8. Which of the following are components in GAN
  - i. Generator
  - ii. Discriminator
  - iii. Both i & ii
  - iv. None of the above
9. if there are m inputs coming from previous layer to current layer with n nodes in a Neural net, the Number of weights used in computation is :
  - i.  $m * n$
  - ii.  $(m-1) * n$
  - iii.  $(m+1) * n$
  - iv.  $m*n + n$
10. Squared error Loss function is given by :
  - i.  $(y-y^{\wedge})^2$
  - ii.  $\log(y)$
  - iii.  $y- y^{\wedge}$
  - iv. None of the above
11. The Binary Cross Entropy function is: —————
12. The Cross Entropy unction for multi class classification is : —————
13. The squared error Loss Function is : —————
14. Sigmoid activation function is —————
14. Max of Sigmoid function ———
15. Min of sigmoid function. ———
16. Value at origin of sigmoid function —————
17. Differential of sigmoid function —————
18. Tanh activation function is ———
19. RelU activation function is :
20. Softmax function is : —————
21. Maxpool operation is —————
22. Vanishing gradient problem is the following:
  - i. gradients increasing to a very high value
  - ii. when computing the gradients on the unrolled RNNs, the value of the gradients can drop to a very small value (close to zero).

- iii. Gradient becomes negative
- iv. None of the above

23. Gradient explosion problem is :

i. gradients increasing to a very high value

ii. when computing the gradients on the unrolled RNNs, the value of the gradients can drop to a very small value (close to zero).

- iii. Gradient becomes negative
- iv. None of the above

24. Which of the following are true about Gradient clipping:

- I. Rescaling of norm of the gradient to a threshold when it goes very high
- II. Is a way to deal with Gradient explosion problem
- III. Both i & ii
- IV. None of the above

25. LSTM cell state is given by the equation — — — — — — —

26. These are part of LSTM

- I. Output Gate
- II. Forget Gate
- III. I & ii
- IV. Memory Gate