# Unit 5 - Week 3



## Assignment 3

**The due date for submitting this assignment has passed.**
**As per our records you have not submitted this assignment.**

**Due on 2020-02-19, 23:59 IST.**

1) Entropy is represented as *1 point*

- $-\sum_i p_i \log q_i$
- $-\sum_i p_i \log p_i$
- $\sum_i p_i \log q_i$
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
$-\sum_i p_i \log p_i$

2) Which of the following statement is true? *1 point*

- An event with high probability has high information content
- An event with low probability has high information content
- An event with low probability has low information content
- None of the above

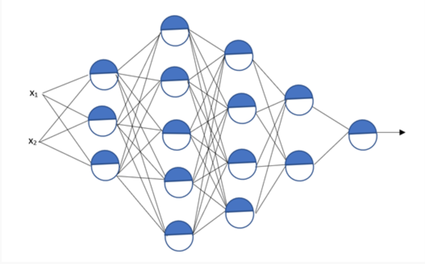
No, the answer is incorrect.
Score: 0
Accepted Answers:
*An event with low probability has high information content*

3) The number of nodes in the input layer is 10 and the hidden layer is 6 (In MLP). The maximum number of connections from the input layer to the hidden layer are *1 point*

- 72
- 60
- More than 60
- 120

No, the answer is incorrect.
Score: 0
Accepted Answers:
*60*

4) Consider the following Feed Forward Neural Network: *1 point*




Find the number of hidden layers in the above figure:

- 6
- 5
- 4
- 2

No, the answer is incorrect.
Score: 0
Accepted Answers:
*4*

5) Consider the figure in question:4. Find the number of neurons in the above figure in 2nd hidden layer: *1 point*

- 4
- 5
- 3
- 2

No, the answer is incorrect.
Score: 0
Accepted Answers:
*5*

6) Consider the figure in question:4. What is the dimension of the weight matrix to connect input to 1st layer? *1 point*

- 3 x 2
- 3 x 3
- 2 x 3
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
*3 x 2*

7) Consider the figure in question:4. What is the dimension of the first bias? *1 point*

- 2
- 1
- 3
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
*3*

8) Consider the figure in question: 4. Find the number of inputs. *1 point*

- 3
- 2
- 1
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
*2*

9) Which of the following method is used at the output layer for classification? *1 point*

- Linear
- softmax
- Linear or softmax
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
*softmax*

10) In regression problem, which of the following loss function will be used? *1 point*

- squared error loss
- cross entropy
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
*squared error loss*