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NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Deep Learning - IIT Ropar (course)



Course outline How does an **NPTEL** online course work? Week 0 Week 1 Week 2 Linearly Separable Boolean **Functions** (unit? unit=35&lesson=36) Representation Power of a Network of Perceptrons (unit? unit=35&lesson=37) Sigmoid Neuron (unit? unit=35&lesson=38) A typical Supervised

Assignment 2 The due date for submitting this assignment has passed.	тет
Due on 2021-02-07, 23:59	, 191.
Assignment submitted on 2021-02-07, 12:06 IST	
1) Which of the following two input Boolean logic function/s is/are linearly inseparable?	l point
■ AND ■ NAND ■ XOR ■ NOT XOR Yes, the answer is correct. Score: 1 Accepted Answers: XOR NOT XOR	
2) A MLP with a single hidden layer can represent Boolean functions irrespective of whether they are linearly separable or inseparable. True False No, the answer is incorrect.	1 point
Score: 0 Accepted Answers: True	

3) The layer which contains perceptron's in MLP is called as _____

1 point

Machine Learning Setup	Output layer	
(unit?	○ Middle layer	
unit=35&lesson=39)	Hidden layer	
Learning	O Input layer	
Parameters: (Infeasible)	Yes, the answer is correct. Score: 1	
guess work	Accepted Answers:	
(unit?	Hidden layer	
unit=35&lesson=40)		1 point
Learning	4) The values produced by the sigmoid function lies between the range	ι μοπι
Parameters:	© 0 to 1	
Gradient Descent (unit?	1 to 3	
unit=35&lesson=41)	0 to 2	
Representation	0 to 4	
Power of	Yes, the answer is correct.	
Multilayer	Score: 1	
Network of	Accepted Answers:	
Sigmoid Neurons (unit?	0 to 1	
unit=35&lesson=42)	5) Gradient Descent rule says that the direction 'u' that we intend to move in should be at	1 point
Lecture	60° with respect to the gradient.	
Material for	O -	
Week 2 (unit?	O True	
unit=35&lesson=43)	False	
• Quiz:	Yes, the answer is correct. Score: 1	
Assignment 2	Accepted Answers:	
(assessment? name=180)	False	
-	6) The algorithm/s which help us to learn the parameters of the sigmoid neurons starting	1 noint
Week 2	6) The algorithm/s which help us to learn the parameters of the sigmoid neurons starting from random values is/are	1 point
Feedback Form : Deep	monification values to also	
Learning - IIT	Perceptron learning algorithm.	
Ropar (unit?	Gradient descent learning algorithm.	
unit=35&lesson=44)	Both Perceptron learning algorithm and Gradient descent learning algorithm can be us	sed.
Week 3	None of these.	
week 4	No, the answer is incorrect. Score: 0	
	Accepted Answers:	
Week 5	Both Perceptron learning algorithm and Gradient descent learning algorithm can be used.	
Week 6	7) Identify the property/ies which is/are applicable to sigmoid neuron.	1 point
	Smooth.	
Week 7	Continuous.	
	Differentiable.	
Week 8	None of these.	
Week 9		

Score: 1 Accepted Answers: Smooth. Continuous. Differentiable. 8) S ₁ and S ₂ are two statements related to Gradient Descent, choose the correct option. 1 point Score: 1 Accepted Answers: Smooth. Continuous. Differentiable. 8) S ₁ and S ₂ are two statements related to Gradient Descent, choose the correct option. 1 point S ₁ : Gradient Descent is an optimization algorithm for finding a local minimum of a differentiable function.			
Accepted Answers: Smooth. Week 12 Download Videos Text Transcripts S ₁ : Gradient Descent is an optimization algorithm for finding a local minimum of a differentiable function. S ₂ : The logic is to take repeated steps in the direction of the gradient of the function at the current point. S ₁ is true and S ₂ is false. S ₁ is false and S ₂ are true. Both S ₁ and S ₂ are true. Both S ₁ and S ₂ are false. No, the answer is incorrect. Score: 0 Accepted Answers: S ₁ is true and S ₂ is false. 9) As number of inputs increases, the number of perceptron's in the hidden layer also 1 point increases exponentially. True False Yes, the answer is correct. Score: 1 Accepted Answers: True 10) An MLP consists of at least layers of nodes. 1 point Three Four None of these Yes, the answer is correct. Score: 1 Accepted Answers:	week 10	Yes, the answer is correct. Score: 1	
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Download Videos Text Transcripts S1: Gradient Descent is an optimization algorithm for finding a local minimum of a differentiable function. S2: The logic is to take repeated steps in the direction of the gradient of the function at the current point. S1 is true and S2 is false. S1 is false and S2 is true. Both S1 and S2 are true. Both S1 and S2 are false. No, the answer is incorrect. Score: 0 Accepted Answers: S1 is true and S2 is false. 9) As number of inputs increases, the number of perceptron's in the hidden layer also 1 point increases exponentially. True False Yes, the answer is correct. Score: 1 Accepted Answers: True 10) An MLP consists of at least layers of nodes. 1 point Two Three Four None of these Yes, the answer is correct. Score: 1 Accepted Answers:	Week 12	Differentiable.	
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Three Four None of these Yes, the answer is correct. Score: 1 Accepted Answers:		○ Two	
Four None of these Yes, the answer is correct. Score: 1 Accepted Answers:		Three	
None of these Yes, the answer is correct. Score: 1 Accepted Answers:			
Yes, the answer is correct. Score: 1 Accepted Answers:			
Accepted Answers:		Yes, the answer is correct.	
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