Course outline

course work?

Assignment 0

Applications

Sets

Sets

Sets

Operations

Properties

How does an NPTEL online

Week 1 - Introduction: Fuzzy

Sets, Logic and Systems &

Week 2 - Nomenclature

Terms and Set Theoretic

Operations used in Fuzzy

Week 3 - Set Theoretic

Week 5 - Arithmetic

Operations on Fuzzy

Numbers, Complement, T-

norm and S-norm for Fuzzy

Week 6 - Parmeterized T-

Norms, Parameterized S-

Norm Operators

Norm Operators

Norms, Fuzzy Relation and its

Lecture 26: Parameterized T-

Lecture 27: Parameterized S-

Lecture 28: Fuzzy Relation-I

Lecture 29: Fuzzy Relation-II

Crisp and Fuzzy Relations

Lecture 30: Operations on

Quiz : Assignment 6

Feedback For Week 6

Week 7 - Projection,

Cylindrical Extension and

Week 8 - Composition of **Fuzzy Relations and Its** 

Properties of Fuzzy Relation

Properties, Fuzzy Tolerance

Week 9 - Linguistic Hedges,

Connectives, Concentration,

Dilation, and Some Examples

Intensification of Fuzzy Sets, Orthogonality of Fuzzy Sets,

Negation/ Complement,

on Composite Linguistic

Week 10 - Contrast

Fuzzy Rules, Fuzzy

Inference System

Reasoning, and Fuzzy

Week 11 - Fuzzy Inference

Week 12 - Fuzzy Inference System: Larsen Fuzzy Model,

Tsukamoto Fuzzy Model, and

"first element is less than second element"?

 $A \times B$ 

 $B \times A$ 

 $A \times A$ 

 $B \times B$ 

Score: 0

 $A \times B$ 

No, the answer is incorrect.

Accepted Answers:

System: Mamdani Fuzzy

Model and Examples

TSK Fuzzy Model

**Text Transcripts** 

DOWNLOAD VIDEOS

Terms

and Equivalence Relations

Solution for Assignment - 6

Operations and Fuzzy Set

Week 4 - Fuzzy Set Properties

and Distance between Fuzzy

## About the Course

## Unit 9 - Week 6 - Parmeterized T-Norms, Parameterized S-Norms, Fuzzy Relation and its Operations

## Assignment 6 The due date for submitting this assignment has passed. Due on 2020-03-11, 23:59 IST. As per our records you have not submitted this assignment. 1) Let A and B are two fuzzy sets given as below. Find the intersection of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using T- 1 point norm minimum operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.8/1 + 0.7/2 + 0.2/3 + 0.9/40/1 + 0.5/2 + 0.1/30/1 + 0.4/2 + 0.2/3 + 0/40.7/1 + 0.5/2 + 0.3/3 + 0.6/4No, the answer is incorrect. Score: 0 Accepted Answers: 0/1 + 0.4/2 + 0.2/3 + 0/42) Let A and B are two fuzzy sets given as below. Find the intersection of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using T- 1 point norm algebraic product operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.7/1 + 0.8/2 + 0.1/3 + 0.6/40/1 + 0.2/2 + 0.02/30/1 + 0.24/2 + 0.06/3 + 0/40/1 + 0.28/2 + 0.06/3 + 0/4No, the answer is incorrect. Score: 0 Accepted Answers: 0/1 + 0.28/2 + 0.06/3 + 0/43) Let A and B are two fuzzy sets given as below. Find the intersection of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using T- 1 point norm bounded product operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30/1 + 0.4/2 + 0.5/3 + 0/40/1 + 0.1/2 + 0/3 + 0/40/1 + 0.5/2 + 0.1/3 + 0/40/1 + 0.4/2 + 0.3/3 + 0/4No, the answer is incorrect. Score: 0 Accepted Answers: 0/1 + 0.1/2 + 0/3+ 0/4 4) Let A and B are two fuzzy sets given as below. Find the intersection of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using T- 1 point norm drastic product operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30/1 + 0.4/2 + 0.3/3 + 0.9/40/1 + 0.3/2 + 0/3 + 0/40/1 + 0/2 + 0/3 + 0/40/1 + 0/2 + 0.3/3 + 0/4No, the answer is incorrect. Score: 0 Accepted Answers: 0/1 + 0/2 + 0/3 + 0/4Let A and B are two fuzzy sets given as below. Find the union of fuzzy sets 1 point A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using S-norm maximum operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.8/1 + 0.7/2 + 0.3/3 + 0.9/40/1 + 0.3/2 + 0/3 + 0/40/1 + 0.5/2 + 0.1/3 + 0/40/1 + 0.40/2 + 0.3/3 + 0/4No, the answer is incorrect. Score: 0 Accepted Answers: 0.8/1 + 0.7/2 + 0.3/3 + 0.9/46) Let A and B are two fuzzy sets given as below. Find the union of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using S-1 point norm algebraic sum operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.7/1 + 0.8/2 + 0.3/3 + 0.6/40.8/1 + 0.82/2 + 0.44/3 + 0.9/40.8/1 + 0.7/2 + 0.5/3 + 0.9/4 $\bigcirc$ 0.8/1 + 0.9/2 + 0.4/3 + 0.6/4 No, the answer is incorrect. Score: 0 Accepted Answers: 0.8/1 + 0.82/2 + 0.44/3 + 0.9/47) Let A and B are two fuzzy sets given as below. Find the union of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using S-1 point norm bounded sum operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.8/1 + 0.7/2 + 0.5/3 + 0.9/40.8/1 + 0.92/2 + 0.4/3 + 0.9/40.8/1 + 1.0/2 + 0.5/3 + 0.9/40.8/1 + 1.0/2 + 0.4/3 + 0.9/4No, the answer is incorrect. Score: 0 Accepted Answers: 0.8/1 + 1.0/2 + 0.5/3 + 0.9/48) Let A and B are two fuzzy sets given as below. Find the union of fuzzy sets A and B for the universe of discourse $X = \{1, 2, 3, 4\}$ using S-1 point norm drastic sum operator. A = 0.8/1 + 0.4/2 + 0.3/3 + 0.9/4B = 0.7/2 + 0.2/30.0171 + 0.7/2 + 1/3 + 0.9/40.01/1 + 1/2 + 0.3/3 + 0.9/40.8/1 + 1/2 + 1/3 + 0.9/4 $\bigcirc$ 1/1 + 1/2 + 1/3 + 1/4 No, the answer is incorrect. Score: 0 Accepted Answers: 0.8/1 + 1/2 + 1/3 + 0.9/49) For two crisp sets given as $A = \{1, 2, 3, 4\}$ and $B = \{9, 8, 7, 6\}$ , which of the following Cartesian products will have the element (7,2)? 1 point $A \times B$ $B \times A$ $A \times A$ $B \times B$ No, the answer is incorrect. Score: 0 Accepted Answers: $B \times A$ 10) For two crisp sets given as $A = \{1, 2, 3, 4\}$ and $B = \{9, 8, 7, 6\}$ , which of the following Cartesian products will give the non-empty relation for