10200440: DILSHAD BANO

645 - Fuzzy Logic and Applications (Quiz NO. 1)

tion # 1 of 5 (Start time: 05:33:43 PM, 29 December 2022)

Qui

$At-norm\ \Delta\ is\ ____\ if\ it\ is\ convex\ and\ for\ each\ a, b \in (0,1)\ \exists n > 0\ such\ that\ [a]^n < b.$

ct the correct option

- None of these
- Archimedean
- Cyclic
- Periodic

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Question # 2 of 5 (Start time: 05:34:16 PM, 29 December 2022)

For t-norm

$$\Delta : X \times X \to X$$

, for every x \in X,

$$x \Delta 1$$

= _____ .

Select the correct option

- 1
- none of these
- 0
- x

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Question # 3 of 5 (Start time: 05:34:56 PM, 29 December 2022)

A t-norm

$$\Delta : X \times X \to X$$

is called idempotent t-norm of

$$x \Delta x =$$

_____ .

Select the correct option

- 1
- 0
- none of these
- x

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

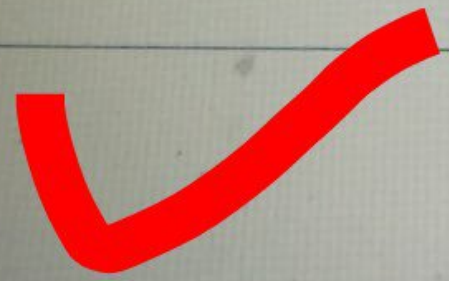
Question # 4 of 5 (Start time: 05:36:06 PM, 29 December 2022)

For every $t-norm\ \Delta$, the following equality holds,

$$x\Delta_0 y \leqslant x\Delta y \leqslant x\Delta_5 y$$

Select the correct option

- False
- True



4G 4G 73.8K/s 5:36 PM 64%

Quiz

Ads

MC210203810: FATIMA FIRDOUS

Time Left 87 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:36 PM, 29 December 2022

Question # 1 of 5 (Start time: 05:36:26 PM, 29 December 2022)

Total Marks: 1

$$For\ every\ t-norm\ \Delta,\ the\ following\ equality\ holds,$$
$$x\Delta_0 y \leqslant x\Delta y \leqslant x\Delta_5 y$$

Select the correct option

Reload Math Equations

- False
- True



Click to Save Answer & Move to Next Question

2

Question # 5 of 5 (Start time: 05:36:55 PM, 29 December 2022)

A t-norm

$$\Delta : X \times X \to X$$

satisfies associative property.

Select the correct option

- ○ False
- ○ True ✓

4G 4G 17.2K/s 5:37 PM 4G2 63%

Quiz

Ads

MC210203810: FATIMA FIRDOUS

Time Left 88 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:36 PM, 29 December 2022

Question # 2 of 5 (Start time: 05:37:15 PM, 29 December 2022)

Total Marks: 1

$For\ t-norm\ \Delta : X \times X \to X\ such\ that\ \Delta := \min(x, y),\ calculate\ 0.5\Delta 0.7 =$ _____.

Select the correct option

Reload Math Equations

- 0.5
- 0.7
- 0.7*0.5
- 0.7-0.5

Click to Save Answer & Move to Next Question

2

4G 4G 21.2K/s 5:38 PM 63%

Quiz

Ads

MC210203810: FATIMA FIRDOUS

Time Left 88 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:36 PM, 29 December 2022

Question # 3 of 5 (Start time: 05:38:07 PM, 29 December 2022)

Total Marks: 1

$If\ \Delta\ is\ archimedean\ t-norm,\ then\ \forall\ a,b \in (0,1),\ a\Delta b\ is$ _____.

Select the correct option

Reload Math Equations

- less than a
- greater than b
- greater than a
- less than b

Click to Save Answer & Move to Next Question

2

4G 4G 7K/s 5:39 PM 4G2 63%

Quiz

Ads

MC210203810: FATIMA FIRDOUS

Time Left 87 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:36 PM, 29 December 2022

Question # 4 of 5 (Start time: 05:38:53 PM, 29 December 2022)

Total Marks: 1

A t-norm

$$\Delta : X \times X \to X$$

satisfies associative property.

Select the correct option

Reload Math Equations

- False
- True



Click to Save Answer & Move to Next Question

2

4G 4G 31.4K/s 5:39 PM 4G2 63%

Quiz

Ads

MC210203810: FATIMA FIRDOUS

Time Left 88 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:36 PM, 29 December 2022

Question # 5 of 5 (Start time: 05:39:31 PM, 29 December 2022)

Total Marks: 1

For t-norm

$$\Delta : X \times X \to X$$

, for every x \in X,

$$x \Delta 1$$

= _____ .

Select the correct option

Reload Math Equations

- 1
- none of these
- 0
- x

Click to Save Answer & Move to Next Question

2

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

sec(s)

Quiz Start Time: 05:39 PM, 29 December 2022

Question # 1 of 5 (Start time: 05:39:56 PM, 29 December 2022)

Total Marks: 1

An operator

$$\Delta : X \times X \to X$$

is called t-norm if it satisfies

Select the correct option

Reload Math Equations

- $y \leqslant z \Rightarrow x\Delta y \leqslant x\Delta z$
- $x\Delta y = y\Delta x$
- All of these
- $x\Delta(y\Delta z) = (x\Delta y)\Delta z$

13°C Cloudy

Quiz Start Time: 05:39 P

Question # 2 of 5 (Start time: 05:40:50 PM, 29 December 2022)

$$For\ t-norm\ \Delta : X \times X \to X\ such\ that\ \Delta := \min(x, y),\ calculate\ 0.5\Delta 0.7 = _____.$$

Select the correct option

Reload

- 0.7-0.5
- 0.7
- 0.7*0.5
- 0.5

13°C Cloudy

Question # 3 of 5 (Start time: 05:41:35 PM, 29 December 2022)

A t-norm

$\cdot \Delta : X \times X \to X$

is called idempotent t-norm of

$x \Delta x =$

_____ .

Select the correct option

- x
- 1
- none of these
- 0

Reload Math Equati

13°C Cloudy

5:42 PM

vulms.vu.edu.pk/Quiz

MC210202730: ZAHIB DAWOOD

Time Left 87 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:41 PM, 29 December 2022

Question # 2 of 5 (Start time: 05:42:01 PM, 29 December 2022)

Total Marks: 1

An operator

$$\Delta : X \times X \to X$$

is called t-norm if it satisfies

Select the correct option

Reload Math Equations

- All of these
- $y \leq z \Rightarrow x\Delta y \leq x\Delta z$
- $x\Delta y = y\Delta x$
- $x\Delta(y\Delta z) = (x\Delta y)\Delta z$

Click to Save Answer & Move to Next Question

Quiz Start Tim

Question # 4 of 5 (Start time: 05:42:14 PM, 29 December 2022)

A triplet (S, T, N) is called De morgan triplet if it satisfies $S(x, y) =$ _____.

Select the correct option

- $T(N(x), N(y))$
- $N(N(N(x), N(y)))$
- $N(T(N(x), N(y)))$
- $N(T(T(x), T(y)))$





13°C Cloudy

5:42 PM

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MTH645 - Fuzzy Logic and Applications (Quiz NO. 1) Quiz Start Time: 05:41 PM, 29 December

Question # 3 of 5 (Start time: 05:42:33 PM, 29 December 2022) Total Mc

$For\ t-norm\ \Delta : X \times X \to X,\ calculate\ 0.2 \Delta 1.0 =$ ____

Select the correct option

Reload Math Equatio

- 0.8
- 1
- none of these
- 0.2

Click to Save Answer & Move to Next Questio

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1) Quiz Start Time: 05:42 PM, 29 December 2022

Question # 1 of 5 (Start time: 05:42:58 PM, 29 December 2022) Total Marks: 1

$If\ \Delta\ is\ archimedean\ t-norm,\ then\ \forall\ a,b \in (0,1),\ a\Delta b\ is$ _____.

Select the correct option

Reload Math Equations

- greater than a
- less than a
- less than b
- greater than b

Click to Save Answer & Move to Next Question

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:39 PM, 29

Question # 5 of 5 (Start time: 05:43:22 PM, 29 December 2022)

$$A\, t-norm\, \Delta\, is ____ if\, it\, is\, convex\, and\, for\, each\, a, b \in (0,1)\, \exists n > 0\, such\, that\, [a]^n < b.$$

Select the correct option

Reload Math

- Cyclic
- Archimedean
- None of these
- Ppriodic

13°C Cloudy

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1) Quiz Start Time: 05:42 PM, 29 December 2022

Question # 2 of 5 (Start time: 05:44:14 PM, 29 December 2022) Total Marks: 1

$If\ a\ t-norm\ \Delta\ is\ ____\ and\ a < b,\ then\ there\ exist\ c \in [a,1]\ such\ that\ a = b\Delta c.$

Select the correct option

Reload Math Equations

- Convex
- Bounded
- Non-Convex
- None of these

Click to Save Answer & Move to Next Question

5:44 PM

vulms.vu.edu.pk/Quiz

MC210202730: ZAHIB DAWOOD

Time Left 88 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:41 PM, 28 December 2022

Question # 4 of 5 (Start time: 05:44:25 PM, 28 December 2022)

Total Marks: 1

If Δ is archimedean $t-$ norm, then $\forall a, b \in (0,1)$, $a \Delta b$ is _____

Select the correct option

Reload Math Equations

- greater than b
- less than a
- greater than a
- less than b

Click to Save Answer & Move to Next Question

5:45 PM

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MC210202730: ZAHIB DAWOOD

Time Left 88 sec(s)

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:41 PM, 29 December 2022

Question # 5 of 5 (Start time: 05:45:03 PM, 29 December 2022)

Total Marks: 1

A t-norm

$$\Delta : X \times X \to X$$

is called idempotent t-norm if

$$x \Delta x =$$

Select the correct option

Reload Math Equations

- 1
- x
- 0
- none of these

Click to save answer & Move to Next Question

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:42 PM, 29 December 2022

Question # 3 of 5 (Start time: 05:45:06 PM, 29 December 2022)

Total Marks: 1

For t-norm

$$\Delta : X \times X \to X$$

, for every x \in X,

$$x \Delta 1$$

= _____ .

Select the correct option

Reload Math Equations

- x
- 1
- none of these
- 0

Click to Save Answer & Move to Next Question

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1) Quiz Start Time: 05:42 PM, 29 December 2022

Question # 4 of 5 (Start time: 05:46:09 PM, 29 December 2022) Total Marks: 1

An operator

$$\Delta : X \times X \to X$$

is called t-norm if it satisfies

Select the correct option

Reload Math Equations

- All of these
- $y \leq z \Rightarrow x\Delta y \leq x\Delta z$
- $x\Delta y = y\Delta x$
- $x\Delta(y\Delta z) = (x\Delta y)\Delta z$

Click to Save Answer & Move to Next Question

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time: 05:42 PM, 29 December 2022

Question # 5 of 5 (Start time: 05:46:50 PM, 29 December 2022)

Total Marks: 1

$A\ triplet\ (S,T,N)\ is\ called\ De\ morgan\ triplet\ if\ it\ satisfies\ S(x,y) =$ _____.

Select the correct option

Reload Math Equations

- $T(N(x), N(y))$
- $N(N(N(x), N(y)))$
- $N(T(N(x), N(y)))$
- $N(T(T(x), T(y)))$

Click to Save Answer & Move to Next Question

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1) Quiz St

Question # 1 of 5 (Start time: 05:53:32 PM, 29 December 2022)

$$For\ t-norm\ \Delta : X \times X \to X\ such\ that\ \Delta := \min(x,y),\ calculate\ 0.5\Delta 0.7 = _____.$$

Select the correct option

- 0.7*0.5
- 0.7
- 0.5
- 0.7-0.5

MTH645 - Fuzzy Logic and Applications (Quiz NO. 1)

Quiz Start Time

Question # 2 of 5 (Start time: 05:54:19 PM, 29 December 2022)

$$For\, t-norm\, \Delta : X \times X \to X,\ calculate\, 0.2\Delta 1.0 = ____.$$

Select the correct option

- none of these
- 1
- 0.8
- 0.2

Question # 3 of 5 (Start time: 05:55:33 PM, 29 December 2022)

$If\ a\ t-norm\ \Delta\ is\ ____\ and\ a < b,\ then\ there\ exist\ c \in [a,1]\ such\ that\ a = b\Delta c.$

Select the correct option

- None of these
- Non-Convex
- Convex
- Bounded

Question # 4 of 5 (Start time: 05:56:11 PM, 29 December 2022)

$A\ t-norm\ \Delta\ is\ ____\ if\ it\ is\ convex\ and\ for\ each\ a,b\in(0,1)\ \exists n>0\ such\ that\ [a]^n<b.$

Select the correct option

- ○ None of these
- ○ Cyclic
- ○ Periodic
- ○ Archimedean

Question # 5 of 5 (Start time: 05:56:42 PM, 29 December 2022)

$$For\ every\ t-norm\ \Delta,\ the\ following\ equality\ holds,$$
$$x\Delta_0 y \leqslant x\Delta y \leqslant x\Delta_5 y$$

Select the correct option

- True
- False