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Quiz: Discrete Maths

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← — →

1) What is the truth value for the proposition:
If today is Friday, then $2+3=6$

Also justify:

$P \rightarrow Q$

$T \rightarrow F \Rightarrow F$

Truth value = F

X 0/1

2) What are the contrapositive, converse and inverse of implication:

"The home team wins whenever it is raining"

inverse: The home team does not win whenever it is not raining. ✓

converse: It is raining whenever the home team wins. ✓

contrapositive: It is not raining whenever the home team does not win.

✓

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Q:3 Is it a proposition (Y/N)?

"What time is it?"

Ans: No

Q:4 Represent symbolically by letting

p: There is a hurricane

q: It is raining.

"Either there is a hurricane or it is raining (or both)."

Ans: $p \vee q$

Q:5 - ~~Resist~~ the

Resist the following 'if p then q' from

"A program is readable only if it is well structured."

Ans: If a program is readable then it is well structured.

Q6:- Assuming that p & r are false &
 q and s are true, find the
truth value of proposition

i) $\bar{p} \rightarrow q$

ii) $(p \rightarrow q) \wedge (q \rightarrow r)$

i) $\bar{p} \rightarrow \bar{q}$

$$\bar{F} \rightarrow \bar{T}$$

$$T \rightarrow F$$

F

Truth value = F

ii) $(p \rightarrow q) \wedge (q \rightarrow r)$

$$(F \rightarrow T) \wedge (T \rightarrow F)$$

$$T \wedge F$$

F

Truth value = F