

From: "Ramesh Johari" <rjohari@stanford.edu>
To: "'Diane Shankle'" <shankle@ee.Stanford.EDU>
Subject: RE: Quals Meeting Time Change Please see below!
Date: Fri, 27 Jan 2006 16:31:55 -0800
Thread-Index: AcYjoSTBdzWaCh9JQ+GZBZdis/ufxwAALfyQ

Hi Diane,

My quals question is below. Am I required to attend the quals meeting?

Ramesh

There are two questions, you may do them in any order.

Q1. You are given three random variables, X_1 , X_2 , X_3 .

X_1 is independent of X_2 .

X_2 is independent of X_3 .

X_3 is independent of X_1 .

Is it true that (X_1, X_2, X_3) are jointly independent? Either prove or provide a counterexample.

Q2. Can you find three random variables X_1 , X_2 , X_3 such that:

$P(X_1 > X_2) > 1/2$

$P(X_2 > X_3) > 1/2$

$P(X_3 > X_1) > 1/2$?

If so, provide them.

If not, prove you cannot.

Does your answer to the question depend on whether or not (X_1, X_2, X_3) are assumed to be jointly independent?

> -----Original Message-----

> From: Diane Shankle [mailto:shankle@ee.Stanford.EDU]

> Sent: Friday, January 27, 2006 4:23 PM

> To: quals-examiners@ee.Stanford.EDU; EE-adminlist@ee.Stanford.EDU

> Subject: Quals Meeting Time Change Please see below!

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> Quals Meeting

> Tuesday, January 31st.

> 4:30 P.M.

> CIX-X AUD

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> Coffee, Tea and Cookies will be served before the meeting.

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> Please send me a copy of your Quals Question either by email

> or a hard copy to the address listed below!

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> Happy Friday,

> Diane

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