(093) Math 131:Finite Mathematics QuizTest-2(8.3-8.4): Aug 14, 2010

Dr. Latif and **Dr. Raja Latif** and **Dr. Muhammad Latif** and **Dr. Abdul Latif**

Contents

Marks: 20; Time: 15 Minutes

NAME:.....

I.D.#:

SERIAL#_____ SECTION #: *One*

Sr.	09 20 *Sc* 01	10 : 20 *am* *Marks* : 20

NOTE: SHOW ALL STEPS OF THE SOLUTION.

NO CREDIT FOR ANSWERS WITHOUT COMPLETE SOLUTION.

The questions are not in any order of difficulty at all.

Only the nonprogramable calculators are allowed.

Write the simplified answer of each question at the end of each question.

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Q.1. (*Marks* : 3) . An experiment consists of selecting two people at random and noting whether each is a Student (S), an Administrative

(A), or a Faculty Member (F). What is an appropriate sample space for this

experiment?

(*A*) $\{AA, SS, FF\}$

(*B*) $\{AF, AS, FS\}$

(*C*) $\{AA, AF, AS, FS, FF, SS\}$

(*D*) $\{A, F, IR\}$

(*E*) *NONE OF THE CHOICES IS CORRECT.*

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Q.2. (*Marks* : 5) . Likeligood of Passing. Bilal is taking courses in both Mathematics and English. He estimates his probability of passing Mathematics at 0.4 and English at 0.6, and he estimates his probability of passing at least one of them at 0.8. What is the probability of passing both courses.

(*A*) $\longrightarrow$ 0.24 (*B*) $\longrightarrow$ 0.48

(*C*) $\longrightarrow$ 0.32 (*D*) $\longrightarrow$ 0.40

(*E*) $\longrightarrow$ 0.20 (*F*) $\longrightarrow$ 0.60

(*G*) $\longrightarrow$ 0.80 (*H*) $\longrightarrow$ 0.90

(*N*) $\longrightarrow$ NONE OF THE ABOVE CHOICES IS CORRECT.

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Q.2. (*Marks* : 2) . If one of the 150 cars is selected at random, what is the probability that it is defective?

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Q.3. (*Marks* : 5) Committee Selection. From a group of four women and five men, three persons are selected at random to form a committee. Find the probability that the committee consists of exactly one woman and two men only.

Chice	CHOICES	*Yes* ($\surd$)
$A \longrightarrow$	0.020408163	
$B \longrightarrow$	0.142857142	
$C \longrightarrow$	0.285714285	
$D \longrightarrow$	0.326530612	
$E \longrightarrow$	0.571428571	
$F \longrightarrow$	0.081632653	
$G \longrightarrow$	0.6666667	
$G \longrightarrow$	0.476190	
$I \longrightarrow$	0.734693877	
$J \longrightarrow$	0.857142857	
$K \longrightarrow$	0.428571428	
$L \longrightarrow$	0.907029478	
$M \longrightarrow$	0.952380952	
$N \longrightarrow$	*NONE of the ABOVE* $\downarrow\longrightarrow$ *Your Answer*	*Your Answer* $\downarrow$ = --------- = $\uparrow$ *Write Answer*

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Q.4. (*Marks* : 5) . If a pair of fair dice are rolled, then the probability that the sum of the numbers of dots appearing is 4 or 5 is

(*A*) $\longrightarrow \frac{1}{3}$ (*I*) $\longrightarrow \frac{1}{10}$

(*B*) $\longrightarrow \frac{2}{9}$ (*J*) $\longrightarrow \frac{1}{12}$

(*D*) $\longrightarrow \frac{1}{18}$ (*K*) $\longrightarrow \frac{1}{6}$

(*E*) $\longrightarrow \frac{5}{36}$ (*L*) $\longrightarrow \frac{1}{6}$

(*G*) $\longrightarrow \frac{20}{36}$ (*M*) $\longrightarrow \frac{1}{4}$

(*H*) $\longrightarrow \frac{5}{6}$ *P* $\longrightarrow \frac{7}{36}$

(*N*) *NONE OF THE PREVIOUS GIVEN CHOICES IS CORRECT.*