

## UNIVERSITY NAME

Final Exam - 2015

## Course Title

INDEX555

Teacher Name

Student Information	$(fill\ completely)$
First Name	
Last Name	
Student ID	

• Exam Duration: 2 hours

• Permitted Materials: Permitted materials

• Any Caution

№1. Problem

Joint distribution given by table.

$$\begin{array}{c|ccccc} X & -1 & 0 & 1 \\ \hline -1 & 0.2 & 0.2 & 0.1 \\ 0 & 0 & 0.1 & 0.2 \\ 1 & 0 & 0 & 0.2 \\ \end{array}$$

Are random variables correlated?

 $Solution \dots$ 

№2. Question

Let X and Y are independent random variables. Find E(XY). Where E – expectation of random variable.

 $Answer \dots$ 

**№3.** Selective Test

2 point

What planet do you live on?

 $Select \dots$ 

A. Earth

B. Mars

C. Jupiter

D. Saturn

№4. Placement Test

 $\beta$  point

Let EX = 2 and EY = 1.  $E(2X + Y) = ___ + EY$ .

№5. Placement Test

3 point

Attila was king of the \_\_\_\_.

Total point 16

\*\*\* End of Examination \*\*\*



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**№1.** Problem

5 point

Joint distribution given by table.

$$\begin{array}{c|ccccc} & & Y & \\ X & -1 & 0 & 1 \\ \hline -1 & 0.2 & 0.2 & 0.1 \\ 0 & 0 & 0.1 & 0.2 \\ 1 & 0 & 0 & 0.2 \\ \end{array}$$

Are random variables correlated?

 $Solution \dots$ 

**№2.** Question

3 point

Let X and Y are independent random variables. Find E(XY). Where E – expectation of random variable.

 $Answer \dots$ 

**№3.** Selective Test

2 point

What planet do you live on?

 $Select \dots$ 

A. Earth

B. Mars

C. Jupiter

D. Saturn

**№4.** Placement Test

3 point

Let EX = 2 and EY = 1.  $E(2X + Y) = ___ + EY$ .

№5. Placement Test

3 point

Attila was king of the \_\_\_\_\_.

№6. Problem

Joint distribution given by table.

$$\begin{array}{c|ccccc} X & -1 & & Y \\ \hline -1 & 0.2 & 0.2 & 0.1 \\ \hline 0 & 0 & 0.1 & 0.2 \\ 1 & 0 & 0 & 0.2 \\ \end{array}$$

Are random variables correlated?

 $Solution \dots$ 

№7. Question 3 point

Let X and Y are independent random variables. Find E(XY). Where E – expectation of random variable.

 $Answer\dots$ 

№8. Selective Test

What planet do you live on?

 $Select \dots$ 

A. Earth B. Mars C. Jupiter D. Saturn

№9. Placement Test

Let EX = 2 and EY = 1.  $E(2X + Y) = ___ + EY$ .

№10. Placement Test

3 point

Attila was king of the

Attila was king of the \_\_\_\_\_.

Total point 32

 $*** End\ of\ Examination\ ***$