**Балтийский государственный технический университет**

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**Кафедра И5**

**«Информационные системы и компьютерные технологии»**

**«Математическая статистика»**

Лабораторная работа № 6

«Критерии согласия в статистическом пакете STATGRAPHICS»

Вариант 7

**Выполнил:**

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Analysis Summary

Data variable: RAND1

50 values ranging from 0,568522 to 59,4623

Fitted lognormal distribution:

mean = 6,39456

standard deviation = 8,39598

Computed Chi-Square goodness-of-fit statistic = 60,88

P-Value = 1,77909E-7

Shapiro-Wilks W statistic = 0,580838

P-Value = 2,22045E-16

Z score for skewness = 4,80856

P-Value = 0,00000152219

Z score for kurtosis = 5,6661

P-Value = 1,46493E-8

Chi-Square Test

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Lower Upper Observed Expected

Limit Limit Frequency Frequency Chi-Square

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at or below 1,33073 8 7,14 0,10

1,33073 2,19871 8 7,14 0,10

2,19871 3,23557 6 7,14 0,18

3,23557 4,63951 6 7,14 0,18

4,63951 6,82742 10 7,14 1,14

6,82742 11,2807 5 7,14 0,64

above 11,2807 7 7,14 0,00

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Chi-Square = 2,36012 with 4 d.f. P-Value = 0,669847

Estimated Kolmogorov statistic DPLUS = 0,0602494

Estimated Kolmogorov statistic DMINUS = 0,0594615

Estimated overall statistic DN = 0,0602494

Approximate P-Value = 0,993429

EDF Statistic Value Modified Form P-Value

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Kolmogorov-Smirnov D 0,0602494 0,434195 >=0.10

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\*Indicates that the P-Value has been compared to tables of critical values

specially constructed for fitting the currently selected distribution.

Other P-values are based on general tables and may be very conservative.

area below 3,0 = 0,399155

area below 6,0 = 0,668909

area below 9,0 = 0,800091

area below 11,0 = 0,851389

area below 13,5 = 0,893799

Critical Values for RAND1

area below 0,377433 = 0,01

area below 1,07414 = 0,1

area below 3,87446 = 0,5

area below 13,9753 = 0,9

area below 39,7725 = 0,99

