Package: LBPG (via r-universe)

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Type Package

Title The Length-Biased Power Garima Distribution

Version 0.1.2

Language en-US

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Description The Length-Biased Power Garima distribution for computes the probability density, the cumulative density distribution and the quantile function of the distribution, and generates sample values with random variables based on Kittipong and Sirinapa(2021)<DOI:10.14456/sjst-psu.2021.89>.

License GPL-3

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RoxygenNote 7.1.2

Suggests testthat (>= 3.0.0)

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Repository https://kittipong8888.r-universe.dev

RemoteUrl https://github.com/cran/LBPG

RemoteRef HEAD

RemoteSha 0bc138f050bfbdb32548a826c7903375c3ba6e67

Contents

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dLBPG *The probability density function of the length-biased power Garima distribution.*

Description

The LBPG package computes the probability density, the cumulative density distribution and the quantile function of the length-biased power Garima (LBPG) distribution, and generates sample values with random variables that has the LBPG distribution.

Usage

```
dLBPG(x, lambda, beta)
```

Arguments

x	vector of positive quantile.
lambda	positive parameter(Transformed parameter).
beta	positive parameter(Shape parameter).

Value

dLBPG gives the probability density function.

References

Kittipong Klinjan and Sirinapa Aryuyuen(2021), The length-biased power Garima distribution and its application to model lifetime data,Songklanakarin Lournal of Science asd Techno;ogy (SJST),Volume 43 No.3(May - Jun. 2021),pp667-676, <DOI: 10.14456/sjst-psu.2021.89>

Examples

```
dLBPG(5.7,1.5,2.5)
```

pLBPG *The cumulative density function of the length-biased power Garima distribution.*

Description

The LBPG package computes the probability density, the cumulative density distribution and the quantile function of the length-biased power Garima (LBPG) distribution, and generates sample values with random variables that has the LBPG distribution.

Usage

```
pLBPG(x, lambda, beta)
```

Arguments

x	vector of positive quantile.
lambda	positive parameters(Transformed parameter).
beta	positive parameters(Shape parameter).

Value

pLBPG gives the cumulative density function.

References

Kittipong Klinjan and Sirinapa Aryuyuen(2021), The length-biased power Garima distribution and its application to model lifetime data,Songklanakarin Lournal of Science asd Techno;ogy (SJST),Volume 43 No.3(May - Jun. 2021),pp667-676, <DOI: 10.14456/sjst-psu.2021.89>

Examples

```
pLBPG(0.5,1.5,2.5)
```

qLBPG *The quantile function of the length-biased power Garima distribution.*

Description

The LBPG package computes the probability density, the cumulative density distribution and the quantile function of the length-biased power Garima (LBPG) distribution, and generates sample values with random variables that has the LBPG distribution.

Usage

```
qLBPG(p, alpha, beta)
```

Arguments

p	vector pf probabilities.
alpha	positive parameters(Transformed parameter).
beta	positive parameters(Shape parameter).

Value

qLBPG gives the quantile function.

References

Kittipong Klinjan and Sirinapa Aryuyuen(2021), The length-biased power Garima distribution and its application to model lifetime data,Songklanakarin Lournal of Science asd Techno;ogy (SJST),Volume 43 No.3(May - Jun. 2021),pp667-676, <DOI: 10.14456/sjst-psu.2021.89>

Examples

```
qLBPG(0.5,1.5,2.5)
```

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rLBPG *Random number generating of the length-biased power Garima distribution*

Description

The LBPG package computes the probability density, the cumulative density distribution and the quantile function of the length-biased power Garima (LBPG) distribution, and generates sample values with random variables that has the LBPG distribution.

Usage

```
rLBPG(n, alpha, beta)
```

Arguments

n	number of observations.If length(n)>1,the length is taken no be the number required.
alpha	positive parameters(Transformed parameter).
beta	positive parameters(Shape parameter).

Value

rLBPG generates sample values of random variables.

References

Kittipong Klinjan and Sirinapa Aryuyuen(2021), The length-biased power Garima distribution and its application to model lifetime data,Songklanakarin Lournal of Science asd Techno;ogy (SJST),Volume 43 No.3(May - Jun. 2021),pp667-676, <DOI: 10.14456/sjst-psu.2021.89>

Examples

```
rLBPG(5,1.5,1)
```

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