Package ‘LBPG’

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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 Siri-napa(2021)<DOI:10.14456/sjst-psu.2021.89>.
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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


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


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 of probabilities.
- alpha: positive parameters (Transformed parameter).
- beta: positive parameters (Shape parameter).

Value

qLBPG gives the quantile function.
References


Examples

$qLBPG(0.5, 1.5, 2.5)$

\[rLBPG(n, \alpha, \beta)\]

**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 to be the number required.
- **alpha**: positive parameters (Transformed parameter).
- **beta**: positive parameters (Shape parameter).

Value

rLBPG generates sample values of random variables.

References


Examples

\[rLBPG(5, 1.5, 1)\]
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