PERIOD OF BALANCING NUMBERS MODULO PRODUCT OF CONSECUTIVE LUCAS-BALANCING NUMBERS

BIJAN KUMAR PATEL, SHANTA KUMARI SUNANDA, and PRASANTA KUMAR RAY

Abstract. The period of the balancing numbers modulo m, denoted by $\pi(m)$, is the least positive integer l such that $\{B_l, B_{l+1}\} \equiv \{0, 1\} \pmod{m}$, where B_l denotes the l-th balancing number. In the present study, we examine the periods of the balancing numbers modulo a product of consecutive Lucas-balancing numbers.

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International Institute
of Information Technology
Bhubaneswar-751003, India
E-mail: `iiit.bijan@gmail.com`
E-mail: `shanta@iiit-bh.ac.in`

Sambalpur University
Burla-768019, India
E-mail: `rayprasanta2008@gmail.com`