

J. of Ramanujan Society of Mathematics and Mathematical Sciences
Vol. 10, No. 1 (2022), pp. 167-172

DOI: 10.56827/JRSMMS.2022.1001.14

ISSN (Online): 2582-5461

ISSN (Print): 2319-1023

DIGITAL TIME: A FINITE FIELD, $T_{\mathbb{F}}$

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(Received: Aug. 19, 2022 Accepted: Sep. 15, 2022 Published: Dec. 30, 2022)

Abstract: Digital time was defined KSR-PP [2] with three two-digit positions as $h_2h_1 : m_2m_1 : s_2s_1$. It was identified with appropriate restricted place values on the hours (H), minutes (M) and seconds (S) shown to be 86400-element cyclic Time Group, T_G . Here it is shown to be a finite time field, $T_{\mathbb{F}}$. A palindromic sequence of 119-elements and its sub-sequences are shown to be consequences of $T_{\mathbb{F}}$.

Keywords and Phrases: Digital Time, Finite Field, Order of Elements, Palindromic Sequence.

2020 Mathematics Subject Classification: 05C25, 20F65.

1. Introduction and Definitions

Time flows smoothly as it is a continuous real variable. Precision in digital time measurement has been crucial in sophisticated space research and in sports, to proclaim olympic world records. Measurement of time using watches has been a part of a way of life for ages now. The digital Time Group, T_G , is indeed shown here to be a finite field, $T_{\mathbb{F}}$. A palindromic sequences are derived, from the first