South East Asian J. of Mathematics and Mathematical Sciences
Vol. 16, No. 3 (2020), pp. 171-180

ISSN (Online): 2582-0850

ISSN (Print): 0972-7752

APPLY ON COMPLEMENTARY NEIGHBOURHOOD VIA NANO TOPOLOGY

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(**Received:** *Nov. 14, 2019* **Accepted:** *Sep. 20, 2020* **Published:** *Dec. 30, 2020)*

Abstract: This paper introduce a new notion of complementary neighbourhood and complementary covering based on nano topological space. Further we characterize the concept is equipped with the arbitrary binary relation. Finally, we discuss the complement of covering interior and closure and its properties and examples are given.

Keywords and Phrases: Neighbourhood, Right Cover, Left Cover, Binary relation, Covering interior, Covering Closure.

2010 Mathematics Subject Classification: 54B05, 54C05.

1. Introduction

In 1982, Pawlak introduced the concept of rough set which is defined in terms of approximation based on equivalence relation [9]. A mathematical tool is an data mining,information system and vagueness and granularity for dealing with the concept of covering based rough set theory [3, 8, 10, 11, 12, 13, 14, 15]. Lellis Thivagar et al [5] introduced a nano topological space with respect to a subset X of an universe which is defined in terms of lower approximation and upper approximation and boundary region of a set. However the lower and upper approximations and boundary region are based on equivalence relations distinct on it are known to be interchangeable notions, but it has been extended to arbitrary binary relation [6, 7]. Many authors has studied the concepts of topology and covering its extended