

CLASSIFICATION OF GRAPH EMBEDDED IN COMPACT CONNECTED SURFACES

R. APPARSAMY¹, N. SELVI² AND S. SIVAKUMAR³

¹ Associate Prof. of Mathematics,
Shree Raghavendra Arts & Science College,
Keezhamoongiladi-608102, Tamilnadu, India

² Associate Prof. of Mathematics,
ADM College for Women (Autonomous),
Nagapattinam - 611001, Tamilnadu, India

³ Associate Prof. of Mathematics,
Shree Raghavendra Arts & Science College,
Keezhamoongiladi-608102, Tamilnadu, India

Abstract

We introduce a notion of graph homeomorphisms which uses the concept of embedded graphs into both orientable and non-orientable surfaces. It preserves the dimension of compact connectivity and classification of surfaces in classical topology. In this paper we shall give another sufficient condition for embedding of orientable and non orientable graphs to be uniquely and faithfully in compact connected surfaces.

Key Words : *Connected surfaces-faces-genus-orientable and non-orientable graphs-spanning tree.*