SPECTRA OF PARTIAL COMPLEMENTARY GRAPHS

[1]SWATI NAYAK, [2]PRADEEP G. BHAT

[1,2] Department of Mathematics, Manipal Institute of Technology, MAHE, Manipal, Karnataka-INDIA
E-mail: [1]swati.nayak@manipal.edu,[2] pg.bhat@manipal.edu

Abstract - H.B. Walikar in 2003 defined partial complement of graphs. For a finite undirected graph $G = (V, E)$ and a subset S of the vertex set V of a graph G, the partial complement of a graph G with respect to S is the graph denoted by $\overline{G_S} = (V, E_S)$ where $E_S = E(\leq S >) \cup E(< \overline{S} >) \cup \{uv | u \in S, uv \notin E\}$; $< S >$ denote the subgraph of G induced by the set S and $\leq S >$ denote its complement and $\overline{(S)}$, the usual complement of a set S .
In this paper we defined energy of Partial complement of graph and obtained spectra of some standard graphs. We also computed several bounds for partial complement of graphs.

Keywords - Partial Complement Spectrum, Partial Complement Eigen Values, Partial Complement Energy of Graphs.

REFERENCES

[1] D. B. West, (1996). Introduction to Graph Theory, Prentice Hall.
[2] E. Sampath Kuamr and L. Pushpalatha (2003). Partial Complement of a Graph Electronic Notes in Discrete Mathematics, 15. 219-221.
[3] Ivan Gutman (1978),The energy of a graph, Ber.Math-Statist.Sekt.Forschungsz.Graz 103. 1-22.
[4] R.Balakrishnan (2004), The energy of a graph, linear algebra Appl.,387., 287-295.

★★★