**Paper No: PU-SOE-MAT- 14**

**Meromorphic Solutions of some non-linear q-shift difference equations**

Renukadevi S. Dyavanal, Jyothi and **Shilpa N**

Department of Mathematics, School of Engineering, Presidency University, Bangalore-560 064, INDIA

**Abstract**

With the help of Nevanlinna theory, we investigate the existence of meromorphic solution of certain class of q-difference differential equations and consequently we are able to show that no transcendental meromorphic function with some conditions will satisfy such equations.

**Keywords:**

Graph theory, domination, Harary graph, 05C12, 68M10, 68R10

**Publication Details:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Journal Name** | **Vol.** | **Month & Year** | **Page No.** | **Publisher** | **Scimago Ranking** |
| Tbilisi Journal of Mathematics | 13(3) | 2020 | 53-62 | Tbilisi Centre for Mathematical Sciences | web of science |