VARIATIONS OF WEYL TYPE THEOREMS

M. H. M. RASHID¹* AND T. PRASAD²

Communicated by J. Koliha

Abstract. A Banach space operator $T$ satisfies property($Bgw$), a variant property($gw$), if the complement in the approximate point spectrum $\sigma_a(T)$ of the semi-$B$-essential approximate point spectrum $\sigma_{SBF-}(T)$ coincides with set of isolated eigenvalues of $T$ of finite multiplicity $E^0(T)$. We also introduce properties $(Bb)$, and property $(Bgb)$ in connection with Weyl type theorems, which are analogous, respectively, to generalized Browder’s theorem and property($gb$). We obtain relation among these new properties.

¹ DEPARTMENT OF MATHEMATICS, FACULTY OF SCIENCE P.O. BOX(7), MU’TAH UNIVERSITY, AL-KARAK, JORDAN.
E-mail address: malik_okasha@yahoo.com

² DEPARTMENT OF SCIENCE AND HUMANITIES, AHALIA SCHOOL OF ENGINEERING AND TECHNOLOGY, PALAKKAD -678557, KERALA, INDIA.
E-mail address: prasadvalapill@gmail.com

Date: Received: 1 May 2012; Revised: 12 August 2012; Accepted: 8 September 2012.
* Corresponding author.

2010 Mathematics Subject Classification. Primary 47A10; Secondary 47A11, 47A53.
Key words and phrases. Weyl’s theorem, Property ($w$), Property ($Bgw$), Property ($Bw$), Property ($Bgb$), Property ($Bb$).