ABBREVIATIONS AND SYMBOLS

- ascending chain condition acc dcc descending chain condition dg distributively generated dgnr distributively generated near-ring i.e. that is such that s.t. N-subgroup ≤ essential N-subgroup \leq_{e} \leq we Weakly essential N-subgroup essential ideal ≤eı & and direct sum \oplus Π direct product Σ_{fin} finite sum N - Near-ring $\overline{\mathsf{N}}$ factor near-ring E or _NE Near-ring group

- factor N-group

 $\overline{\mathbf{E}}$

 $Ann_N(B) \qquad \qquad - \{n \in N / nx = 0, \forall x \in B \}$

 $Ann_{E}(B) \qquad \qquad - \{e \in E / xe = 0, \forall x \in B \}$

 $^{h}|_{A}$ - restriction of h to M

≅ - isomorphic

E(A) or \widehat{A} - injective hull of A

[] - to refer to the paper of the author