1104-00-51 **Gezahagne Mulat Addis*** (buttu412@yahoo.com), 419 Dilla, Dilla, Ethiopia. *Fundamental Theorem of Functions.* Preliminary report.

From the fundamental theorem of homomorphisms, it is well known that any homomorphism of groups can be decomposed as a composition of a monomorphism and an epimorphism. This result can also be extended to general functions defined on abstract sets; that is, any function can be expressed as a composition of an injection and a surjection. The main theorem in this paper called 'Fundamental theorem of Functions' provides the uniqueness of such a decomposition of functions as a composition of an injection and a surjection. The uniqueness in this theorem is proved upto the level of associates by introducing the notion of an associate of a function. The Fundamental Theorem of Homomorphisms of groups, rings, modules, vector spaces and of general universal algebras are derived by applying the Fundamental Theorem of Functions and various isomorphism theorems are also deduced. (Received August 13, 2014)