The following abbreviations will be used:

U – collective of utility units

a – utility unit calibrating year

A – ordinary utility unit of a commodity

U(A) – collective of A-units

 C_a – compound utility unit, a fixed composition of quantities of different commodities, calibrated at a

 $U(C_a)$ – collective of C_a -units

 E_a – elementary utility unit, a dollar's worth quantity of a commodity, calibrated in a,

 $U(E_a)$ – collective of E_a -units

INF – index number formula

t – current year of INF

b – base year of INF

O – zero year of validity range of INF

T – end year of validity range of INF

(O.T) – validity range of INF

FGA - index number formulae generating algorithm

c – base year of inflation rate formula

 P_{ha} – price of the ordinary unit of commodity h in year a

 P_{ha} – number of elementary utility units in an ordinary unit of the commodity h over the validity range of INF

INE – index number equation

F - fundamental equation, particularly F_1 , F_2 , F_3 as the case may be

CINT – Common Index Number Theory

ELINT - Elementary Index Number Theory.

2. FORMULAE GENERATING ALGORITHM AND ONE-COMMODITY MARKET

Let us consider at first an one-commodity market represented by the collective

U(A) of ordinary utility units of type A (e.g. A is 1 kg of sugar) sold, where p_i and p_b are the average price in the current and the base period, respectively; q_i and q_b are the quantities of units sold, while $q_i p_i = v_i$ and $q_b p_b = v_b$ are the values realized