КОМПЬЮТЕРНАЯ МАТЕМАТИКА

В.А. КОНДРАТЕНКО

ДИАЛЕКТИЧЕСКАЯ ЛОГИКА УПРАВЛЕНИЯ ВЕГЕТАТИВНОЙ НЕРВНОЙ СИСТЕМЫ ЧЕЛОВЕКА

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$$p1(X, Y_1, …, Yi, …Y_{110}),$$

$p1$ –   (   ),

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Yi   110   .

2.

X,

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$$p2(X, Z_1, \ldots, Z_i, \ldots Z_{105}),$$

$p2$ – ( ),

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Z_i (

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Z_i 105 .

3.

X,

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$$p3(X, V_1, \ldots, V_i, \ldots V_{100}),$$

$p3$ – ( ),

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V_i (

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V_i 100 .

4. X,

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$$p4(X, W_1, \ldots, W_i, \ldots W_{50}),$$

$p4$ – ( ),

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, W_i (-

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W_i 50 .

5. X,

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$$p5(X, U_1, \ldots, U_i, \ldots U_{50}),$$

$p5$ – ( ),

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U_i 50 .

6. $p6(X, DS\ Q)$ – (DS) -
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$(3X)(3Y_1)...(3Yi)...(3Y_{110})(3Z_1)...(3Zi)...(3Z_{105})(3V_1)...(3Vi)...(3V_{100})(3W_1)...$
$(3Wi)...(3W_{50})(3U_1)...(3Ui)...(3U_{50})(3DS\ Q)((p1(X, Y_1, ..., Yi, ...Y_{110})$
$p2(X, Z_1, ..., Zi, ...Z_{105})\quad p3(X, V_1, ..., Vi, ...V_{100})\quad p4(X, W_1, ..., Wi, ...W_{50})$
$p5(X, U_1, ..., Ui, ...U_{50})) => p6(X, DS\ Q))$
$=>$
$(5X)(5Y_1)...(5Yi)...(5Y_{110})(5Z_1)...(5Zi)...(5Z_{105})(5V_1)...(5Vi)...(5V_{100})(5W_1)...$
$(5Wi)...(5W_{50})(5U_1)...(5Ui)...(5U_{50})(5DS\ Q)((p1(X, Y_1, ..., Yi, ...Y_{110})$
$p2(X, Z_1, ..., Zi, ...Z_{105})\quad p3(X, V_1, ..., Vi, ...V_{100})\quad p4(X, W_1, ..., Wi, ...W_{50})$
$p5(X, U_1, ..., Ui, ...U_{50})) => p6(X, DS\ Q)).$ (1)

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(1) :
• **F₁** :
$(p1(X, Y_1, …, Yi, …Y_{110})$ $p2(X, Z_1, …, Zi, …Z_{105})$ $p3(X, V_1, …, Vi, …V_{100})$ p4(X, W_1,
…, $Wi, …W_{50})$ $p5(X, U_1, …, Ui, …U_{50}))$;
• $(3\mathbf{T})$:
$(3X)(3Y_1)…(3Yi)…(3Y_{110})(3Z_1)…(3Zi)…(3Z_{105})(3V_1)…(3Vi)…(3V_{100})(3W_1)…$
$(3Wi)…(3W_{50})(3U_1)…(3Ui)…(3U_{50})(3DS \quad Q)$;
• $(5\mathbf{E})$:
$(5X)(5Y_1)…(5Yi)…(5Y_{110})(5Z_1)…(5Zi)…(5Z_{105})(5V_1)…(5Vi)…(5V_{100})$
$(5W_1)…(5Wi)…(5W_{50})(5U_1)…(5Ui)…(5U_{50})(5DS \quad Q)$.
(1) :
$$(\forall T)(F_1 \vee p6(X, DS \quad Q)) => (\exists E)(F_1 \vee p6(X, DS \quad Q)). \qquad (2)$$

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(,)
27
. :

$$\left(F1(X) => F2(X)\right) \equiv \left(F1(X) \vee F2(X)\right),$$
$$\left(F1(X) => F2(X)\right) \equiv \left(F1(X) \wedge F2(X)\right).$$

$$\exists \equiv \forall .$$

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, (2) :
$$(F_1 \vee p6(X, DS \quad Q)) \wedge (F_1 \vee p6(X, DS \quad Q)). \qquad (3)$$

(3)
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DS   Q, .

V.A. Kondratenko

DIALECTICAL LOGIC OF A HUMAN AUTONOMIC NERVOUS SYSTEM CONTROL

An author's idea of a formal model of dialectical logic of the human activity control, carried out by biological tools of his autonomic nervous system, is presented.

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