ADAPTIVE TESTING AS A MARKOV PROCESS: MODELS AND THEIR IDENTIFICATION

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Abstract — Presented is a new technology of adaptive testing, which is based on application of trained structures in the form of discrete- and continuous-time models. Its peculiarities, in particular, are revealing and using test solution capability changes in quantitative evaluation of their time-domain dynamics as well as taking into account timetable of testing process. The approach suggested has certain advantages over the testing techniques which were used before owing to its greater information capability and acceleration of test procedure.

Keywords: Markov models; item response theory; classical test theory; test design; adaptive testing.