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**THEORETICAL BASES OF QUALITY ASSURANCE OF   
PUBLISHING AND PRINTING PROCESSES  
(PART 1: INTRODUCTION GENERAL PRINCIPLES)**

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***Research methodology.*** *The methodological base of the research is made by: systems analysis of the existing technological process; the mechanism of semantic networks to reproduce relationships between factors influencing the quality of implementation of technological procedures; analytic hierarchy process for ranking factors; methods of the theory of operations research and multicriteria optimization; means of fuzzy logic for predictive quality evaluation.*

***Results.*** *The study has highlighted many factors of impact on the quality of the main stages of preparation and production of printed materials; the es-sence of models of formation and prognostic evaluation of the process of pro-duction of book editions has been shown; a mathematical model of information forecasting of publication quality has been generalized as the premise of a numeric expression of corresponding integral index.*

***Novelty.*** *The general essence and analytical support have been solved in the formation of the information technology components of a predictive evaluation and quality assurance of publishing and printing processes. The preconditions for the synthesis of multi-level models of factors priority for the design and analysis of alternative variants of performance of technological procedures, forecasting and quality assurance by means of fuzzy logic have been formed.*

***The practical significance.*** *A multi-level model of research has been designed, the implementation of which will ensure the quality of the technological process implementation of book publications. A graphical model has been designed to display the quality process of book publication formally. A model of predictive assessment of the quality of the book publication has been designed.*