PROBLEMS OF RELEVANT LOGIC IN V. A. SMIRNOV'S BOOK FORMAL DEDUCTION AND LOGICAL CALCULI

T. P. DOLGOVA

and

V. M. POPOV

Relevant logic is, undoubtadly, one of the most interesting trends of modern logic at least in its theoretical aspect. At present it attracts the attention of many logicians, mathematicians, and philosophers, for it deals with serious problems of operations with information and the laws of reasoning.

The purpose of this paper is to provide an exposition of some results obtained by Professor Vladimir Alexandrovich Smirnov in the field of relevant logic. The exposition concerns his book *Formal Deduction and Logical Calculi* [Smirnov 1972] without any consideration of any of other of his works in which relevant logic was investigated. In the first part of the paper the definitions of formal iferences and the formulations of deduction theorems for implicative fragments of relevant systems are reproduced according to [Smirnov 1972]; in the second part, one of the systems of relevant logics, Smirnov's absolute system, is described.

1. Deduction theorems for the implicative fragment of relevant system R in V. A. Smirnov's book Formal Deduction and Logical Calculi

In his Formal Deduction and Logical Calculi [Smirnov 1972] Smirnov formulated different notions of inference and several kinds of deduction theorems. Considering the question about the necessary and sufficient conditions of validity of one or another kind of deduction theorem