

## **Selection of Weapon using Digraph and Matrix Methods**

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### **Abstract**

A country's wealth is shown by its armed forces. Weapons play an important role in the armed forces. A soldier of the armed forces should be fully equipped with suitable weapons during war period. Selection of suitable weapon from the set of weapons is a multi criteria decision making problem. In selecting weapons, there is not a single attribute and the decision maker has to take into account a large number of attributes. In this paper, graph theory and matrix approach is presented for solving the problem. A real world application involving five weapons is also presented.

### **Keywords**

Weapon selection, Digraph and Matrix method, Multi criteria decision making