Conventional way of computing which doesn't guarantee



Conventional vs Intelligent ComputingConventional computing is a traditional way of computing by which we can get guaranteed solution to a given problem. Results produced are consistent, reliable and solves given problem according to programmer's instruction or algorithm. Problem is treated with rigorous mathematical analysis Mathematical models are created based on mathematical formulas We can analyze computing technique mathematically Follows sequential processing, One problem can be solved at a given time. Programmer gives instruction to a system on how to solve a given problem Program Doesn't have reasoning capability Intelligent computing is a way of computing which doesn't guarantee a solution to a given problem. Results produced may not be reliable or consistent and will solve the given problem without program instruction. Programmer doesn't give instruction to a system on how to solve a given problem Series of problems can be solved at a given time Based on rules, conceptualization and reasoning so system has reasoning capability Intelligent computing is used mainly for complex real-world problems where using traditional methods (conventional computing) is not easy or useless as the process might be too complex for using conventional mathematical methods. In Traditional approach, we build mathematical models or use ifthen-else.

Example: – Brute-Force method is used to solve a problem of chess but this approach is expensive, ineffective and may arrive at poor solutions. For this type of problem using Intelligent computing is far better as methods used in intelligent computing are very close to human's way of reasoning and thus it is a way of performing like humans. Intelligent computing has been used

exponentially over the past few years as intelligent techniques are tolerant of imprecision and uncertainty and are tractable, robust and effective.

Therefore conventional computing has its limitations and to make computation fast and effective we need "intelligent abilities in systems so that they can think, behave and reason just like humans.