What are quantum computers? Discuss its advantages over conventional computers?

Ans:- A quantum computer is ~~the~~ one which runs on quantum Mechanical principles of superposition and Entanglement.

- The "computational process" involves using cubits in a number of possible combinations or sequences either Discrete in nature or in super-position. And there can be a sequence of ~~combinabo~~ cubits simultaneously possible at a given time.

- How does classical computer differ from its quantum counterpart?

In a classical computer, there is a bit system, we call "binary" - '0' and '1' and the result of any computation is a possible combination of the two or a switch over from one to other. ~~However~~ classical computers are Prefed with certain algorithms like Shor algorithm and Simons algorithm.

- In case of a quantum computer, the discrete nature of binary system cannot be ascertained and a prefed algorithm does not work ~~convent~~ on conventional lines.