What do you understand by the term quantum computing? What are its notable applications areas?

Quantum computing is an area of computing focused on developing computer technology based on the principles of quantum theory (which explains the behavior of energy and material on the atomic and subatomic levels).

Application areas of quantum computing

1. Drug design and development
2. Computational chemistry
3. Cyber security and cryptography
4. Financial modelling
5. Logistics optimization
6. Weather forecasting

What do you understand by the concept of industry 4.0 or 4th industrial evolution? Discuss the major technology that pushes this concept in todays’ era.

Industry 4.0 is the digital transformation of manufacturing/production and related industries and value creation processes. Cyber-physical systems form the basis of Industry 4.0 (e.g., ‘smart machines’). They use modern control systems, have embedded software systems and dispose of an Internet address to connect and be addressed via IoT (the Internet of Things).