

Cloud Computing

1) Explain Applications of cloud Computing in Agriculture

Ans: Cloud computing in Agriculture : An Overview:

cloud computing in agriculture can help farmers with smart agriculture by using cloud-based data and IOT to make data-driven product decisions.

→ Here are a few ways how cloud computing impacts agriculture:

- a) Enables precision farming tools, real-time monitoring, and accurate crop management.
- b) Collects data from sensors, drones, and satellites to optimize resource usage and improve crop health.
- c) Allows real-time product tracking, optimizes logistics, and expands market access for improved supply chain management.
- d) Access to real-time data and predictive analytics enhances decision-making and minimizes risk.

Applications of cloud Computing in Agriculture:

1) It Captures Crop Information -

cc in agriculture can gather all the data on crops grown recently. Therefore, using cloud computing in agriculture can assist farmers in determining what to plant next on a given piece of land.

2) It Gathers Soil Information -

cloud-powered applications for agriculture focus on collecting soil information. These applications are designed to identify soil profiles and their past trends, thus significantly helping farmers understand future trends.

3.) It captures Cultivator's Data -

Authorities can record, monitor and investigate the activities and involvement of local cultivators. This application of cloud computing in agriculture helps in identifying core agricultural areas that policymakers may utilize to develop plans.

4.) It opens a space for Retail -

Farmers are typically unable to bring their produce to market directly. Middlemen emerge b/w them and the retail market, exploiting growers. Farmers can now deliver their goods directly to retailers or end consumers using cloud technology.

5. It enables Effective Information Sharing -

Scientists working in agricultural research can use the cloud to share their ideas and discoveries directly about adopting current agriculture and fertilizer methods.

② Explain Applications of cloud computing in Higher Education.
Cloud computing in the education sector becomes very popular. It offers various online distance learning platforms and student information portals to the students.

→ The advantage of using cloud in the field of education is that it offers strong virtual classroom environments, Ease of accessibility, secure data storage, scalability, greater reach for the students, and minimal hardware requirements for the applications.

→ There are the following education applications offered by the cloud -

i) Google Apps for Education:

Google Apps for Education is the most widely used platform for free web-based email, calendar, documents, and collaborative study.

ii) Chromebooks for Education:

Chromebook for education is one of the most important google's projects. It is designed for the purpose that it enhances education innovation.

iii) Tablets with Google Play for Education:

It allows educators to quickly implement the latest technology solutions into the classroom and make it available to their students.

iv) AWS in Education:

AWS cloud provides an education-friendly environment to universities, community colleges and schools.

3. Explain Applications of cloud computing in politics.

Ans:

The key Applications of cloud computing in politics are:

a) voter Data Management:

stores and analyzes large amounts of voter information for targeted campaigning.

b) Election Management:

Provides scalable infrastructure for Voting systems, voter registration, and real-time election results.

c) Public Engagement:

Supports virtual events, social media management, and real-time communication with voters.

d) Data Security: Ensures sensitive political data is protected with encryption and cyber security measures.

e) Cost Efficiency: Reduces costs by eliminating the need for expensive IT infrastructure.

f) AI and Analytics

Uses AI for sentiment analysis, voter behavior prediction, and fraud detection.

g) Disaster Recovery:

Provides backup and recovery to ensure political data is safe in case of failures or attacks.

h) Collaboration:

Enables remote work and teamwork through cloud-based tools for political staff and volunteers.