

CAP 471

CLOUD COMPUTING - LABORATORY

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REG.NO.:-12111670

ROLL NO.RD2112A03

SECTION D2112

GROUP G1

1. Latest Trend and Technology used in Agricultural Sectors in India

Ans:- In India, a digital agriculture mission has been initiated for 2021-2025 by the government for projects based on new technologies like artificial intelligence, block chain, remote sensing and GIS technology, use of drones and robots etc.

Modernisation of the agriculture sector will continue by infusing new technologies so that farmers can increase their income, according to Agriculture Minister Narendra Singh Tomar. His ministry recently signed an MOU for pilot projects with CISCO, Ninjacart, Jio Platforms Limited, ITC Limited and NCDEX e-Markets Limited (NeML).

The technology provides a wide range of solutions for the agricultural industry such as crop stress detection, pathogen detection, and monitoring. With improved technological advancements and better adoption of the technology, hyperspectral imaging will help drive the precision farming market globally.

Based on these pilot projects, farmers will be able to make informed decisions on what crop to grow, what variety of seed to use and what best practices to adopt to maximize the yield. The agriculture supply chain players can plan their procurement and logistics on precise and timely information. Farmers can take informed decisions about whether to sell or store their produce and when and where and what price to sell.

Any attempt to transform the agriculture sector needs to imbibe an ecosystem thinking and a digital ecosystem. The agriculture value chain extends from crop selection to crop management and the .

Market it involves public and private players in agricultural inputs and services and logistics.

Establishing a digital ecosystem of agriculture needs to take a long-term view of aspects like interoperability, data governance, data quality, data standards, security and privacy, besides promoting innovation.

A significant requirement is adoption of a decentralized, federated architecture that assures autonomy to the service providers and all other actors and ensures interoperability at the same time.

Recognising the importance of digitisation in agriculture the department is creating a federated farmers database and building different services around this database so as to build Digital Ecosystems of Agriculture.

Federated farmers' databases will be linked by the land records of farmers from across the country and unique Farmer ID will be created. So far, the database is ready with details of around 5.5 crore farmers.

The most important sector for any country. Similarly, agriculture has special importance in India. It is an economy based sector that involves more than half the population of the country. We can say

that agriculture is the backbone of India. Our livelihood completely depends on it. Therefore, Indian agriculture and Indian farmers both are essential in every manner. For the same, the Indian government and Indian peoples take many steps to help them and the sector's growth. As a result, today, agriculture has become an emerging sector with the latest trends. Emerging Trends in Agriculture are major reasons for the sector's growth.

Emerging trends in agriculture mean new technologies and new strategies which become higher with time. For the last several decades, the agriculture sector has been undergoing new changes, and at the same time, new technologies have also expanded in this sector. Due to all these things, the sector is growing. The recent development in agriculture makes agriculture activities more suitable and comfortable for farmers. These changes or trends help not only in agriculture growth but also farmer's conditions.

Indian agriculture production has increased with time due to the latest trends in India. It has made us self-reliant and prevented us from becoming a begging bowl for food as a net exporter of agriculture and other products after independence. As per the Second Advance Estimates for 2019-20, the total country's foodgrain production is estimated to be a record 291.95 million tonnes. It is good news, but the Indian Council of Agricultural Research (ICAR) forecasts that the

demand for food grains will increase to 345 million tonnes by 2030. These all things are happening because of agriculture trends. Recent trends in Indian agriculture means new technologies and developments in recent years in the agriculture sector.

The global hyperspectral imaging in the agriculture market is expected to reach \$56.88 million by 2026, with a CAGR of 11.93% during the forecast period 2021-2026, according to a recent study.

The study, titled “Global Hyperspectral Imaging in Agriculture Market: Focus on Product, Application, and Country Analysis - Analysis and Forecast, 2020-2026”, says that the growth rate in the market is because of the increased emphasis on precision farming around the world.

Link:-

<https://docs.google.com/document/d/1QxjX7r8MInMOZBp70XmQao1fWhhXtdvhLh7gGd-kg9w/edit?usp=sharing>

Emp Id	Emp Name	Emp Designation	Emp Salary	Bonus	Salary with Bonus
RD1000	Jay Kumar	Softwar Eng	65270	30%	84851
RD1001	Arvind Kumar	Programmer	38959	40%	54542.6
RD1002	Sanju Paswan	Programmer	16228	50%	24342
RD1003	Raju Rastogi	Programmer	46657	40%	65319.8
RD1004	Ram Kumar	Softwar Associative	45153	40%	63214.2
RD1005	Anil Kumar	Network Eng	67531	30%	87790.3
RD1006	Priyanka Kumari	SME	25311	40%	35435.4
RD1007	Shyam Kumar	Brand Manager	80613	30%	104796.9
RD1008	Ramesh Kumar	Mis-Operation	71643	30%	93135.9
RD1009	Narayan Kumar	Operation	46496	40%	65094.4
RD1010	Sharita Kumari	Seles Executive	82331	30%	107030.3
RD1011	Rajan Kumar	Seles Executive	61553	30%	80018.9
RD1012	Anu Kuamri	Seles Executive	61189	30%	79545.7
RD1013	Akash Kuamr	Seles Executive	21784	50%	32676
RD1014	Shivesh Ratan	Seles Executive	94263	30%	122541.9
RD1015	Alok Kumar	Seles Executive	24274	50%	36411
RD1016	Manish Kumar	Seles Executive	25645	40%	35903
RD1017	Ajit Kumar	Seles Executive	93895	30%	122063.5
RD1018	Sushil Kumar	Seles Executive	86250	30%	112125
RD1019	Sujit Kumar	Seles Executive	40262	40%	56366.8

Bonus Formula `if(D2>=50000,"30%",if(D2>=25000,"40%",if(D2>=15000,"50%","0%")))`

Bonus with Salary Formual = `D2+D2*E2`



