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1		Recognize ethical responsibilities to community society, discipline & professional skills through oral communication skills.			
		1. Communication Today.			
2.		Search the information to related topic, and acquire knowledge of contemporary issues related to advance-ments in Computer Science engineering.			
3.		Discuss & disseminate about advancements in related profession including societal, environmental.			
4.		Demonstrate the ability to analyze a problem and communicate competently in groups.			

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5.		Exposure to various industry environment practice and global, societal, economic, and/or environmental issues by listening experts talks and Interact with them and make a Presentation			

UNIT-1

COMMUNICATION SKILLS

TOPICS

1.INTRODUCTION

2.SIGNIFICANCE OF COMMUNICATION

3.GSC's 3M MODEL

4.VIATALITY OF COMMUNICATION PROCESS

5.VIRTUES OF LEARNING

6.FUNDAMENTAL OF GOOD LISTENING

7.NATURE OF NON-VERBAL COMMUNICATION

8.NEED FOR INTERCULTURAL COMMUNICATION

9.COMMUNICATION IN A DIGITAL WORLD

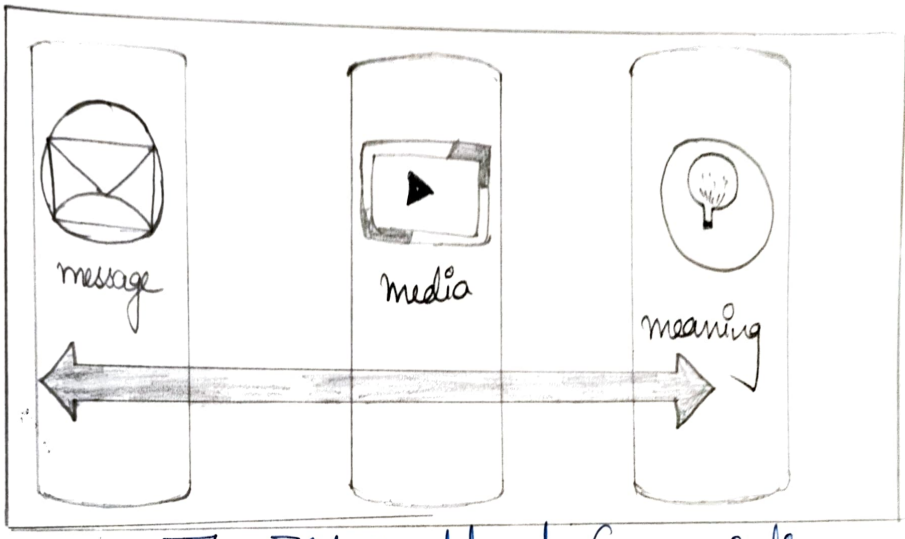
Introduction

Speaking is an interactive process of construction meaning that involves producing and receiving and processing information. Its form and meaning are dependent on the context in which it occurs including the Participants themselves. Their collective experiences, the Physical enviroment, and the purpose for specifying It is often spontanous, open-ended, and evolving. However, Speech is not always unpredictable language functions that tend to recur in Certain discourse situation.

Significance of Communication

- Organisations are totally reliant on Communication.
- When communication is through put, accurate and timely the organisation tends to be vibrant and effective.
- Without Communication is diminished or hampered, the entire Organisation suffers.
- Communication is Central to the entire management Process for four Primary resource.
- GSC's 3M model of communication a simple approach.

GSC's 3M Model of Communication: A Simple Approach.



The 3M model of Communication.

All other things being equal in a situation, message media & meaning determine the out come of any Communication Process.

* The three elements Combine to make GSC's 3M model of Communication, as Shown in above figure.
* The messages stroges reflects the ideas to Communicate.
* The media facilatates transmission of the message.

Vitality Of Communication Process :-

Effective Communication is Vital to all business. The communication process involves.

Sender → Message → Medium → Reciever → Feedback.

If the right message does not get to the right person in the right format. than this could effect the over all efficiency of the business. worse stick, the wrong message might be passed on to the wrong people. This could alter actually harm the business.

The Sender - The Person writing the text.

The Reciever - The Person to when the message is address.

Virtues of Listening:-

"A Good listeness is not only popular everywhere, but offer a while they knows something". is a two-way activity.
A Person who dominates the conversation mightfull known about it means the ideas.

* Example:- He/She atracts all audiance but He/She might be avoided the next time.

* If you listen to others you will gainlol talk to.

* you will get Parts of view, neo perpective & new instruction.

Fundamentals Of Good listening

The fundamentals principles for being an effective listener are:-

* Be receptive to what the other person is saying without becoming defensive.

* Accept the other's viewpoint as his / her own don't judge or execute it.

* Keep focused on what the employer is saying without changing the subject.

* One effective way of practing these principles is by paraphrasing down when paraphrasing do not show approval or disapproval merely restate. What you heard the other say.

Nature Of Non-Verbal Communication

* Non-Verbal communication refers to the body signals, that we use in our communications. everybody it is also known as Communication without speech and writing or Communication in silence. It has unique quality but still it communicates the desired sense meaningfully.

* Research suggests that only 5% effect is produced by the spoken word 45% by the tone inflexion by the and other elements of voice & 50% of body language movements eye contact etc. Transmission of message by writing / medium other than Speechar.

Need for Intercultural Communication.

* Intercultural Communication skills are those required to communicate or share information People from other culture & Social groups.

* Where language skills maybe an important part of intercultural communication, they are by no means the only requirement.

* Intercultural Communication also requires an understanding the different Customs, standards Social moves & men thought Patterns.

Communication in a digital World.

* The digital age has brought real-time 24-hour communication between business employees and customers to the fore front.

* Maintaining Positives relationship with both employees and customer means keeping up with an ever-evving digital world.

* Today Communication technology of the Owning business. Everthing is online and the way market Communication with the way make the customer has Changed forever. The modern workplace uses a host of new technology to communicate to with Consumer & general Public.

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To cope with stress, it is the best take time out. Efforts should be made to calm down before jumping back into the conversation. Only after one regains emotional equilibrium does one become better equipped to deal with the situation in positive way.

Tips to Improve Non-verbal Communication.

Developing stress managment skills to handle stress in the heat of the moment is one of the most important things one can do to improve non-verbal communication. Strong companies are communication abilities. When under stress, people are more likely to misread others. They send confusing or off-putting non-verbal signals and lapse into the unpredictable patterns of behaviour. Futhermost, emotions are like a contagious disease. If someone is upset is very likely that the people around him/her become upset too. making a bad situation worse. More is explained on this topic on stress managment.

Voice:- In a communication, other than what one say it is also important how one says it listeness judge a speaker by the quality of his/her voice. They pay attention to the quality, timbre tone, etc. of the Speakers Voice, Sounds that convey understanding like 'Hmm' and 'Uh-huh' are important. Think about how someone's tone of voice, for example:- Can indicate Sarcasm, anger, affection or confidence.

Touch :-

Touch is a very effective means of Communi-cation one feelings For example: a pat on the back may reinforce praise while a Controlling grip on the arm may convey aggression. Think about the messages Conveyed by the following types of touch: a timid handshake, a weak tap on shoulder a warm embrace & a patronising pat on the head.

Space :-

Everyone needs a physical space although one's need for space depends on factors like culture, situation and the proximity that exists in a relationship. Physical Space can be used to communicate many different non-verbal messages, including those like intimacy & affection or aggression and dominance. Sometimes people may feel uncomfortable if someone stands very close to them while talking. They feel that their personal space is violated.

Eye Contact: Visuals are most people give importance to visual perception in communication. Eye contact is one of the most important type of non verbal Communication. The way one looks at someone can Convey many things. including interest, affection, enmity, jealousy or attraction. Eye contact is especially important to Continue Conversation & for determining the other Person's response.

Gestures:- Gestures form an inseparable trait of our personality. We express ourselves with gestures On autopilot when we wave, point, beckon and use our hands while arguing or Speaking animatedly.
However the meaning of gestures may Vary across Cultures & regions. so it is important to be Careful to avoid misinterpretation Thumbs up, facial expressions palm movements, etc are examples of the gestures that we regularly use In Communication.

Components Of Non-Verbal Communication & Body Language:-

There are Various components that contribute to non-verbal Communication, Together, they Combine to communicate one's interest in a Particular thing These Components are described in the following sections:-

Facial Expressions:-

Our faces are capable of emoting countless feelings interestingly, unlike some forms of non verbal communication, facial expression are universal. Facial expression for emotions like surprise, happiness, sadness, fear, anger, disgust, etc are the same across Countries & Cultures!

Body Movements and Postures:-

People's perceptions of others are affected by the way they walk, sit, stand up, etc. The way one moves & Carries, Speaks, Volumes about one's personality. This type of non-verbal Communication includes one's Postures, bearing, stance, etc.

Salesman :- In HP, Care Is you would get two-year warenty. also has five years service. The installation for. The maintanence is also taken Care by Company.

Customer :- Could you please tell me the price of Computer & the mode of Payment?

Salesman :- It will Cost you around 32500/- Pay by Card, cash / Cheque.

Customer :- Can you tell me about its weight?

Salesman :- Its weight is 8.20 kg &

Customer :- Okay Sir. Once I will discuss it with my Parents & inform you later.

Salesman :- Sure mam, Thank you for Visit.

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2)

Salesman:- Hello mam, welcome to our store.

Customer:- Thank you.

Salesman:- How can I help you?

Customer:- Actually, I am planning to buy a computer so could you please help me out.

Salesman:- Sure mam, Could you please specify me with brand so that I can be more transparent with the details.

Customer:- I think HP, is good so would like to known about it.

Salesman:- Sure mam, its good for students Particularly, & its is already in high demand

Customer:- What kind of Service does it offer?

UNIT-2

INFORMATION SEARCH AND DATA COLLECTION

TOPIC

DATA LEAKAGE AND DETECTION

Unit - 2.

IMPROVED DATA LEAKAGE & DETECTIONS

INTRODUCTION:-

In the course of doing business, sometimes sentivive data must be handed over to supposedly trusted third parties. For example a hospital may give patient records to research-ers who will devise new treatments. Similarly a company may have a particular Parterner-ship with other companies that require sharing customer data. Another enterprises may have partnership with other companies that require sharing customer data. Our goal is to detect when the distributor's sensative data has been leaked

by agents, and if possible to identify the agent that leaked the data. Perturbation is a very useful technique where the data is modified & made "less sensative" before being handed to agents.

Traditionally, leakage detection is handled by watermarking e.g., unique code is embedded in each distribution copy. If that copy is later discovered in the hands of an unauthorised party, the leaker can be identified. Watermarks can be very useful in some cases, but again, involve some modification of the Original data. Furthermore, watermarks can sometimes be destroyed if the data recipient is malicious.

DIGITAL WATERMARKING:-

Digital watermarking is the process of embedding information into a digital signal which may be used to verify its authenticity or the identify of its owners, in the same manner as paper bearing a watermark for visible identification. In digital watermarking, the signal may be audio pictures, or video. If the singal is copied, then the information also is carried in the copy. A singal may carry several different watermarks at the same time

Paul Levison Future of the information revolution", where he called for the use "smart patent numbers" or the embedding of electronic chips in every piece of

technology, which would give an updated listing of all of its inventors.

In visible digital watermarking, the information is visible in the picture or video. Typically the information is text or a logo, which identifies the owner of the media. The image on the right has visible watermark

When a television broadcaster adds its logo to the corner of transmitted video, this also is a visible watermark.

Unobtrusive Techniques:-

In this section we develop a model for assess-ing the "guilt" of agents. We also present algorithms for distributing objects to agents in a way that improves our chances of identifying a leaker. Finally, we also consider the option of adding "fake" objects to the distributed set. Such objects do not correspond to real entities but appear relatics to the agents. In a sense, the fake object acts as a type of watermark for the entire set, without modifying any individual members.

Guilt Agents:-

Suppose that after giving objects to agents, the distributor discovers than a set S_T has leaked. This means the some third party, called the target may be displaying S on its website, or perhaps as part of a legal discovery process, the target turned over S to the distributors. Since the agents U1; . . . ; Un have some of the data it is reasonable to suspect them leaking the data. However, the agents can argue that they are innocent, and that the S data were obtained by the target through other means.

Related Work:-

The guilt detection approach we present is related to the data provenance problem: tracing the lineage of S objects implies essentially the detection of the guilty agents. Tutorial [1] provides a good overview on the research conducted in this field. Suggested solutions are domain specific, such as lineage tracing for data warehouses, and assume some prior knowledge on the way a data view is created out of data sources. Our problem formulation with objects and set is more general & simplifies tracing, since we do not consider any data transformation from R_i sets to S.

As far as the data allocation strategies are concerned, our work is mostly relevant to watermarks were initially used in images [5], video [5], and audio data [5] whose digital representations includes to relation data. Our approach and watermarking are similar in the sense of providing agents with some kind of reciever identifying information.

Agent Guilt Model:-

To compute this $Pr\{G_i|S\}$, we need an estimate for the Probality that values in S can be "guessed" by the target. For instance, say that some of the objects in S are e-mails of individuals. We can conduct an expirement and ask a person with approximatly the expertise and resources of the target to find the e-mail of, say, 100 individuals. If this person can find say, 90 emails, then we can reasonably guess that the probability of finding one e-mail then we can reasonably guess that the

probability of finding e-mails is 0.9. On the other hand, leading to an estimate of 0.2. We call this estimate pt, the probability that object in questions are bank account numbers, the person may only discover, say, 20, leading to an estimate of 0.2. We call this estimate pt, the probality that object t can be guessed by the target. Probability pt is analogous to the probalities used in desiging fault-tolerant system. That is, to estimate of 0.2 We call this estimate pt, the probability that object t can be guessed by the target. Probality pt is analogous to the probalities are estimated how likely it is that a system will be opekational throughout a given period, we need the probabilities pt

is analogous to the probality used in designing fault-tolerant systems. That is, to estimate how likely it is that a system will or will not fail. A component failure in our case is the event that the target guesses an object of S. The component failure in our case is the event that the target guesses an object of S. The component failure is used to compute the overall system reliabitly, while we use the probability of guessing to identify agents that have leaked information.

Modules:-

1. Data Allocation Module:-

The main focus of our project is the data allocation problem as how can the distributor "intelligently" give data to agents in order to improve the chances of detecting a guilty agent.

2. Fake Object Module:-

Fake object are objects generated by the distributor in order to increase the chances of detecting agents that leak data. The distributor may be able to add fake objects to the distributed data in order to improve his effective in detecting guilty agents. Our use of fake objects is inspired by the use of "trace" records in mailing lists.

3. Optimisation Module:-

The optimisation is the distribution in order to increase the chances of detecting agents that leak data. The distributor may be able to add fake objects is inspired by the use of "trace" records in mailing lists.

4. Data Distributor:-

A data distributor has given sensitive data to set of supposedly trusted agents (third Parties) Some of the data is leaked and found in an unauthorized place. The distributor must access the likehood that the leaked data came from one or more agents, as opposed to having been independently gathered by other means

Data Allocation Problem:-

Our main focus is data allocation problem: how can the distributed "intelligently" give data to agents in order to improve the chances of detecting a guilty agent? As illustrated in Fig 1, there are four instances there are four instances of this problem we address, depending on the type of data requests made by agents & whether "fake objects" are allowed. The two types of requets we handle were defined. Fake objects are objects generated by the distributor to agents together with T objects, in order to increase the chances of detecting agents that leak data.

Conclusion:-

In a perfect world, there would be no need to hand over sensitive data against to agents that may unknowingly or maliciously leak it. And even if we had to hand over sensitive data, in a perfect world, we could watermark each object so that we can trace its origins with absolute certainty However in many cases, we must indeed work with agents or from some other source since certain data cannot admit watermarks.

Limitations:-

Traditionally, leakage detection is handled by watermarking e.g. a unique code is embedded in each distributed copy. If that copy is later discovered in the hands of unauthorised party, the leaker can be identified. Watermarks can be very useful in some cases, but again, involve some modification of the original data. Futhermore, watermarks can sometimes be destroyed if the data recipient is malicious. A Company may have paternships with other countries that require sharing customer data. Another enterprises may outsources is data processing. So data must be given to various other companies.

UNIT-3

GUEST LECTURES/ WORKSHOPTWO TECHNICAL AND ONE GENERAL

TOPICS

1.CURRENT TECHNOLOGIES IT INDUSTRIES

2.PYTHON

3.YOGA AND MEDITATION

Python Introduction:-

what is python?

=> python is popular programming language. It was created by Guido vor Rossum and Released in 1991.

It is used for

* Web development.
* Software development.
* Mathematics
* System scripting.

what can Python do?

=> * Python can be used on server to create web applications.

* Python Can be used alongside software to create workflows.

* Python can connect to database systems. It can also read & modify files.

* Python can be used to handle big data and perform complex mathematics.

Why python?

=> * Python works on different platforms

* python has a simple syntax similar to the english language.

* python has syntax that allows developers to write programming languages.

* Python runs on interpreter system meaning that code be executed that protophying can be done very quick

* Python Can be ~~f~~ treated in a procedual way an object-oriented way or a functional way.

Python Syntax Compared to other programming language:-

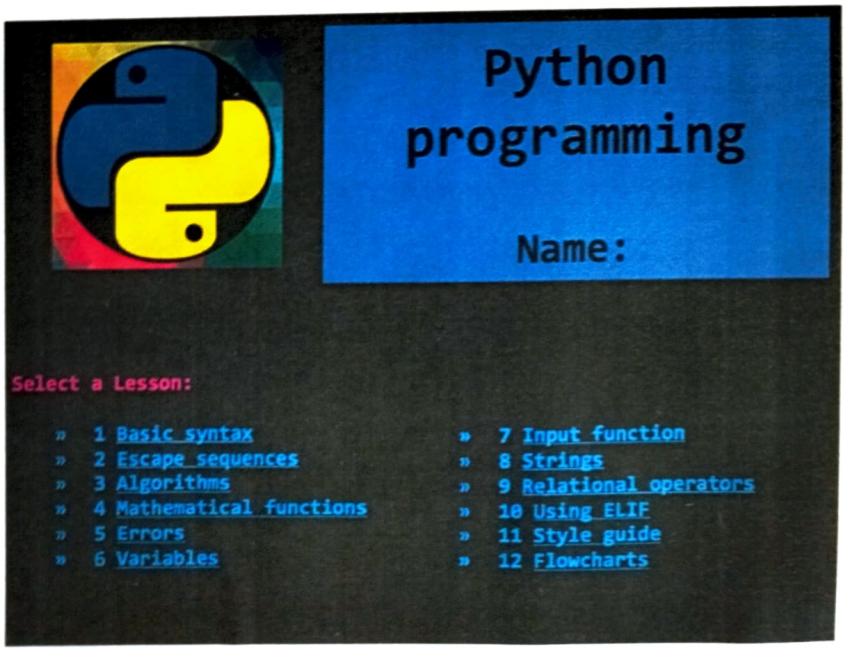
Python was adjusted designed for readbility and has some similarities to english language with influence from mathematical. python uses new lines to complex a command as apposed to other programming language which often use Semiclons or parentheses.

Python (Programming language)

Python is an intepruted, high-level, general purpose program language. Created by guick van rossum and first released in 1991, Pythons design philosophy emphasized code reability with its notable use of significant whitespace. It's language constructs and object-oriented

aim to help programmes write clear, logical code for small and large-scale project.

Python is dynamically typed and garbage collected. It supports mutiple programming python of often described as a battries includes language due to its comprehensive standard libary python was conseived in the late 1980 as a succesor 2000, infoucded features like lists comprehsion & a garbage collection systems capable collecting reference cycle



Python interpreters are available of many operating systems. A global community of programs develops and maintains Cpython, an open source reference implementation. A non profit organisation, the python software foundation manages & directes resources for Python & Cpython development.

Most python implementations include a read eval print loop permitting them to function as a command line interpreter for which the reviews results immediatly.

Other shells, including IDLF and Ipython add futher abilities such as auto completion session state retension & Syntax highlighting.

Features And Philosophy

Python is a multi-paradigm programming language. Object-oriented programming and structural programming are fully supported. functional programming and aspect oriented programming. many other paradigms are supported via extensions. including design by contract and logic programming.

Naming:-

Python's name is derived from the British comedy group monty python, whom python creator guido van Possum enjoyed while developing the language. Monty Python code and culture.

For example metasyntactic variables often used in python literature are spam and eggs instead of the traditional foo and bar.

The official python documentation also contains various reference to monty python routines.

The prefix Py- is used to show that something is related to python. The python creator guido van Rossum enjoyed while developing the language. The metasyntatic variables often used in Python literature are Spam.

Uses

Since 2003, python has consistently ranked in the top ten most popular programming language in the TIOBE Programming Community index where as of december 2018. it is third most popular language. It was selected programming language of the year in 2007, 2010 & 2018.

An empirical study found that scripting language such as python are more productive than conventional language such as c and java for programming problems involving string manipulation Eg search in a python language the python has consistently ranked in the most popular programming language that consumption was often better than java not much worse than C or C++.

Development:-

Python development is conducted largly through the python inbrement proposed process the primary mechanism for proposing major new features collecting community input on issues and documenting python design decisions python coding style is covered in PEP's. Outstanding PEP are viewed and commented on by the python community an the steering council.

Enhancement of the language corresponds with development of the Cpython reference implementation. The mailing list Python-devicis the primary forum for the language's development.

Implementations:

* Reference implementation
* Other implementation
* Unsupported implementations
* Cross-Compilers to other language
* Performances.

Yoga Meditation

What exactly is meditation. It seems that so many people nowadays are hooked up with so many problems. The word yoga is a sanskrid word meaning union. Its a Combination of the physical self and various exercise for the mental peace of mind to simulate the Individu-als eternity. Yoga releases the toxins from the body and tries to be in full harmoning with nature with the basic 3 aspects of the human elements the mind the mental and the spiritual.

Yoga is a form of attainaning peace through various rigurous exercise practised in India from the ages as it is believed that yoga clears a man from all illness. yoga has done wonders to the people suffering from various diseases & had cured them completly from time of Indus civilisation : when the dealment of allopathy was not hard of.

Yoga integrates the exercises of aerobics gym nastics and even combines the mental and physical through breathing lungs exercise and inhaling of fresh air into the System yoga has several forms of exercise namely the yama, niyama, padmasana Pronayama, Protyohara, Pharana, Dyanomedie

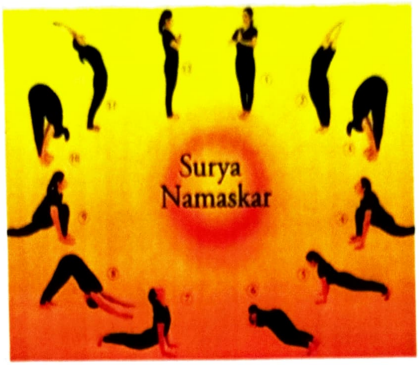
Meditation:-

Meditation is believed to bring retive the strives and stress of the body. The whole process of meditation intends to bring peace of mind to the individual giving him complete freedom from the under tensions arisings out due to the natural and physical conditions. It relins the soul and the body & tries to purity every system of the human organs and tries to empower the body with fresh and positive feelings within and outside.

Meditation helps in complete conch of the self in physical and moral terms and in full command of one's activities with lot of vibrans energies.

Meditation originated several thousand years ago as the oldest method of body exercise and meditation as a form of exercise & body care is very popular among the people of the developed countries as it gives them enough space to relieve the stress of the workplaces. Also patients from over the world visit south India for meditation in the astonous build specially for the Purpose.

Meditation which literally means the seines of reaching the supreme power has passed on through the bags traditionally from the master to disipline only by pratices that has gained. promience during the Countries that wins by.



The various benefits of Meditation are:-

* The helps in oxygen circulation through out the body.

* It Stabilises the respiratory system and reduces risk of blood pressure.

* Increases blood flow to the body parts

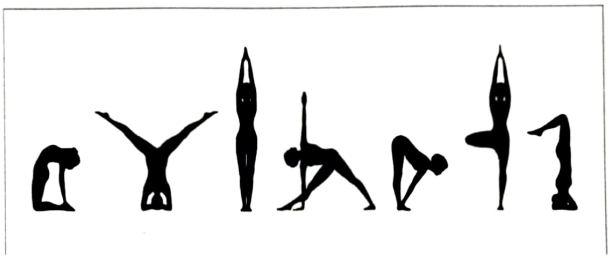
* Gives peace & a deeper level of relaxation

* Builds Self - Confidence

Yoga and meditation typically go hand in hand & have been around for thousands of years. They have been used an alternative from of exercise to keep the mind and body healthy and happy. practicing yoga improves balance, endurences, flexibility and strength while meditation helps keeps the mind sharp, relieves stress and anxiety and can strengthen your immune system.

Following a few simple poses, breathing techniques and positive Caping Skills and help vetrious manage stress, improve a healthier lifestyle. With so many health benefits linked to these traditional practise may Baby Boomers are taking

notices incorporating these techniques into their lifestyle.



Yoga and meditation have been linked with emotional health boosts. Studies have shown that yoga & meditation help improve congnitive behavioral performance as well as aid with mood swings, menopause Schizophrenics, Insomnics, depression & anxiety.

UNIT-4

GROUP DISCUSSION

(FIVE TOPICS)

1.Polythene bags must be banned

2.Global warming is caused more by developed countries

3.China market threat Indian market

4.Mobile phones requirement of day

5.Examination has it killed its education?.

Plastic bags are everywhere in our environme-nt. when we go to purchase our groceries, we use plastic bags because they are convenient In fact in our modern lives it has become part of us. However, the convenience of these plastic bags come at a very high cost to the environment and negatively affects human health. Several cities globally have begun plastic bags while some have enforced restricted laws against the use of plastic bags while some have enforced restricted the because of the negative effects of the use of their usage.

Besides, the use of plastic bags is considered as one of the great issues that humans are facing in their contemporary life. Cities such as China have banned the use of plastics. Bangladesh and India has only banned the use and sale of polythene bags which basically have thickness of less than 50 microns.

Picture.

Below are some of the 20+ reasons why plastic

1. Plastic bags do not only pollute our water but also our land. Plastic bags do not only pollute. usually lightweight and such as, they can travel very long distance by either water or wind. Wind blows there plastic bags and trashes a whole are these plastic litters gets caught up in between trees, fences and floats in water bodies thus moving to the world's oceans.

2. The plastic bags are made from non-renewable sources and on its account, highly contribute to climate change. Most of the plastic is made of polypropylene which is a material are non-renewable fossil fuel-based material and through their extraction and even production

3. A lot of energy is used in the producing these bags. The total amount of energy required to drive a car for one kilometer or 0.5 miles is the equilavent energy required to produce nine plastic bags. It is not rational that these non-renewable resources are used to make plastic bags when the typical useful life of each and every plastic bags is around 12 minutes.

4. Plastic bags do not degrade. In truth; petroleum based plastic bags never degrade. Instead of these plastic degrading, it is broken down into small tiny pieces which are swept down and endup in the oceans which are then consumed by wildlife. Currently, there are approximately 46,000 - 1,000,000 plastic fragments floating within every square mile of the globes oceans.

5. Plastic bags are harmful to wildlife and marine life. Birds. animal and marine life such as sea turtles and fish often mistake the plastic bag and other plastic materials for food and consume them. The animals may also become easily etangled inside the plastic.

6. Plastic bags are harmful to human health. There are some chemicals from the plastic bags which can disrupt the normal functioning of hormones in the body. Most plastic fragments in the oceans like plastic bags have some pollutants such as PCBs (polychlorinate biphenyl) together with PAHs which are hormone disrupt-ing. Once the marine animals consume these chemicals, they move through the food web then later into the humans who consumes these chemicals they move

When the human prepare them they consume all these chemicals affecting their healths. They could develop cancers or other serious conditions.

7. Plastics bags are expensive and hard to clean or remove from the environment. The amount of plastic bags cleanup is around 17 cents per bag thus in average the taxpayers end up paying around $88 each year just on plastic bag waste. These plastic bags also 3-5 cents each. Individuals pay lot to purchase them and even for refusing them. For this reason. Plastic should simply be banned.

8. Plastic bags have external costs. Several costs are attributed to the production of plastic bags. A prime example is the production & environmental costs.

9. Plastic bags are not easy to recycle. plastic bags are said to present significant challenge in terms of recycling. Recycling facilities do not have the capacity to recycle plastic bags & thus do not accept them. Therefore, the actual recycli-ng rate for plastic bag is around 5%.

10. Plastic bags tend to last more: perhaps for-ever and when even use so many of them. Plastic bags never degrade Completly which solve Therefore, the more the amount of plastic bags the more these is plastic pollution & its effects. Banning the use of plastic bags will help reduce this great effect.

11. Do we need Smart cities?

Introduction:-

The rate of migration from rural to urban areas is increasing across the world day by day. By 2050 around 70% of the people will be living in cities and Indian is no exception in this regard.

There is an emerging need for the cities to get Smarter in India so that it would tackle the issues related with the large Scale urbanisation.

Smart city can be defined as a city which should be equipped with basic infrastructure to give a decent quality of life.

But, does a country like India require a smart cities? Let's take a look.

Yes - Smart cities are required.

1. Good infrastructure:- The main aim of constructing a smart city is to provide good infrastructure to the residents, such as water and sanitation services24*7 electricity supply etc. The information will be collected through the detectors gas, electricity and other government analytics. This process can focus on making the city different.

2. Smart solutions - Smart cities are required as it would also provide smart solution such as providing public data, electronic service delivery, 100% treatement of water waste, monitoring water quality etc.

3. Promotes development - Smart cities enhance the development activities of a region. A lot of development activities such as building schools, organisations, shopping malls can take place. These activities benefit everybody including citizens, business, government & environment.

4. Housing of All - The main aim of a smart city is "housing for all". More than 70% of the Indian population would be living in cities by 2050. Due to the rising urbanisation, a better standard of living is required. To support this rising shift, a sustainable model of housing should be develop.

5. Provides employement - A smart city is an economy of agglomeration. It provides various opportunities & advantages to its residents many.

NO- Smart cities are not required:-

1. Dumb administration:- The politicians of India have picked up the term "smart city" to wooo the youngsters. In the past few months, we have witnessed the real face of the country's corrupt miniters who rule our country. Carruption has become a part of our countrys identify. Smart city is not possible with a set of dumb administers & politicians.

2. Unable to afford:- In a smart city, people have to build their own houses according to their financial capacity. A lot of people would not be able to afford a place smart city as it would be very costly. Thus, people from middle class and poor section of the society won't able to enjoy the city benifits.

3. Better Utilization of places:-

A large acre of land would be wasted for the construction of a smart city. If properly utilized, this area can be turned into a biodiver-sity park later on. region can be utilized to avoid ecological degeneration.

4. Proper use of fund:- India is a country which better known for its increasing poverty rate. Only a certain part of the city would be still under the shadow of poverty. We should understand that smart city won't be able to solve the basic issues of an entire state or city. India would be much ahead of other countries.

Conclusion:-

India is a developing country and Modi government is trying its best to develop India into a powerful nation.

Introducing the concept of smart cities in the India is a great idea but due to increasing poverty rate, lack of infrastructure & basic amenities the cities might have to face a lot of changes. Before initializing the project, the government should try to attend to the basic issues of the nation such as implementing a proper drainage system, providing good water, Sanita-tion & health care facilities etc.

A nation with a strong infrastructure would be successful in creating numerous Smart Cities.

Current Trends in Information Technology

Information technology is an industry on the rise, and business structure, job, growth, and emerging technology will all shift in the coming years. Current trends are improving and presenting new functions in fields like medicine, entertainment business, education, marketing, law enforcement, and more still, other much anticipated technology is only now coming on the scene.

Innovations in IT change internal company processes but they are also altering the way customers experience purchasing and support not to mention busy practises in life. Locking up your home, visiting the doctor, and storing files, the following trends information technology are crucial areas to watch in 2019 & viable considerable that could influence

your future career choice.

1) Cloud Computing:-

cloud computing is a network of resources a company can access, and this method of using a digital drive increases the efficiency of organisation. Instead of level storage on computer hard devices, companies will be sourcing their space and conserving sends. According to jorles, 83% of enterprises workloads will be in the cloud by 2020. which means rate will show an increasing trends closing in an this statistic.

A company wide network will help business have on information technology infrastructure central services will also extend internal function to gain revenue.

2) Mobile computing and Applications:

Mobile phones, tablets and other devices have taken both the business world and the personal reah by storm. Mobile usage and the number of application generated have the both sky rocketed in recent years. New Research centre also shows using phones for online use has increased and fewer individuals use trondional internal services.

3) Big Data Analysis:- Big data is a termed allows business to analyze intensive soft of information to achieve variety in increasing volums and growth of velocity Big data has a high return on investments that boosts the productivity of marketing companies due to its ability to enable high functions processing success.

Examination of data to understand market and strategies is becoming more managable with advances in data analysis programme.

4) Automation:-

Another current trend in the IT industry is automated process, Automated process can collect information from vendors, customers and other documentation, Automated process that check invoices and other accounts payable assets expenditure customer interactions, machine process can automate repetive manual tests rather than assiging them to employes. This increases them to employee This increases organisation wide productivity allowing employee to use their valuable time wisely.

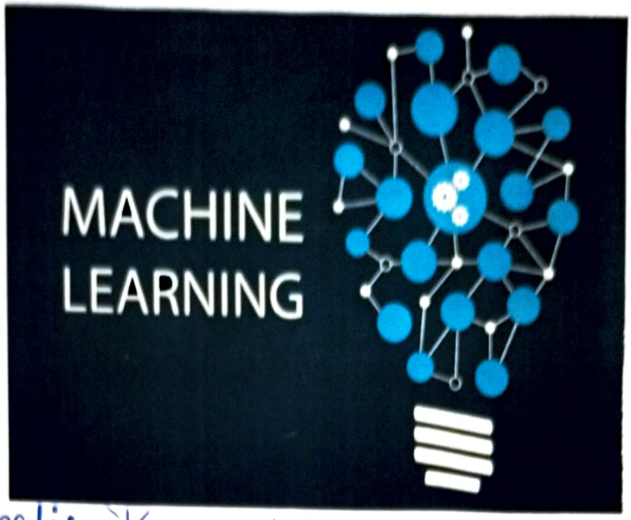
Emerging Trends in Information Technology

Trends in information technology emerging in 2019 are new and innovative ways from the industry to grow. These movements in information technology are the areas expected to generate revenue and increase demand for IT jobs. Pay attention to these technologies changes and unique products that enhances business operations.

1) Artificial intelligence and Smart Machines:-

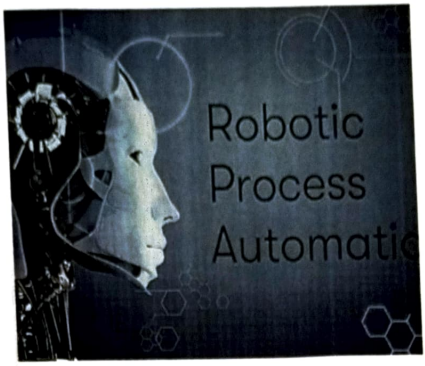
Artificial intelligence harnesses algorithm and machine learning to predict usefull patterns humans hormally indentify. Smart machine take human dicission-making out of the equation employee to use their abilities for the most worth while tasks along with.

2) <u>Machine Learning</u>:- Is a subset of AI with machine learning computers are programmed to learn to do they literally learn by discovering patterns and insights from data. In general we have two types of learning Surpervised and unsurpervised. while machine learning is a subset of AI we also have subset with in the domain of machine learning including natural metolz natural language processing (NLP). and deep learning each of these subtents offers an opportunity for Specializing in a carrer field that will only grow.

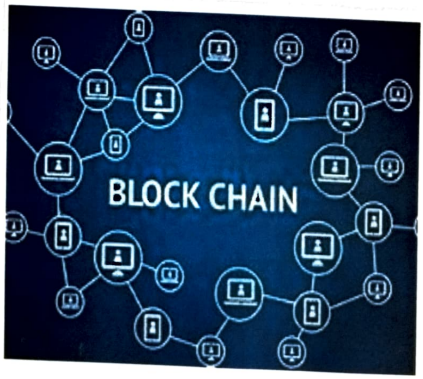


3) Robotic Process Automation or RPA:-

Like AI & machine learning Robotic process Automation or RPA is another technology that is automating jobs. RPA is the use of software to automate business processes much such as interpreting applications, processing transactions dealing with data and too replying to emails RPA automatic repetitive tasks that people use for the IT Proffessional looking to the future and trying to understand technology thends RPA and consultant and these jobs pay will.



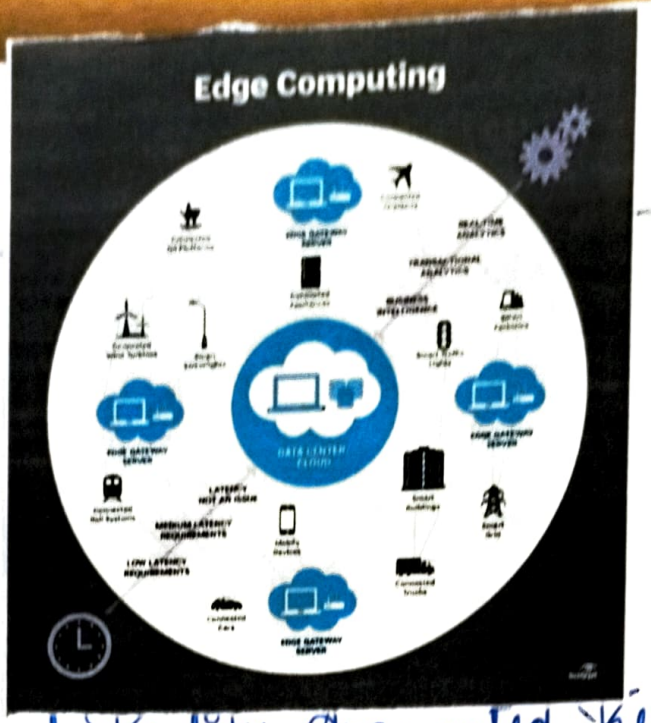
4) Block Chain:- All though most people think of block chain technology in relation to copy to currencies such as bitcoin block chain offers security that is useful in many other way. In the simplest of forms, block chain can be describe data. We can only add to not take away from or change. Hence the term "Chain" because we are making chain of data



5) Edge Computing:-

Formally a technology trend to watch cloud computing has become main stream with major players. The adoption of cloud solution. But its no longer then emerging technology edge is more is more over, cloud computing and make way for the edge is more over. cloud computing and make way for the edge is more over. cloud computing and make way for the edge.

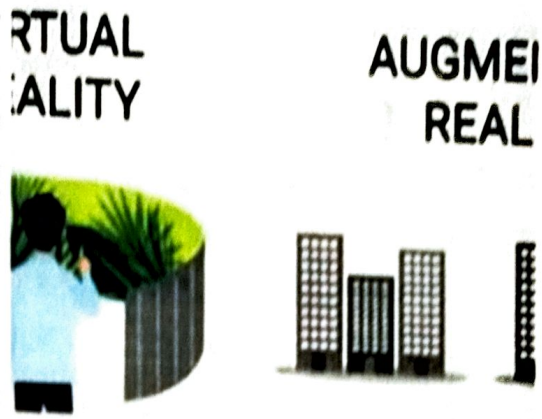
As quantity of data we are dealing with continues to increate we have realised the short comings we are realize as edged computing in some solution.



6) Virtual Reality Augmented Reality:-

Virtual reality immersed the user in on environ-ment while augment reality chance their environment. Although VR has primarily been used for gaming this for it has also been used for training as with virtualship to train us navy army and cosd guardship Captions.

Both have enormous potential in training entrainment, education marketing and even rabilitation after an injury. either could be used to train doctor to do surgery after museum goes super experience enhance them murdering as with this.



7) Cyber Security:- It might not seem like emerging technology given that it has been around for a while but is evolving just as other technology are that is in part because threats are constantly new. The moveldens hackers who are trying to illegally access data are not going to give up any time soon. and they will continue to find ways to get through even the through security features. It's also in part because new technology is being while machine learning is a subset of AI we also have subsets with in the domain of machine learning including neural networks natural language processing (NLP).

8) Internet of Things:- Although it should like a game we would play on our environment - the internet of things is the faster future many things meaning are now being built with wifi connected to the internet and to each other hence the internet of things or IOT. IOT enables devices hence over the internet. Although the technologies are emerging and evolving all around us these sigth. As consumers we are already using and benefiting form IOT. we can load our door remotly if we forget to when leave for world.

Conclusion:-

Technologies are emerging and evolving all around us. these eight domain offer promising careers potential now and for the forensable future. And all eight are suffering from a shortage of skilled workers meaning the time is right for us to choose one good training and ignson bound at the early stage of the technology positioning you for success now & in the future.