List of Abbreviations and Terminology in ICT

- AGP –>Accelerated Graphic Port
- PC –>Personal Computer
- EPROM –>Erasable Programmable Read Only Memory
- BIOS –>Basic Input and Output System
- HDD –>Hard Disk Drive
- PCI –>Peripheral Component Interconnect
- UNIVAC –>Universal Automatic Computer
- GUI –>Graphic User Interface
- USB –>Universal Serial Bus
- VGA –>Visual Graphic Adaptor
- MAN –>Metropolitan Area Network
- ASCII –>American Standard Code for Information Interchange
- WAN –>Wide Area Network
- EBCDIC –>Extended Binary Coded Decimal Interchange Code
- LAN –>Local Area Network
- EEPROM/EAPROM –>Electrical Erasable/Alterable Programmable Read Only Memory
- CPU –>Central Processing Unit
- OS –>Operating System
- ALU –>Arithmetic and Logic Unit
- DVD –>Digital Versatile Disc
- CD –>Compact Disk
- ROM –>Read Only Memory
- VDU –>Visual Display Unit
- RAM –>Random Access Memory
- ICT –>Information Communication Technology
- PROM –>Programmable Read Only Memory
- URL –>Uniform Resource Locator
- IDE –>Integrated Drive Electronics
- FORTRAN –>Formular Translator
- MOS –>Metaoxide Semi Conductor
- ATX –>Advanced Technology Extended
- SIM –>Subscriber Identi_cation Module
- MHZ –>Megahertz
- ISP –>Internet Service Provider
- GHZ –>Gigahertz
- DBMS –>Database Management System
- SQL –>Structured Query Language
- RW –>Re-Writeable
- SDT –>Serial Data Transmission
- CAN –>Campus Area Network
- SIMMs –>Single In-line Memory Module
- PAN –>Personal Area Network

- DIMMs –>Dual In-line Memory Module
- CMOS –>Complimentary Metaoxide Semi Conductor
- ENIAC –>Electronic Number Integrator And Calculator
- CMD –>Command
- EDSAC –>Electronic Dialog Storage Automatic Computer
- MAC –>Media Access Control
- IC –>Integrated Circuit
- LSIC –>Large Scale Integrated Circuit
- DIR –>Directory
- GIGO –>Gabbage In Gabbage Out
- PHP –>PHP Hypertext Preprocessor
- DOC –>Document
- PDT –>Parallel Data Transmission
- PDA –>Personal Digital Assistant
- USSD –>Unstructured Supplementary Service Data
- WWW –>World Wide Web
- COBOL –>Common Basic Oriented Language
- CCNP –>Cisco Certi_ed Network Professionals
- BASIC –>Beginner All Purpose Symbolic Instruction Code
- CEH –>Certi_ed Ethical Hacking
- TCP –>Transmission Control Protocol
- CSS –>Cascading Style Sheet
- CISCO –>Computer Information System Company
- XXS –>Cross Site Scripting
- XML –>Extensible Mark-up Language
- HTML –>Hypertext Markup Language
- CCNA –>Cisco Certi_ed Network Associate
- RFI –>Remote File Inclusion
- HTTP –>Hypertext Transfer Protocol
- DDOS –>Distribution Denial Of Service
- VPN –>Virtual Private Network
- SEO –>Search Engine Optimization
- IP Internet Protocol

Operating Systems and Data Storage Based

- BIOS – This is the Basic Input Output System which controls the computer, telling it what operations to perform. These instructions are on a chip that connects to the motherboard.
- BYTE – A byte is a storage unit for data.
- CPU – This stands for the Central Processing Unit of the computer. This is like the computer's brain.
- MAC – This is an abbreviation for Macintosh, which is a type of personal computer made by the Apple Computer company.

- OS – This is the Operating System of the computer. It is the main program that runs on a computer and begins automatically when the computer is turned on.
- PC – This is the abbreviation for personal computer. It refers to computers that are IBM compatible.
- PDF – This represents the Portable Document Format which displays _les in a format that is ready for the web.
- RAM – This stands for Random Access Memory which is the space inside the computer that can be accessed at one time. If you increase the amount of RAM, then you will increase the computer's speed. This is because more of a particular program is able to be loaded at one time.
- ROM – This is Read Only Memory which is the instruction for the computer and can not be altered.
- VGA – The Video Graphics Array is a system for displaying graphics. It was developed by IBM.
- WYSIWYG – This initialism stands for What You See Is What You Get. It is pronounced "wizziwig" and basically means that the printer will print what you see on your monitor.

Connecting to the Internet Network Based

- "K" is a Kilobyte which is 1024 bytes.
- "MB" is a Megabyte which is a million bytes.
- "GB" is a Gigabyte, which equals 1000 megabytes.
- FTP – This is a service called File Transport Protocol which moves a _le between computers using the Internet.
- HTML – Hyper Text Markup Language formats information so it can be transported on the
- Internet.
- HTTP – Hypertext Transfer Protocol is a set of instructions for the software that controls the movement of _les on the Internet.
- IP – This stands for Internet Protocol which is the set of rules that govern the systems connected to the Internet. IP Address is a digital code speci□c to each computer that is hooked up to the Internet.
- ISP – The Internet Service Provider is the company which provides Internet service so you can connect your computer to the Internet.
- LAN – This stands for Local Area Network which is the servers that your computer connects to in your geographic area.
- PPP – Point-to-Point Protocol is the set of rules that allow your computer to use the Internet protocols using a phone line and modem.
- URL – This is the Uniform Resource Locator which is a path to a certain □le on the World Wide Web.
- USB – The Universal Serial Bus is used for communications between certain devices. It can connect keyboards, cameras, printers, mice, □ash drives, and other devices. Its

use has expanded from personal computers to PDAs, smartphones, and video games, and is used as a power cord to connect devices to a wall outlet to charge them.
- VR – Virtual Reality simulates a three-dimensional scene on the computer and has the capability of interaction. This is widely used in gaming.
- VRML – Virtual Reality Markup Language allows the display of 3D images.

Some Common Email Abbreviations

Here is a list of email abbreviations that are commonly used to get your point across in less time and fewer keystrokes:
- 2G4U – Too Good For You
- AWHFY – Are We Having Fun Yet?
- AYPI – And Your Point Is?
- GAL – Get A Life
- GMTA – Great Minds Think Alike
- J4F – Just For Fun
- KISS – Keep it Simple, Stupid
- QL – Quit Laughing!
- RUOK – Are you Okay?
- SITD – Still In The Dark
- TIC – Tongue In Cheek
- WYSIWYG – What You See Is What You Get
- YYSSW – Yeah Yeah Sure Sure Whatever
- ZZZ – Sleeping, Bored, Tired

Basics of Internet, Intranet, E-mail, Audio and Video-conferencing.

Basic of Internet
- The Internet is a worldwide telecommunications system that provides connectivity for millions of other, smaller networks; therefore, the Internet is often referred to as a network of networks. It allows computer users to communicate with each other across distance and computer platforms (Including other ICT Based Devices such as Mobile & Other electronic devices)
- The Internet began in 1969 as the U.S. Department of Defense's Advanced Research Project
- Agency (ARPA) for war communication
- The World Wide Web—usually called the Web for short—is a collection of different websites you can access through the Internet.
- Internet Service Provider- An ISP offers a variety of services for a variety of prices: web page access, email, web page hosting and so on. Most ISPs offer various internet connection speeds for a monthly fee
- A browser is a program that allows you to interact and view the internet and contents of the Web.

- The Web Browser, Internet Explorer, or IE is developed by Microsoft and comes pre-installed when you buy a Windows computer.
- A browser is a free software package or mobile app that lets you view web pages, graphics, and most online content. The most popular web browsers include Chrome, Firefox, Internet Explorer, and Safari, but there are many others.
- A webpage is what you see in your browser when you are on the internet. Think of the webpage as a page in a magazine. You may see text, photos, images, diagrams, links, advertisements and more on any page you view.
- Uniform Resource Locators—URLs— are the web browser addresses of internet pages and files. URLs consist of three parts to address a page or file:
- The protocol is the portion ending in //: Most web pages use the protocol http or https, but there are other protocols.
- The host or top-level domain, which frequently ends in .com, .net, .edu or .org but can also end in one of many others that have been officially recognized.
- The filename or page name itself.
- A domain name is the unique, alphabetically-based part of a URL. This domain name can be officially registered with a domain registrar by a person, business, or non-profit organization The top level domain name that designates what kind of site it is; for example, .com (for commercial domains), .org (organizations), .edu (for educational institutions).

Top-level domain names include:

.com	Commercial
.edu	Educational
.gov	US Government
.int	Organization
.mil	US Military
.net	Networking Providers
.org	Non-profit Organization

- Domain name country codes include, but are not limited to:

.au	Australia
.de	Germany
.fr	France
.in	India
.uk	United Kingdom
.us	United States

- Domain name system- An Internet address has four fields with numbers that are separated by periods or dots. This type of address is known as an IP address. Rather than have the user remember long strings of numbers, the Domain Name System (DNS) was developed to translate the numerical addresses into words.

- SSL- The acronym SSL stands for Secure Sockets Layer. SSL is a secure encryption Web protocol used to make data safe when transmitted over the Internet.

- Web Hosting- A web host is a business/company that offers space, storage, and connectivity in order to enable a website to be viewed by Internet users.

- Web Server- The Term Web server refers to a specialized computer system or dedicated server specifically designed to host or deliver Web sites.

- Hypertext Markup Language is the programming language of webpages. HTML commands your web browser to display text and graphics in a speciﬁc fashion. Beginning internet users don't need to know HTML coding to enjoy the webpages the programming language delivers to browsers.

- XML is eXtensible Markup Language, a cousin to HTML. XML focuses on cataloging and databasing the text content of a web page.

- XHTML is a combination of HTML and XML.

- HTTP- The client/server protocol used to exchange hypertext documents is called HTTP (HyperText Transport Protocol). The main thing you need to know is that HTTP is a language spoken between your web browser (client software) and a web server (server software) so that they can communicate with each other and exchange ﬁles

Basic of Intranet

An intranet is a private network that is contained within an enterprise. It may consist of many interlinked local area networks and also use leased lines in the wide area network.

The main purpose of an intranet is to share company information and computing resources among employees.

Today's working environment often means colleagues are no longer present in the same room at the same time, but separated by large distances. This can make teamwork and face-to-face interaction diﬃcult – unless an intranet with the latest communication and collaboration tools is available

Typically, larger enterprises allow users within their intranet to access the public Internet through firewall servers that have the ability to screen messages in both directions so that company security is maintained.

Extranet refers to network within an organization, using internet to connect to the outsiders in controlled manner. It helps to connect businesses with their customers and suppliers and therefore allows working in a collaborative manner.

Basic of Email

Electronic mail is a method of exchanging messages between people using electronic devices. Invented by Ray Tomlinson, email ﬁrst entered limited use in the 1960s and by the mid-1970s had taken the form now recognized as email.

Email, short for Electronic Mail, consists of messages which are sent and received using the Internet. There are many different email services available that allow you to create an email account and send and receive email and attachments, many of which are free.

Today, the top three webmail providers are Yahoo!, Microsoft's Outlook.com (previously Hotmail), and Google's Gmail. Many people also have an email address hosted by their company, school, or organization. These email addresses are usually for professional purposes.

The first five lines of an E-mail message is called E-mail header. The header part comprises of following fields:

- From
- Date
- To
- Subject
- CC
- BCC

Email Protocols: IMAP, POP3, SMTP and HTTP

E-mail Protocols are set of rules that help the client to properly transmit the information to or from the mail server.

- POP3 (Post Office Protocol 3) - This is a simple, standardized protocol that allows users to access their mailboxes on the Internet and download messages to their computers. The simple design of POP3 allows casual email users who have a temporary Internet connection (dial-up access) to access emails. They can read their emails, draft new emails or reply to emails while they are offline, and can send these emails when they are back online.

- IMAP (Internet Message Access Protocol) – This is a standard protocol used for email transfer by users. Like POP3, it also supports both online and offline modes of email access. The email message is downloaded to the user's machine only when a specific request is made to read it. Users can download mails to their computers while keeping a copy on the server. The mails on the server are the primary copy and anything changed on the local machine is updated by what is on the serve

- SMTP (Simple Mail Transfer Protocol)– As the name suggests, SMTP is a simple, text-based protocol that works best when devices are interconnected to each other. However, SMTP protocol can only be used to send emails. Unlike POP3 and IMAP protocols, SMTP does not provide the functionality to the users to retrieve emails from the server. This limits the use of SMTP to some extent. One of the main issues with SMTP is the lack of sender email authentication. SMTP lacks security features too and thus users get spam emails.

What's the Difference between CC and BCC When Sending an Email?

Bcc Stands for "Blind Carbon Copy." When you send an e-mail to only one person, you type the recipient's address in the "To:" field. When you send a message to more than one person, you have the option to enter addresses in the "Cc:" and "Bcc:" fields. "Cc" stands for "Carbon Copy," while "Bcc" stands for "Blind Carbon Copy."

A Carbon Copy, or "Cc'd" message is an e-mail that is copied to one or more recipients. Both the main recipient (whose address is in the "To:" field) and the Cc'd recipients can see all the addresses the message was sent to. When a message is blind carbon copied, neither the main recipient nor the Bcc'd recipients can see the addresses in the "Bcc:" field.

Blind carbon copying is a useful way to let others see an e-mail you sent without the main recipient knowing. It is faster than sending the original message and then forwarding the sent message to the other recipients. It is also good etiquette to use Bcc when copying a message to many people.

This prevents the e-mail addresses from being captured by someone in the list who might use them for spamming purposes. However, if it is important that each recipient knows who your message was sent to, use carbon copy (Cc) instead.

Basic of Audio and Video-conferencing

When a number of participants of a meeting use telephonic instruments to communicate with each other then it is known as audio conferencing

When two or more people use digital platforms communicate and collaborate with each other to achieve a common goal effectively then it is known as a video conferencing mode of communication or a tool of face-to-face conferencing.

There are many online tools, incorporating a range of options from free one-to-one audio conferencing all the way to more sophisticated and expensive tools such as Polycom which allow multiple sites with entire classes participating using video and audio.

Most Popular Video Conferencing Software
- Skype
- Zoom
- Cisco WebEx.
- GoToMeeting
- Zoho Cliq.
- Workplace by Facebook.

Web conferencing involves sharing content live over the web between two or more locations. Visual material is usually accompanied by an audio track

Application of ICT in research

The Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer, and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and

distance learning. ICTs in higher education is not only used in research and academic works but also be used for developing online course material; delivering study content and sharing content with remotely located students; communication between learners, teachers and the outside world; creation and delivery of presentation and lectures; academic research; administrative support, enrollment, test, evaluation and many more.

Generally, ICT helps researcher in the following research-related tasks- Identify research areas & identify appropriate information sources through searching various online portal Literature survey & critically analyses known information for further reading use the information to extend and communicate knowledge across subject area fields with wide community

Choose Methods for research (Q&Q)
- Data Collection – manage information/data collectively
- Referencing
- Present / share / disseminate Instantaneous information exchange despite geographical distances, cost less accumulation of data and documents
- Search multiple databases and electronic resources simultaneously retrieve results in a common format to consume link to others individual databases for more specialized searching &select favourite resources and e-journals, save searches and records, and set up email alerts.

The role & application of ICT in research and Higher Education academic work can be broadly divided into
4 major areas: –
- Communication – How ICT has changed the way the researcher communicate with other parties Information sharing – How quickly & easily information can be shared across the globe
- Simulation – Virtual Lab & robotic experiments
- Evaluation– Various tools and technology for feedback and evaluation

Let's go through a few important ICT products/Digital tools for researchers

Application of ICT in research, Tools & Services for Research

There are thousands of digital tools for researchers to help you through your journey to find an interesting fact. Covering details of each tool is beyond the scope of this article. We have covered most important ICT products which helps you in exploring the literature, content curation, share data and code, connect with others, tools required for data collection & evaluation, writing and publishing the paper.

#1. Search Engine & Research Papers

Google/Bing/Yahoo and many other search engines help you to find useful and relevant contents. This also helps you to explore the millions of thesis and already published articles and keeps you up to date with the latest happenings in your area of interest. Below are important Online Tools to explore millions of research article across the globe.

- Google Scholar – Provides a way to broadly search for scholarly literature across disciplines and sources.
- Microsoft Academic Search – Find information about academic papers, authors, conferences, journals, and organizations from multiple sources.
- Science scope – Innovation in the exploration of papers and authors.
- Research Gate – Research Gate is the professional network for scientists and researchers. Over 15 million members from all over the world use it to share, discover, and discuss research.
- Bio-hunter – Portal with literature search, data statistics, reading, sorting, storing, field expert identification and journal finder.
- Edu -is a platform for academics to share research papers. The company's mission is to accelerate the world's research.
- SSRN – Multi-disciplinary online repository of scholarly research and related materials in social sciences.
- Deep Dyve- provides simple and affordable access to millions of articles across thousands of peer reviewed journals. Content from the world's leading publishers including Reed Elsevier, Springer, Wiley-Blackwell, and more.
- Wiki Journal Club – Open, user-reviewed summaries of the top studies in medical research.

#2 Shared Dataset & Code

- DataBank– Analysis and visualization tool that contains collections of time series data on a variety of topics.
- Google- Google periodically releases data of interest to researchers in a wide range of computer science disciplines.
- GitHub– Online software project hosting using the Git revision control system.
- Open Science Framework– Gathers a network of research documents, a version control system, and collaboration software.
- SlideShare– Community for sharing presentations and other professional content gov.uk-The British government's official data portal offers access to tens of thousands of data sets on topics such as crime, education, transportation, and health
- Gov- The USA government's official data portal offers access to tens of thousands of data sets gov.in-
- Open Government Data (OGD) Platform India – is a platform for supporting Open Data initiative of Government of India. The portal is intended to be used by Government of India
- Ministries/ Departments their organizations to publish datasets, documents, services, tools and applications collected by them for public use. It intends to increase transparency in the functioning of Government and also open avenues for many more innovative uses of Government Data to give different perspective.
- Code Ocean– Cloud-based computational platform which provides a way to share, discover and run published code.

- Peer Evaluation– Open repository for data, papers, media coupled with an open review and discussion platform. org offers open government data from US, EU, Canada, CKAN, and more.

#3 Connect & Communicate with experts and researchers

- Academia– A place to share and follow research and researchers.
- net – Online platform for professional networking and sharing of knowledge in life sciences.
- Open Science Framework– Gathers a network of research documents, a version control system, and collaboration software.
- Research Gate– Social network for researchers.
- Academic Joy– Sharing research ideas and story in research and innovation.
- Experiment– Crowdfunding Platform for Scientic Research.
- Linkedin- Connect with people in your area of interest.
- Thinkable– Platform to mobilize knowledge and fund breakthrough ideas.
- ScienceOpen– Freely accessible research network to share and evaluate scientic information.
- Communication tools– web-ex, skype, TeamViewers, anywhere,

#4 Free Digital Library

- The National Digital library of India is a project under the Ministry of Human Resource Development, India. The objective is to integrate several national and international digital libraries in one single web-portal. The NDL provides free access to many books in English and the Indian languages.
- Internet Archive is a non-profit library of millions of free books, movies, software, music, websites, and more. The Internet Archive offers over 12,000,000 freely downloadable books and texts. There is also a collection of 550,000 modern eBooks that may be borrowed by anyone.
- The Ministry of Human Resource Development (MHRD), Government of India has launched a National Repository of Open Educational Resources (NROER). The development of it has been a combined effort of the Department of School Education and Literacy, Ministry of Human Resource
- Development, Government of India, the Central Institute of Educational Technology, National Council of Educational Research and Training and Metastudio, which is the platform that hosts the Repository.
- The ultimate goal of the Open Library is to make all the published works of humankind available to everyone in the world. While large in scope and ambition, this goal is within our grasp. Achieving it will require the participation of librarians, authors, government officials and technologists.
- ManyBooks provides free e-books for your PDA, iPod or eBook Reader. You can randomly browse for an ebook through the most popular titles, recommendations or recent reviews for visitors. There are 21,282 eBooks available here and they're all free!
- Get Free E-Books is a free ebooks site where you can download free books free. All the ebooks within the site are legal downloadable free ebooks.

#5 Simulation/Lab and project management

- Internet of things is coming to laboratories and connecting instrumentation to the internet allowing us to perform experiments from anywhere in the world.
- Virtual Labs project is an initiative of the Ministry of Human Resource Development (MHRD), Government of India under the aegis of National Mission on Education through Information and Communication Technology (NMEICT). This project is a consortium activity of twelve participating institutes and IIT Delhi is coordinating institute. It is a paradigm shift in ICT-based education. For the first time, such an initiative has been taken-up in remote-experimentation.
- Lab Suit– Inventory Management, orders Management, materials Trade-In, price Comparison.
- Life technologies Lab Management Tool – Management tool for lab equipment and services.
- LiveLabSpace– Collaborative research tool that lets you plan experiments, replicate outcomes and generate research papers.

#6 Write & publish research papers

Various online available writing tools are the needs of researchers. Tools are required to store and manage references, collaborations across labs and continents, collaborative writing tools & track of the modifications done by others to the manuscript.

- CitationStyles – Find and edit CSL citation styles.
- Papers – helps you collect and curate the research material that you're passionate about.
- Zotero – helps you collect, organize, cite, and share your research sources
- Draft – Version control and collaboration to improve your writing.
- Typewrite – A simple, real-time collaborative writing environment.
- ScienceOpen – Freely accessible research network to share and evaluate scientific information.

ICT in Research Sponsored by Govt. of India

- India has been ranked 121st among 157 countries in terms of progress in the realm of information and communication technology (ICT) in a newly-released report of the International Telecommunication Union (ITU), which makes an annual assessment based on a wide range of parameters and data
- National Mission on Education through ICT (NMEICT) is a major initiative of the Govt. of India in this direction intending to leverage the potential of ICT in providing high quality personalized and interactive content, free of cost, to all the learners.
- The National Mission on Education through Information and Communication Technology (ICT) has, under its aegis, created Virtual Labs, Open Source and Access Tools, Virtual Conference Tools, Talk to Teacher programs, a Non-Invasive Blood Glucometer and also for simulated lab experiments, a Di. Electric frequency shifts the application development of resonator for low-cost oscillators.
- This being a truly multi-disciplinary effort, its success will entirely depend on good teams in technological and knowledge content areas. For the technological part, NIC and its various collaborators have to come forward as a strong and committed team

whereas, for the knowledge content part, various institutions under the Ministry of Human Resource Development (MHRD) worked as a catalyst to the occasion.

- So far, institutions like IITs, IIMs, NITs, Central Board of Secondary Education (CBSE), Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), National Institute of Open Schooling (NIOS), Indira Gandhi National Open University (IGNOU), All India Council for Technical Education (AICTE) and National Council of Educational Research and Training (NCERT) have been actively participating.

ICT and Governance
Introduction

- The "e" in e-Governance stands for 'electronic'. Thus, e-Governance is basically associated with carrying out the functions and achieving the results of governance through the utilization of ICT (Information and Communications Technology).
- In this century where almost everything has been made electronic like e-commerce, e-service, e-learning, etc. the Indian government is also trying to go with the wave and wants to govern through ICT. E-governance needs the help of ICT services to achieve their objective anytime and anywhere. It eliminates the need of physical travel by citizens to various government offices in order to get their work done.
- The major objective of e-governance is to support and simplify governance for all the government agents, citizens and businesses.
- E-governance also means e-democracy where all forms of communications between the electorate and the electoral happen electronically or digitally.
- Heads up! You can also refer other ICT topics based on latest UGC NET Exam syllabus
- ICT: General abbreviations and terminology.
- Basics of Internet, Intranet, E-mail, Audio and Video-conferencing.
- Digital initiatives in higher education.

Background

India is country of villages and for overall prosperity, growth and sustainable development ,ICT and Governance play a key role not only in terms of e-Governance models to demonstrate the key changes we see in the services for healthcare, education, banking, mobility, agriculture and other allied fields but also to keep country on the path of development in emerging competition on various fronts from other countries.

About ICT and Governance

The term e-governance focuses on the use of new ICT by governments as applied to the full range of government functions. Thus e-governance is the application of information and communication technology for delivering government services, exchange of information, communication, transaction, integration, various stands alone systems and services between government and citizens, government and business as well as back office process and interaction within the entire government frame work.

ICT acts in speeding up the flow of information and knowledge between government and citizen and transforming the way in which government and citizen interact.

Types of Government Interaction in e-governance.
1. G2G: Government to Government
2. G2C: Government to Citizen
3. G2B: Government to Business
4. G2E: Government to Employee

Some important Initiatives in the fields of E-governance

G2G: Government to Government	Aimed at efficient file routing, quick search and retrieval of files and office orders, digital signatures for authentication, forms and reporting components etc. ★ e-office project of central government for file movement across the departments
G2C: Government to Citizen	The goal of government-to-customer (G2C) e-governance is to offer a variety of ICT services to citizens in an efficient and economical manner, and to strengthen the relationship between government and citizens using technology ★ CSC(Scheme to deliver various services to Citizen of India) ★ Bharat Bill Pay(One Stop Bill payment System) ★ Passport Seva Kendra ★ PAN(NSDL & UTI Services) ★ E-District (Various certificates/licences, social welfare scheme, RTI, Land registration, etc) ★ EPIC(Election Commission services) ★ IRCTC ★ e-Panchayat ★ e-Court Mission Mode Project (MMP) ★ NTA- National Testing Agency ★ National Agriculture Market (eNAM) And many more...

G2B: Government to Business	Refers to the conduction through the Internet between government agencies and business companies. ★ MCA- All Business relates needs & requirements for Company ★ e-tender ★ GST ★ e-Biz Mission Mode Project ★ E-Gem(Government e Marketplace) ★ Government Online Procurement Portal And many more...
G2E: Government to Employee	Government to Employee solution is about empowering their own employees to assist citizens in the fastest and most appropriate way, speed-up administrative processes, and optimize governmental solutions. ★ Pradhan Mantri Rojgar Protsahan Yojana ★ The EPF-EPS model- EPFO & provident funds

Benefits
1. Increases accountability
2. Increases transparency
3. Higher availability of public domain information
4. Reduces corruption
5. Higher penetration due to automation
6. Increases efficiency due to connectivity

Initiatives under NeGP
- State Wide Area Networks – connect all state
- State Data Centres – host Govt apps
- Common Services Centres – internet enabled centres at district level
- Electronic forms through state portal – download forms & submit applications
- Capacity Building – implementation from city to village

- E-District – provide district administration services by web services like right to information, social welfare, ration card, birth & death certificate etc.
- Citizen engagement – deep awareness of project

- Deliver all Govt services in electronic mode so as to make Govt process transparent, citizen centric, efficient and easy accessible
- Create sharable resources for all Govt entities
- To deliver both information & transaction of Govt services over mobile
- Build shared service platforms to accelerate e-Gov project implementation
- To strengthen & improve existing project through innovation and infusion of advanced technology
- To promote ethical use of technology & data and create safe & secure cyber world
- To create ecosystem that promotes innovation in ICT for governance & for applications that can benefit the citizens Ø To better target welfare schemes of central & state Govt
- To increase all round awareness & create mechanism that promotes & encourages citizen engagement
- To make available as much data as possible in public domain for productive use by citizens
- The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.
- The focus is on being transformative – to realize IT + IT = IT
- The focus is on making technology central to enable change.
- It is an Umbrella Programme – covering many departments.
- It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them is seen as part of a larger goal.

1. Each individual element stands on its own. But is also part of the larger picture.
2. It is coordinated by DeitY, implemented by the entire government.
3. The weaving together makes the Mission transformative in totality

The Programme:
1. Pulls together many existing schemes.
2. These schemes will be restructured and re-focused.
3. They will be implemented in a synchronized manner.
4. Many elements are only process improvements with minimal cost.
5. The common branding of programs as Digital India highlights their transformative impact.

Nine Pillars of Digital India
1. Broadband highways – To support Broadband for all Rural, Broadband for all Urban & National Information infrastructure by DoT & DeitY
2. Universal access to mobile connectivity- For providing coverage to uncovered villages with mobile connectivity
3. Public internet access programme- This has two important sub components

a. CSCs- Aims to cover each gram panchayat to provide delivery of e-services to the citizens

b. Post-Office- To be converted into multi service centers

4. E-governance – reforming government through technology

a. Online applications and tracking – Online applications and tracking of their status should be provided.

b. Online repositories – Use of online repositories e.g. for certi_cates, educational degrees, identity documents, etc. should be mandated so that citizens are not required to submit these documents in physical form.

c. Integration of services and platforms – Integration of services and platforms e.g. Aadhaar platform of Unique Identity Authority of India (UIDAI), payment gateway, Mobile Seva platform, sharing of data through open Application Programming Interfaces (API) and middleware such as National and State Service Delivery Gateways (NSDG/SSDG) should be mandated to facilitate integrated and interoperable service delivery to citizens and businesses.

5. Ekranti – electronic delivery of services- There are 44 Mission Mode Projects under e Kranti programme. These mission mode projects are grouped into Central, State and Integrated projects.

6. Information for all- Open Data platform, Social Media Engagement and Online Messaging

7. Electronics manufacturing- promoting electronics manufacturing in the country with the target of NET ZERO Imports by 2020.

8. IT for jobs- This pillar focuses on providing training to the youth in the skills required for availing employment opportunities in the IT/ITES sector.

9. Early harvest programmes- Early Harvest Programme basically consists of those projects which are to be implemented within short timeline. Such as Biometric attendance, Wi-Fi in public places, secure email, SMS based alerts.

Important Key Points to remember

The National e-Governance Plan (NeGP) has been formulated by the Department of Electronics and Information Technology (DEITY) and Department of Administrative Reforms and Public Grievances (DARPG) in 2006.