**Q.1. [CLO1-GA2, C1] [10 Marks]**

**State the ways the computer/IT has impacted the world. Include both positive changes and negative change?**

**Answer:-**

Computer and information technology have significant impact the world by transforming how we communicate, work and access information. They have made global communication instantaneous, enabling people to access distance effortlessly and many more. It has both positive and negative affects.

* Its positive changes are:

1. **Communication:-**

The advent of computing and information technology has revolutionized communication, making it faster, more efficient, and accessible than ever before. Instant messaging and video conferencing have bridged geographical gaps, allowing people to connect in real time, regardless of location. Social media platforms have created vibrant spaces for sharing ideas and fostering communities, enabling diverse voices to be heard on a global scale. Additionally, advancements in cloud computing facilitate seamless collaboration, empowering teams to work together on projects from anywhere in the world. Overall, these changes have enriched interpersonal relationships, enhanced productivity, and democratized information sharing, leading to a more interconnected and informed society.

1. **Information Access:-**

The evolution of computing and information technology has dramatically transformed access to information, making it more abundant and readily available than ever before. With just a few clicks, individuals can tap into a vast array of resources, including academic journals, news articles, and educational materials, fostering lifelong learning and informed decision-making. Search engines and online databases have streamlined the process of finding relevant information, enabling users to uncover insights that were once difficult to access. Moreover, digital platforms have made it possible for marginalized voices and niche topics to gain visibility, enriching the diversity of knowledge available. This enhanced access empowers people to engage with content that resonates with their interests, broadening perspectives and encouraging informed dialogue in our increasingly interconnected world.

1. **Health Improvement:-**

Computing and information technology have greatly improved healthcare by making it easier to access and share patient information. Electronic health records (EHRs) help doctors quickly find medical histories, reducing mistakes. Telemedicine allows patients to see doctors from home, making healthcare more convenient. Data analytics enable personalized treatment plans for better results. Health apps and wearables help people track their health, encouraging preventive care. Overall, these advancements are making healthcare more efficient and patient-focused.

1. **Economic Growth:-**

Computing and information technology have boosted economic growth by creating new jobs and industries. Businesses can operate more efficiently with digital tools, reducing costs and increasing productivity. E-commerce allows companies to reach customers all over the world, expanding their markets. Technology also fosters innovation, leading to new products and services that meet changing needs. Overall, these advancements help economies grow by driving development and improving competitiveness.

1. **Automation and Efficiency:-**

Computing and information technology have made automation a key part of many industries, improving efficiency and productivity. Machines and software can now handle repetitive tasks quickly and accurately, freeing up people to focus on more complex work. This leads to faster production times and fewer mistakes. Automation also helps businesses save money by reducing labor costs. Overall, these changes allow companies to operate more smoothly and deliver better products and services.

* Now let discuss some negative affects:

1. **Job Displacement:-**

Computing and information technology have led to job displacement in many industries as machines and software take over tasks that people used to do. This can result in workers losing their jobs, especially in fields like manufacturing and data entry. Many people find it hard to adapt to new technologies, which can make it difficult for them to find new employment. Additionally, the shift towards automation can create a skills gap, leaving some workers unprepared for available jobs. Overall, these changes can lead to economic challenges for individuals and communities.

1. **Privacy Concern:-**

Computing and information technology have raised serious privacy concerns for many people. With so much personal information shared online, there's a higher risk of data breaches and identity theft. Companies often collect and store data without clear consent, making it hard for individuals to control their own information. Surveillance technologies can invade people's privacy, tracking their movements and activities without their knowledge. Overall, these changes can make people feel vulnerable and less secure about their personal data.

1. **Mental Health Issues:-**

Computing and information technology have contributed to mental health issues for many people. Increased screen time can lead to feelings of loneliness and depression, as online interactions often replace face-to-face connections. Social media can create pressure to present a perfect life, leading to anxiety and low self-esteem. Additionally, constant notifications and digital distractions can make it hard to focus and relax. Overall, these changes can negatively impact people's mental well-being and quality of life.

1. **Security Threats:-**

Computing and information technology have increased security threats for individuals and businesses. Cyberattacks, like hacking and phishing, have become more common, putting personal and financial information at risk. Malware can infect devices, causing data loss and damaging systems. Additionally, the rise of online scams can trick people into giving away sensitive information. Overall, these security threats make it harder to protect personal data and can lead to significant financial and emotional stress.

1. **Environmental Impact:-**

Computing and information technology have had negative environmental impacts. The production of electronic devices uses a lot of resources and energy, contributing to pollution. E-waste, or discarded electronics, often ends up in landfills, releasing harmful chemicals into the soil and water. Data centers that power the internet consume large amounts of electricity, increasing carbon emissions. Additionally, constant updates and upgrades lead to more waste as old devices are replaced. Overall, these factors harm the environment and contribute to climate change.