**ICT Essay**

**LAYOUT**

* Introduction
* Definition of ICT
* Aspects of ICT
* Impacts on private life
* Impacts on public life
* Developments
* Issues
* Health and Safety Act
* Freedom of Information Act 2014
* Data Protection Act 2018
* Conclusion

Remember this is an essay. There are should be no bullet points, it should be free flowing, no headings, written in paragraphs, excellent spelling and grammar.

**INTRODUCTION**

Start with an introduction to your essay – Tell the reader what your essay is going to cover

**DEFINITION**

WHAT is ICT – its definition – explain it is an umbrella term and all it means. Do research and be able to quote and then include in your bibliography

**WHAT ARE THE ASPECTS**

* Hardware
* Software
* Devices
* Apps
* Telecommunications - VOIP Voice over IP etc
* Computing
* Technology
* Audio Visual

1. Telecommunications - Social media, text messaging, mobile phones, facebook, Instagram
2. NETFLIX, Amazon prime, on demand tv, recording programmes, ipods, sky online, virgin media
3. Computing - Use of tablets, laptops rather than just PCs
4. Devices - Gaming technology
5. Apps – gaming and ?
6. Banking Apps -Online banking – current accounts, apply for loans etc
7. Passports – apply online for passports
8. Monitoring my house alarm, switching heating, lights
9. Online revenue returns and other
10. CAO, college applications
11. Booking appointments, setting up accounts
12. Search engines – googles etc
13. Learning and Education – doing assignments, roll calls, sharing info
14. Businesses – process efficiencies
15. Security –data etc of personal and business
16. Hardware – quicker, smaller, more affordable
17. Software – more available, more accessible, cheaper, more reliable
18. Programming – binary, java, python, etc
19. Audio Visuals – hardware like tv and radio versus apps, Bluetooth earphone, handsfree capabilities,

**IMPACTS on private life**

1. Improves communication between family member living a distance apart
2. Apps / devices for health such as blood pressure monitoring, diabetes monitoring,
3. Fitness apps,
4. Search engines for healthy lifestyle – information access, realtime
5. Whatsapp groups family or friends
6. Obesity – lack of exercise as consumed by technology
7. Depression – antisocial species, lots of time spent solely / alone using technology
8. Online therapy, access to lots of self help books or tutorials etc
9. Bullying and harassment – keyboard warriors, cyber bulling
10. False impression of daily life – perfect bubble – is it real?
11. On demand tv – good and bad – get to watch what I want but also anti social
12. Online banking – do so much from home, don’t need to spend the time travelling
13. Big Brother is watching – amount of data on my consumer behavior
14. Bullyng and harassment, anonymous keyboard warriors
15. Exploitation of children through chat sites
16. Spotify, Netflix, snapchat, Instagram Youtube
17. Alexa, Google Home
18. Playstation, Nintendo
19. Circuit tv, security cameras
20. Fridges, cookers, dishwasher
21. ***Remember to discuss the IMPACTS*** of all the above points such as efficiency, cost saving, safety, entertainments

**IMPACTS ON PUBLIC LIFE**

1. Look at slides p.34 <http://www.ictlounge.com/html/effects_of_ict_on_society.htm>
2. Online banking etc – our interaction with Public can be done remotely through an App
3. Business uses – Word processing, automation and storage, business efficiency,
4. Replacement of staff, new skill sets needed
5. Icloud technology – ability to store and share but also be hacked
6. Hacking of online accounts, information being stolen
7. Viruses – contamination of data – think medical records, air traffic control
8. NASA
9. Farming and agricultural changes
10. Propaganda – media depicting real and false information, manipulation by Governments, Marketing companies, Organisations that might manipulate information in the public (Pharma Industry)
11. Internet availability and use
12. Business – Intranets
13. Supply Companies, Service Providers – we no longer know the customer e.g. local bank manager – customer relationships are not strong
14. Big Brother is watching
15. Online application – CAO, Passport
16. ***Remember to discuss the IMPACTS*** of all the above points such as business efficiency, business cost saving, time saving, safety, entertainments, icloud and storage, data sharing

**CURRENT ISSUES**

1. Hacking
   1. There is a hacker **attack every 39 seconds**.
   2. Russian hackers are the fastest.
   3. **300,000 new malware** is created every day.
   4. **Multi-factor authentication and encryption** are the biggest hacker obstacles.
   5. You can **become an American citizen for $6,000**.
   6. The average cost of data breaches will be **about 150 million in 2020.**
   7. The cybersecurity budget in the US is **$14.98 billion**.
2. Online bullying
   1. Children on chatroom
   2. Children bullied through school friends
   3. Banks hassling customers for repayments
   4. Employers harassing employees after hours or while on holiday or while out sick
   5. Politicians
   6. Propaganda
3. Viruses
   1. Smaller viruses affecting personal use and pcs
   2. Larger scale viruses affecting companies and industries
   3. Shut an industry down, screw up all the data
4. Data protection and privacy
   1. Icloud – who has access?
   2. Data breaches – data being released to wrong people
   3. Sharing of consumer data between organisations
   4. Spam
   5. Data feeds / ads that appear on apps I use – how do they know what I’ve clicked into?
   6. Companies only allowed to talk to the account holder but is it full proof ? Fraud
   7. Look at the example of Facebook and how they were using your data
   8. hacking, fraud,
   9. cyber bulling,
   10. cybercrime,
   11. dark world (paedophiles etc). Hidden areas for crime to be conducted and anonymous
   12. Issues with cyber currency – falling values, non supported
   13. Data breaches
   14. Viruses
   15. Costs
   16. Ever changing so tech becomes obsolete very quick
   17. False information and propaganda
   18. Intellectual property rights when someone develops something – who owns it and how can you prove it and protect it?

**CURRENT DEVELOPMENTS**

1. Enhancements to mobile technology such as the importance of cameras and pixels etc versus original functionality of phones for talking – phones are multi functional devices
2. Smart TVs –
3. Replacement of traditional tv programmes with Netflix and Disney Plus and Amazon Prime
4. Books replaced with online books / ebooks – pdfs
5. Integration of technologies such as Apple now using Microsoft Office
6. PCs replaced by laptops, replaced by tablets – all to be replaced by phones?
7. VR Headsets – accessible to all people
8. Self driving cars
9. Robotic developments
10. ATMS and online payments- SEPA technology - we are moving from cash?
11. AI – Artificial Intelligence
12. GPS and coordinates
13. Drone technology – used in military, for fun, for commercial use
14. bomb disposals cameras and technology
15. Movies and animation
16. Cyber currency

**Health & Safety legislation**

* P28, P29 of your slides
* think of issues in relation to safety with technology,
* VDU/screen issues,
* cable and wires causing falls,
* how to work safely with technology and computers,
* overloading power sockets
* proper training to be given
* proper PPE where necessary
* adequate space around machines
* Server rooms at correct temperatures
* No food and drinks near equipment
* Correct lighting so no glares

**Understanding of relevant Communications legislation**

* Data Protection act (Ireland) 2018
  + It incorporates 1988 and 2003 acts
  + GDPR – a European wide piece of legislation
  + Looks at Digital age of consent
  + They provide for higher standards of data protection for individuals
  + Impose increased obligations on organisations that process personal data.
  + They also increase the range of possible sanctions for infringements of these rules.
* Freedom of Information Act (Ireland) 2014
  + The FOI Act provides, that from the effective date, every person has the following legal rights:
  + the right to access official records held by Government Departments or other public bodies as defined by the act.
  + the right to have personal information held on them corrected or updated where such information is incomplete, incorrect or misleading;
  + the right to be given reasons for decisions taken by public bodies that affect them.
  + Regulations provide that parents, guardians and next-of-kin may apply to exercise these rights in certain circumstances.
  + These rights mean that people can seek access to personal information held on them no matter when the information was created, and to other records created after the effective date.

**CONCLUSION**

* Summarise what you have told your reader already.
* No new information to be introduced at this stage
* It’s the bow that wraps it up, that ties up all the points