

# **1.5.2**

## **ETHICAL, MORAL AND CULTURAL ISSUES**

### **TOPIC WISE EXAM QUESTIONS**

**A-LEVEL**

**OCR**

- a) The individual (moral), social (ethical) and cultural opportunities and risks of digital technology:
- Computers in the workforce
  - Automated decision making
  - Artificial intelligence
  - Environmental effects
  - Censorship and the Internet
  - Monitor behavior
  - Analyse personal information
  - Piracy and offensive communications
  - Layout, colour paradigms and character sets.

In order to prepare for this section we would recommend candidates regularly keep abreast of technological developments in the news.

Candidates need to understand what is meant by moral, social, ethical and cultural issues in relation to the use of computers.

Candidates need to understand how the use of computers, and the increasing use of computers in the work force has moral, social, ethical and cultural implications and risks to a variety of people such as the employees, employers, society and organisations.

Candidates need to understand how the use of computers to make decisions automatically has moral, social, ethical and cultural implications and risks to a variety of people such as those people who make the decisions, the people the decisions affect, and the need for additional collection of information to ensure the decisions are accurate and valid.

Candidates need to understand how the development of artificial intelligence has moral, social, ethical and cultural impacts on a variety of people.

Candidates need to understand how the environmental effects of computers (such as disposal, energy use) have moral, social, ethical and cultural implications.

Candidates need to understand how the Internet and censorship on the Internet has moral, social, ethical and cultural implications.

Candidates need to understand the moral, social, ethical and cultural implications of using computers to monitor behaviour (such as CCTV, tracking phone calls, GPS, monitoring emails).

Candidates need to understand the moral, social, ethical and cultural implications of using computers to analyse personal information (such as the gathering, storing and analysing of medical records)

Candidates need to understand how different cultures impact on the use of and creation of computers and programs. For example languages make use of different characters, and how this in turn impacts the use of character sets. Some languages read left to right, and others right to left. Candidates should understand how colours have different meanings in different cultures for example red means danger in one culture, and luck in another. Candidates need to consider how these will impact the creation of computer applications.

4\* Amit is studying Computer Science at university. He has been asked to write an assignment on Artificial Intelligence (AI).

Discuss the extent to which you think computer systems will inherit the biases and discrimination of their programmers as the use of AI increases.

You should include the following in your answer:

- the meaning of AI
- examples of when AI may be affected by bias
- the measures that can be taken to prevent people being affected by bias in AI.

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**If you found this  
useful, drop a follow  
to help me out!**

**THANK YOU!**

**GCST**