Emerging trends:   
What if I am asked to talk about new technologies? What can I talk about?

Questions you could be asked – Discuss, evaluate = you need the information available in order to answer these questions.

**What are they? - Real world applications? - Moral and cultural issues? – The potential of the technology in future?**

|  |
| --- |
| **Nanotechnology**  **What is it? How might it work?**  **What can it be used for generally? Give examples of how it has been used in the real world?**  **How can it be used in the field of computing?** |
| **Artificial Intelligence**  **What is it?**  **Why is it so difficult to get right – what are the challenges?**  **Are there any examples of when its worked well?**  **Can you explain the uses in:**  ***Game / simulation playing – deep blue chess playing***  ***Expert systems – making real life decisions (diagnose diesease based on symptoms)***  ***Natural language – google translate***  ***Neural networks – trying to reproduce connections and processes in the animal brain***  ***Robotics – sensor – kernel - actuator***  **What uses might there be in the real world?**  **What are the most common moral and ethical issues that AI raises?** |
| **DNA computing**  **What is it? How does it work? Does it work? Is it still more theoretical than practical? What are the potential uses in society?**  **Why is this substance suitable for use in computing? How might it work?**  **What possible moral and ethical issues are there with DNA** |
| **Computational models**  **What are the three computational models types?**  **What do they look like? When are you likely to use each particular method? Can you give examples of when they are used?** |
|  |
|  |
|  |
|  |