Answers

1. In the past, most people obtained music by purchasing individual Compact Discs (CDs). Most people now obtain music via the Internet. One method of to do this is to stream the music.

(a) Explain **three** advantages for using a streaming service to listen to music. [6]  
  
Users can have access to millions of songs (1) without needing to have storage   
space for all of them (1) Users do not need to pay for lots of CDs to build a collection (1) as all songs are available as soon as they subscribe (1) Users can gain access to songs within seconds,(1) whereas purchasing a CD requires going to a shop or waiting for a delivery (1) Shops often are out of stock of CDs (1) whereas streaming services have access to a much wider selection (1) Streaming services can learn what music you listen to (1) and then recommend alternative tracks you may like (1) (by looking at what other users like/using big data)

(b) Explain **two** disadvantages of using a streaming service to listen to music. [4]  
  
The customer typically only licences the music for a month. (1) If they stop subscribing, they lose access to all their music. (1) For some people who only listen to a few tracks or albums, the services are often expensive (1) as you are paying for access of libraries of millions of songs (1) In order to stream songs an Internet connection needs to be present (1) without this no music will be available (unless cached) (1)

2. North Eastern Academy teaches students from 11 to 18 in a modern, purpose-built building. It was designed to make use of the latest technology for both teaching and learning, administration and communication.  
  
Analyse the use of technology and digital devices in schools. [10]  
  
Teaching and learning technologies  
  
Interactive whiteboards – display images, video, text quickly rather than the teacher writing; saves printing costs; they cost money and many teachers only use the projector component not the expensive interactive component  
One per computer per child in IT classrooms and other subjects that require it. Allows students more opportunity to practice IT skills and software or skills that industry uses. May limit how students work collaboratively  
One laptop/device per student allows students to use their devices in different lessons and take them home to continue learning. Availability of devices is more inclusive to those on lower incomes if certain schemes are set up by the school  
VLEs/learning platforms allow students to submit work/get feedback from the teacher electronically. This means that it is harder to lose homework and clearer which students have completed it. Feedback can be sent and received immediately by student significantly reducing delays. Such technologies can require usernames/passwords and staff and students to learn how to use the systems. If not used regularly enough they can become unproductive. The systems also may enable the auto marking of quizzes which can provide instant feedback to students and reduce the workload on teacher marking. However, they may increase preparation time for the teacher if they have to set up such activities.  
  
  
  
Administration and communication technologies  
  
Students can be registered electronically which means details are in a database and can be accessed by other staff. These other staff can monitor absences for individual students or across the school. It may be easier with an electronic method for a teacher to make obvious mistakes such as marking a whole class absent compared to a paper method. Also, if technology is not working teachers may need to return to a paper record.  
Admin staff can email newsletters and reports home giving faster communication with parents and saving paper. Some parents may prefer paper communication as they may forget to update email addresses and emails may be lost by spam filters.  
Students and parents can make booking at parent’s evenings via online systems. This makes it easier for parents to arrange bookings without relying on their child. It is also fairer in that those parents who are first will have more available places. Some parents may not have access to the Internet and so there may be inclusion issues.  
  
The above suggestions are not exhaustive. There is no requirement for a conclusion in ‘Analyse’ questions. Answers such as MOOCs are unlikely to be appropriate for the scenario as they are used by many students (hence massive in the title). However, if described well – e.g. a class of students has joined a MOOC with many other students in it, then this would be appropriate.

| **Level** | **Mark** | **Descriptor** |
| --- | --- | --- |
| Level 0 | 0 | No rewardable material. |
| Level 1 | 1-3 | Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.  Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario. |
| Level 2 | 4-7 | Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.  A consideration of relevant issues using logical chains of reasoning but does not reflect upon their relative importance to the given scenario. |
| Level 3 | 8-10 | Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.  A balanced and wide-ranging consideration of relevant issues, using coherent and logical chains of reasoning that shows a full awareness of their relative importance to the given scenario  Carefully considers the various elements of the question. |