1. **What is CCD, Charge-Coupled Device, in digital camera systems?**

* The device of Movement of Electrical Charge to an area where the charge can be manipulated and converted into digital values.

1. **Briefly discuss the three analog video transfer methods: Component Video, S-Video, and Composite Video. Which gives the best and which gives the worst quality.**

* **Component Video** that has a video signal at split into 2 or more channels, refers to as component analog video information and stored as 3 different signals. This Component Video transfers the best quality.
* **S-Video**: signal standard for standard definition video, it has multi-colour signal cable (mainly black, white, yellow and red) and since it can transfer more channel than possible, it achieves better quality than component videos signal. It typically supports at 480i and 576i.
* **Composite Video**: known as analog video transmitter that carries standard definition video in a signal channel. Since it can only transmit via 1 channel, it has a limited quality to display. Typically, it supports up to 480i or 576i. This Composite Video transfer the worst video

1. **Briefly explain what are interlacing and progressive scan technologies.**

* **Interlacing**: a technique for doubling the perceived frame rate of a video display without consuming extra bandwidth. This enhances motion perception to the viewer and reduces flicker by taking advantage of the phi phenomenon.
* **Progressive**: format of displaying, storing, or transmitting moving images in which all the lines of each frame are drawn in sequence

1. **What is the resolution of the monitor?**

* Contain a distinct number of pixels in each dimension that it can display. a 1080p monitor or 1920x1080 will have 1920 pixels in length and 1080 pixels in width.

1. **Sort video quality from high to low (using > to denote higher than) for the following resolution: 1080p, 1080i, 720p, 480p, 480i.**

* 1080p > 720p > 1080i > 480p > 480i

1. **Video file format involves two concepts.**

* **What are they?** Usually, come in forms of .mp4 (universal) or .avi (mobile)
* **Briefly explain each of them**.
* **.mp4** contains video and audio, the file is in lossless format and easy to edit since it can have multiple subsequent edits and won’t lose the quality. It’s also an ideals format for recording.
* **.avi** is the oldest and most compatible format at the moment, besides **.mp4**. It allows you to select in between the video quality and size and therefore it is good to send a low-quality video to an old phone or a high-quality video to a modern phone.
* **Which of these two determines the quality of the video?**
* Codecs determined the quality of videos
* **When people mention.MOV file or.AVI file, which concept (from the above two) do people mean?**
* It means the files are in good quality compared to the other video format type and they also have a larger size than other

1. **You are going to create a promotional video for Assignment 2. As preparation, please research the general guidelines for steps in film making. You will find different ways telling how many steps. Use your judgement, describe 7 general steps in film making. Please offer a bit of detail showing you understand what you need to do in film making.**

* **Development**: Understand all the videos file format and determine which to use and Determine the script as well as the content for the video.
* **Pre-Production**: Finalize the planning, understand what to do at the scene.
* **Production**: Get the team to understand that plan and understand their individual roles.
* **Principal** **Photography**: Stick with the plan, only make adjustments when really necessary, take a good picture
* **Wrap**: Finalize the recording session, wrap-up all the materials as well as scene and picture
* **Post-Production**: Merge videos together, make some effects and improvements, render the video
* **Distribution**: share the video publicly to get more attention.