GCSE Component 1: Critical Understanding of Creative and Technical Moving Image Production

Section C
Creative Production, Management and Industry Contexts

About the examination

Component 1 is a **1 hour 30 mins** online, computer-based examination that is worth **40%** of your final grade.

The examination features:

- Unseen audio clips, still images and short film sequences.
- Questions that assess knowledge and understanding of film language, practices, techniques and contexts.
- Questions that require analysis and evaluation of film language, audience and purpose.
- Questions that assess creative and production management skills.

The examination is divided into three sections:

Section A: Film Language, Genre and Representation: 5 minutes viewing time and 35 minutes writing (35 marks).

Section B: Comparative Analysis: 5 minutes viewing time and 15 minutes writing (15 marks).

Section C: Creative Production, Management and Industry Contexts: 30 minutes writing (30 marks).

Total: 80 marks

Examiner Tip: answer the sections in the following order:

1. Section B: 20 minutes
2. Section A: 40 minutes
3. Section C: 30 minutes

This booklet focuses on **Section C, Creative Production, Management and Industry Contexts (30 marks)** assesses, through factual recall and creative application, your knowledge and understanding of **creative film production** and **production management practices** in response to **unseen scenarios** and **creative tasks**.

Production Management

AO: Identify and explain the purpose of the following production documents:

Call sheet

- A call sheet is issued to the cast and crew of a film production.
- Call sheets include contact information for cast and crew, the schedule for the day, which scenes and script pages are being shot, and the address of the shoot location.
- Call sheets have information about cast transportation arrangements, parking instructions and safety notes.
- Call sheets may also provide logistical information regarding the location, such items as weather information, sunrise/sunset times, local hospitals, restaurants, and hardware stores.

Shooting schedule

- A **shooting schedule** is a plan of each day's shooting for a film production.
- A shooting schedule states when and where production resources will be used.

Props lists

- **A props list** itemises and details how and when each prop will be used on set.
- **Hand Props** are objects the actors carry.
- **Set Props** are objects placed in the scene, ready to be used by actors.
- **Personal Props** are items actors carry inside their costume(s) or wear, like pocket watches, keychains, pens or glasses.

Floor plans

- Floor plans are bird's-eye view diagrams of the set.
- The director adds icons that represent camera and lighting positions.
- Floor plans help the director to block out scenes.

Shot list

- A shot list is a document that lists and describes the shots to be filmed during principal photography.
- It is an essential document on set as the director refers to it to check all planned shots have been completed.

AO: Apply knowledge of production management techniques and organisational considerations to given scenarios

Designing Shot Lists. This question type is worth 10 marks and requires you to create a shot list from a short script extract. Here is an example question:

Study the short script extract below.

Create a shot list of **no more than 10 shots** based on the script. Draw on your knowledge of genre-appropriate techniques to make your shot choices.

Use the table provided to clearly identify each shot choice and describe the onscreen action.

```
FADE IN:

          INT. C-130 HERCULES TURBO-PROP - NIGHT

          Eighteen combat-ready special forces, wearing assault black,
          jump packs and combat gear, stare down the deep end of a
          greasy ramp into the night sky.  Village lights flicker
          19,000 feet below.

          The STRIKE FORCE LEADER signals to his team.

          Without a moment's hesitation, they dive into the darkness
          and plummet toward earth.

          EXT. MANSION - NIGHT

           A military GUARD, old Soviet-style uniform, rounds the
           corner of the large estate toting an AK-47.

          A red laser dot appears briefly on his forehead and, after a
          beat, the red dot seems to bleed.  The Guard collapses dead.
          Two other GUARDS are dispatched with single, silenced shots.

          A Strike Team member at a junction box awaits a signal.

          Through infra-red binoculars the strike Force Leader watches
          his assault troops as they take positions.

                         STRIKE FORCE LEADER
                       (into headset/in Russian)
                                GO!

          On the estate - as the power goes out.  The team on the
          mansion's front porch pops the door and pours in.
```

How to Answer the Question:

1. Read the scene.
2. Identify narrative tropes and genre codes (setting, character, narrative, iconography, themes, style).
3. Select and summarise key plot points.
4. Select and describe appropriate shot sequence.

Shot No	Shot Type (distance, angle, movement, length)	Shot Description – (**summary** of) action on Screen
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Mark Scheme

AO: Demonstrate knowledge and understanding of the legal considerations involved in producing a film in relation to artistic and third-party copyright and consent considerations (including work with children)

- In films, **intellectual property rights** exist not only for script, images, footage and music, but also for brand names, logos, fonts, texts and designs.

- In a professional context, if you want to use a film protected by copyright, you need to get permission from the copyright owner.

- In an educational context, copyright in the work is not infringed by a teacher or a student as long as the work is educational, non-commercial and the owner/creator is credited.

- Creative Commons work can be used freely. As long as the original creator(s) is credited.

Why Are Copyright Laws Important?

- Copyright laws protect any creation that is fixed in a recording medium -- whether paper, compact disc, film or digital. Copyright laws come into effect automatically when the author permanently fixes an original work on to a recording medium.

Control

- Copyright laws let creators control their works. By assigning exclusive rights to copyright holders, the laws ensure that only the originators and those who receive their permission can copy, perform or change the works.

Income

- Copyright laws ensure that the holders of the copyright can earn income from their work. Authors may either sell, rent or license their own works or give permission to others to use them and collect royalties.

Fair Use

- Copyright laws include **fair use** as a limitation on copyright.

- Members of the public may reproduce small sections of a copyrighted work for the purposes of criticism, teaching, commentary or research.

- Fair use is generally non-commercial, restricted to a small part of the work and limited to activities that do not substantially affect the commercial value of the work.

Infringement

- Copyright law defines what constitutes infringement and specifies the applicable penalties.

Working with Children.

- It is a legal requirement to obtain permission for any child under the age of 18 to be part of a production.
- A parent or guardian must sign a consent form.

Work and hours
- There are strict guidelines for the number of hours children can be on set and in front that camera, as well as minimum requirements for rest time and meal breaks.

Child protection and adult content.

- When working with children it is vital to shoot in such a way that the child does not witness or get involved with anything that is age inappropriate (sex, violence, etc).

Parents, chaperones and tutors.
- All children under the age of 18 should be accompanied by a chaperone, parent or guardian.

WARNING

The motion picture contained in this videodisc is protected under the copyright laws of the United States and other countries. This disc is sold for home use only and all other rights are expressly reserved by the copyright owner of such motion pictures. Any copying or public performance of such motion picture is strictly prohibited and may subject the offender to civil liability and severe criminal penalties. (Title 17, United States Code. Section 501 and 506)

AO: Demonstrate knowledge of the health and safety considerations when working on a film shoot and how to apply these.

Health and Safety
- Professional film crews take health and safety issues very seriously.
- All crew members have a duty of care which is recognised by law.
- As working in film production can be hazardous, it is important to conduct a Risk Assessment:

Risk assessment
- The way to stay safe is to look at each shooting set up or location individually and think of what exactly could go wrong.
- This is called a risk assessment.

Risk assessment three step process
- Identify all potential hazards
- Evaluate the risks
- Identify measures to control the risks and make a written record.

Precaution	Reason for precaution
Ensure no crew members are moving or lifting excessively heavy or dangerous objects.	Risk of physical injury to crew minimised.
When a camera operator or cast member is walking during a shot, make sure they can do so safely. For example, a camera operator who needs to walk backwards for a shot should have an assistant to guide him or her and/or check his or her route.	Risk of physical injury to crew minimised.
Shots from high up or near the edge of something.	Risk of dropping equipment on to cast or crew or crew member falling from a high place minimised.
Ensure that your location is a safe environment for filming in.	Shooting near a busy road, a river or in a busy industrial location may be dangerous.
If there is an evident danger, choose a different location.	This will minimise the likelihood of injury to cast and crew and reduce the likelihood of damage to equipment.
Ensure that the weather is safe to film in.	If the weather conditions are dangerous (e.g. too icy, too windy, too sunny or raining) there will be greater risk of injury to cast and crew and a greatly increased risk of damage to equipment.

Sunburn and heatstroke are potential outdoor hazards.	Make sure lots of water is available to drink. Ensure the crew is dressed appropriately.
Ensure that you have the correct permission to film in your location.	If you are filming in private property you will need the permission of the owner. If you are filming in public you will may need to seek certain permissions. You should confirm these with your local council and local police station.
If you are planning anything which a passer-by might mistake for a criminal action (e.g a simulated burglary or act of violence) it is important that you inform your local police station ahead of your shoot. You should also inform anyone in the vicinity of our shoot.	This will minimise the likelihood of disruption to your film shoot and will also minimise the potential for public alarm.
If using lights or mains powered camera equipment you must ensure that electrical cables are kept away from water.	Water be it from rain or proximity to any pools of water might cause electrocution or damage equipment.
A dangerous prop you should be rendered safe or replaced with a replica	If your film calls for a knife, use a theatrical prop or a real knife which has been professionally blunted.
Use of liquids and/or make-up effects	Acidic fake blood or special make-up applications which might cause harm to skin, or eyes should not be used. Flammable oil based liquids and compounds may pose a serious fire risk or leading to injury. To prevent falls, floors and surfaces should be kept clear of liquids.
Ensure lights and cameras are securely fitted to stands and or tripods.	This will ensure that lights and cameras do not fall from their stands during the shoot potentially harming members of your cast and crew and damaging equipment.
Ensure that lights are a safe distance away from your performers.	To ensure that there is no risk of injury from bright light or heat and to ensure that there is no risk of your performers knocking any lights over during the shoot.
Ensure that all electrical cables are taped down.	This will ensure that no cast or crew member can trip over the cables and hurt themselves or damage equipment.
Ensure that fire exits are not blocked.	To ensure that all members of the cast and crew have direct access off the set or location should a fire or other emergency occur.
Ensure that power sockets have not been overloaded.	to ensure that there is no damage to equipment, blown fuses, loss of power, fire and electric shock.
Ensure that hot lights are allowed to cool down before being moved.	to ensure no crew members burn themselves and to prevent equipment breakage

Stunts, fights and action

If your film shoot involves stunts or action, take steps to avoid unnecessary dangers. Typical hazards may include:

- Fire, heat, explosions or pyrotechnics
- Noise
- Moving vehicles or equipment
- Weapons
- Animals
- Water
- Confined spaces
- Projectiles and other debris
- Public or crew
- Falls from heights

Control measures, Communication, Rehearsal and Execution

- Determine safe working distances and exclusion zones.
- Wear necessary personal protective equipment (PPE).
- Ensure Emergency plans and arrangements for dealing with sequences that do not go according to plan
- Give specific responsibilities given to those directly involved in and managing or co-ordinating the sequence
- Adequate communication and co-operation is maintained throughout the shoot.
- Appropriate markings or warnings are provided/displayed on sets, scenery and props.
- The production crew are made aware of any significant health and safety issues.
- Adequate arrangements for managing and policing any exclusion zone.
- There should be agreed cuing systems to start and code words to immediately stop the action.
- All those involved in the sequence should be made fully aware of the control measures and emergency arrangements.
- Safety can be improved by rehearsing the action. Only essential personnel should be in the area.
- The stunt co-ordinator or fight arranger should have complete authority over the safety arrangements during the execution of the action sequence.
- The person supervising should have clear sight at all times of the action and immediate area and be able to communicate with all key players.
- High-risk areas such as design, construction, striking, special effects or visual effects are brought to the attention of all crew and cast.
- Sets, scenery and props are designed and tested for safety before their intended use.

Industry Practices and Contexts

AO: How does the mainstream Hollywood film industry currently produce, distribute and exhibit films?

Hollywood Distribution, Exhibition and Audience

Historical Distribution Model

- Major motion pictures released to cinemas.
- Films were distributed to cinemas on 35mm film reels. These bulky film reels were expensive to transport and could only be played on expensive projectors.
- Terrestrial TV screenings followed five years later.
- Home video introduced in late 1970s brought new exhibition window.
- This increase in consumer choice began with the rise of home video technology which enabled studios to release their product on videotape, allowing consumers to watch films in their own homes at the time of their own choosing.
- Video Rental Stores sprang up to facilitate this new business. Even then, however, VHS tapes of films remained expensive and were only sold to these rental outlets.
- By the end of the 1980's, however, distributors were also selling videotapes directly to home-viewers.
- The arrival of DVD in the late-1990's saw a massive growth in home video sales with the newer, more accessible and higher quality format winning over consumers. This market has shrunk but still endures with customers still willing to buy films on DVD or the newer high definition format, Blu-Ray.

Contemporary Cinema Distribution Model.

- Cinema release still most common first release window.
- Almost all film distribution is digital with films being delivered to cinemas on especially formatted hard drives knowns as Digital Cinema Packages or DCPs.
- The time delay between theatrical release and release on other formats has now much shorter. For example, Marvel's Avengers was released in cinemas in the summer of 2012 and was broadcast on terrestrial television in December 2014.
- As well as DVD and Blu-ray, there is now also a much greater variety of ways in which home audiences can watch films.
- Streaming video services are currently the newest and fastest growing means of distribution. Companies such as Amazon Prime, Netflix and Mubi charge customers a subscription fee. In return customers can watch dozens of films via their computers or via home viewing devices such as Smart TVs or tablets.
- Films are now also available on television before their first terrestrial broadcast through subscription or on demand television services, such as Sky Movies.

AO: What is the difference between studio and independent film production?

Hollywood Studio Production

- Hollywood studio production refers to a number of film studios and distributors based in Hollywood, California that produce big budget productions targeted at mainstream audiences and are distributed globally.
- Hollywood studios fund, produce and distribute their films to cinemas through their own distribution wings.
- Studio films are also sometimes shot on the sound- stages or studio backlots owned by the studio.

Independent Film Production

- Films made outside of the Hollywood studio system are referred to as Independent films.
- "Indie Cinema" is often used to describe these non-studio films.
- Usually filmed on lower budgets than studio movies, independent films may be independently funded by private investors or by smaller production companies.
- Independent films may deal with subject matter or themes not normally dealt with by studio films.
- Independent films may enter production without a distributor in place and with no guarantee of wide distribution. Some extremely low budget indie films do, however, manage to find wider distribution.
- For example, The Blair Witch Project was made on a micro budget but went on to make millions of dollars after it secured a global distribution deal.

AO: What are the main types of film funding body in the UK and Ireland?

Provide one example of each

- In the United Kingdom and Ireland there are a number of ways in which a film or TV project might be funded. More often than not a combination of sources are used to finance a project. These may include:

Funds from a Broadcaster or Studio:

- If a studio wishes to distribute a film or if a broadcaster wishes to eventually broadcast it on TV, they may fund some or all of its production costs in return for those rights.
- Most Hollywood films tend to be produced and distributed by a cluster of powerful well-known studios known the Big Six: Columbia, Warner Brothers, Disney, Paramount, Fox and Universal.
- In the UK, BBC Films and Chanel Four's Film Four division have both fully or partly funded dozens of feature films.
- Most recently, online streaming services, such as Amazon Prime and Netflix, now also

directly fund and commission the production of films and television series, which they then also distribute through their own platforms.

- Private Equity Investment: A producer may approach private investors in order to fund a project. These investors will then share in the profits of the film if it is financially successful.

Public Funding:

- In the UK the main public body responsible for this is the **British Film Institute**. There are also a number of regional and national film funding bodies which use public money to support and encourage film production. investing over £26m of Lottery funds per year to support film

- In Northern Ireland this role is fulfilled by **Northern Ireland Screen** who fund indigenous film production as well as offering logistical and financial support to foreign productions filming in Northern Ireland (e.g. the TV series Game of Thrones). In the Republic of Ireland **The Irish Film** Board fulfils a similar role.

Case Study: If we look at the films of director Tom Hooper, we can see a variety of models.

- His first feature film The Damned United (2009) was funded by BBC Films, the English regional film agency Screen Yorkshire and by Columbia Pictures, a film studio owned by the Japanese electronics company Sony. Sony, in return for their investment, retained distribution rights and the BBC retained the right to broadcast the film in the UK.
- His second feature film The King's Speech (2010) was funded by a mixture of private equity funding and money from the now defunct funding body the UK Film Council.
- His third feature film Les Misérables (2012) was funded by the British production company Working Title Films, the French production and distribution company Studio Canal, the American production company Relativity Media and the Hollywood studio Universal Pictures.

Regional/national film commissions

- **The BFI** (British Film Institute) is the UK's lead organisation for the cultural, creative and economic aspects of film, and is the UK's largest public investor in film. The BFI supports development, production, distribution, international sales, export, film heritage and education.
- **Creative England** offers a range of opportunities for film development and production in regionally based filmmakers and projects, which have a strong regional voice.
- **Northern Ireland Screen** offers funding for script, project and slate development for feature film, television and digital content production funding. Productions are required to spend a proportion of the total production budget in Northern Ireland.
- **BFI NETWORK** supports talent development of new filmmakers across the UK
- **iFeatures** is Creative England's low budget feature film initiative, supported by BBC Films, the BFI and Creative Skillset. The aim of the scheme is to support the development and production of low budget feature films, and to discover and mentor the next generation of filmmakers with a passion to tell stories rooted in the English regions.

Regional/national broadcasters

- **BBC Films** is committed to finding and developing new talent, collaborating with some of the foremost writers and directors in the industry.
- **Film4** is Channel 4's film production arm and invests £15 million annually in developing and financing films for theatrical release in cinemas, working collaboratively with filmmakers and usually in partnership with other funders.

AO: Explain the roles and responsibilities of the following film professionals:

Director

The Director is in charge of the look, tone and feel of a film and must work with their cast and crew to achieve their creative and technical goals.

During pre-production, a director must:

- Select cast members.
- Communicate with department heads to ensure they are all working towards the same creative goals as the director.
- Devise shot-lists and create a shooting script.

During principal photography, a director must:

- Direct the actors so that their performances are consistent and appropriate.
- Work with department heads to ensure that everyone works together to create the right look and tone for the film.
- Adhere to the agreed production schedule so that the film does not go over its budget and is completed within the time frame agreed with the producer.

During Post-production, a director must:

- Work with the editor on the completed cut of the project.
- Liaise with the director of photography (DP) over the finished look and colour grade of the cinematography.

Screen writer

- The screenwriter is in charge of writing the screenplay for the film.
- The script will outline the story of the film and include all the action, scene changes, characters and dialogue.
- A screenwriter might write an original script in the hope of selling it to a studio or producer.
- Sometimes, screenwriter might be commissioned by a producer to adapt an existing idea (Hitchcock's film Psycho (1960) was based on a pre-existing novel).
- A finished screenplay will be the result of multiple drafts by multiple writers.
- When writers work together as a team, their name will appear in the credits at the end of a film using the '&' symbol.
- When they work separately on successive drafts the word 'and' is used instead.
- Ant-Man (2015) had two teams of writers, so its credits read, "Screenplay by Edgar Wright & Joe Cornish and Adam McKay & Paul Rudd."
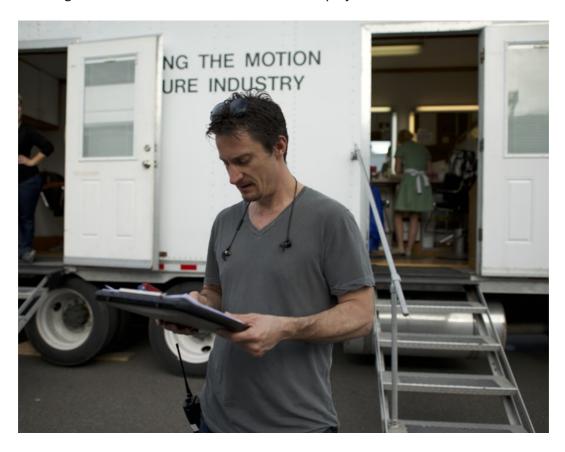- A 'script-doctor', who usually goes uncredited, gives the final draft a 'script-polish'

Producer

- The producer initiates, supervises and controls the entire production of a film. The producer is involved throughout all phases of the filmmaking process from early script development through to the final completion of a project. They have overall responsibility for the legal, financial and organisational aspects of the film.

A producer must:

- Set a budget for the film.
- Raise the funds needed to make the project and maintain good working relationships throughout the making of the film with its main financiers.
- Manage the budget and overall schedule to ensure the film is delivered on time and within the agreed budget.
- Hire key personnel.
- Arrange the sales and distribution of the finished project.

Production designer

Working under the supervision of the director, the production designer devises, develops and oversees the overall design of the production. Anything which will appear in front of the camera is the production designer's responsibility. The production designer plays a huge role in the overall look of a film.

During the production of a film a production designer must:
- Act as a supervisor to the Hair, Make-up and Wardrobe departments.

- Consult with the Camera, Art and Special Effects Departments over individual elements and the overall look of the film.
- Coordinate the work of the costume designer and other visual technicians (such as effects artists) to align with the creative goals of the DP and the director.
- Development of attitude and mood boards for characters, locations, scenes, etc.
- Supervise the creation of title sequences and credits.

Camera operator

- Camera operators are responsible for operating camera equipment and following the director of photography and director's instructions regarding framing, blocking and composition.
- During filming camera operators are responsible for all aspects of camera operation. Having a camera operator in place frees the DP to concentrate on the film's lighting and overall visual style.
- Camera operators are usually the first on set to use the camera's eyepiece or video assist monitor to assess how all the elements such as lighting, set design and performance will look on-screen or if there is a problem with a take, mise-en-scene element or a proposed set-up.
- During the later stages of pre-production, the camera operator will be expected to attend technical recces with other heads of department. This may involve traveling to locations in advance of the shoot, or helping the DP get test footage of certain more complicated elements. If any technical issues become apparent during pre-production the camera operator and DP will devise solutions.
- They work closely with the grip, a camera technician in charge of camera movements and camera mounts.
- The operator is also responsible for supervising junior members of the camera crew such as the first assistant camera (1st AC), second assistant camera (2nd AC) and the focus puller, the member of the camera crew responsible for adjusting focus.
- During the shoot itself, after the director and DP have rehearsed and blocked the shots they want, the camera operator and DP will determine the camera's position and will decide

what lenses and supporting equipment to use. Camera operators must always make sure that cameras and supporting equipment are prepared for the required set-ups.

Cinematographer / Director of Photography (DP):

The cinematographer, also known as the director of photography (DP) is the camera and lighting supervisor.

1. The DP is in charge of the visual look and design of the entire movie.
2. The DP works with the director during pre-production to decide how the script should be filmed and photographed.
3. The DP conducts test shooting to establish which lens types, lighting styles or film formats will create the intended mood or effect.
4. During production, the DP will supervise all aspects of the cinematography.
5. In post-production the DP ensures that the finished film's colour, brightness and contrast levels are adjusted to help enhance the look and feel of the film. This process is known as grading.

Sound designer

- A sound designer works on the finished cut of a film, adding and inventing new audio textures.
- Sound Designers are responsible for providing any required sounds to accompany screen action.
- They work closely with the production mixer, sound supervisor, the editor, and the director to create original sound elements.

Editor

- Importing, logging, backing up and exporting film footage.
- The Editor works closely with the director during pre-production, to decide how the editing process can best help to tell the story.
- Editors select the best takes and edit them together to create scenes.

Film Studies

- During post production, the editor and the director work closely together, refining the initial assembly edit into a final picture locked cut.
- An editor and director determine necessary coverage, agreeing to film scenes from multiple angles to ensure that a certain editing style can be achieved.
- If there is a technical flaw, the editor alerts the director so that this footage can be re-shot.
- Editors may also work in a supervisory role during the subsequent music and track laying and sound mix.
- Additional responsibilities may also include credits, post production effects and compositing.

AO: Explain and discuss the different ways that audiences view films:

- Film distribution is the process of making a movie available for viewing by an audience.
- When a film is initially produced, a feature film is often shown to audiences in a movie theatre.
- The standard release routines for a movie are called "release windows".
- Release windows keep different instances of a movie from competing with each other, allowing the movie to take advantage of different markets (cinema, home video, TV, etc.) at different times.
- In the standard process, a movie is first released in movie theatres (theatrical window), then, after approximately 16 weeks, it is released to VOD (video on demand) services, then DVD and Blu-ray.
- After an additional number of months, it is usually released to Pay TV, and approximately two years after its theatrical release date, it is made available for free-to-air TV

Alternative Release Strategies

- A simultaneous release takes place when a movie is made available on many media (cinema, DVD, internet...) at the same time or with very little difference in timing.

- Simultaneous releases benefit consumers, who can choose the medium that most suits their needs, and production studios that only have to run one marketing campaign for all releases.
- A straight-to-DVD and Blu-ray release occurs when a movie is released on home video formats without being released in theatres first, thereby not taking into consideration the "theatrical window".
- Internet film distribution platform. Most major studios have begun to make films available on VOD services shortly after their theatrical release

Cinema Exhibition

- 3D film is a system of presenting film images so that they appear to the viewer to be three-dimensional.
- IMAX is a system using film with more than ten times the frame size of a 35 mm film to produce image quality far superior to conventional film. IMAX theatres use an oversized screen as well as special projectors.
- A multiplex theatre runs primarily mainstream films from the major film companies and distributors, during the initial new release period of each film.
- A theatre that presents more alternative and art films as well as second-run and classic films is known as an independent cinema or art-house cinema.
- Some cinemas in city centres offer luxury seating with services like complimentary refills of soft drinks and popcorn, a bar serving beer, wine and liquor, reclining leather seats and service bells.
- Sometimes movie theatres provide digital projection of a live broadcast of an opera, concert, or other performance or event.
- Since the 1960s, multiple-screen theatres have become the norm, and many existing venues have been retrofitted so that they have multiple auditoriums.
- **Digital cinema** refers to the use of **digital** technology to distribute or project motion pictures as opposed to the historical use of reels of motion picture film, such as 35 mm film. **Digital** movies are projected using a **digital** video projector instead of a film projector.
- A digital movie can be distributed to cinemas in a number of ways: over the Internet or dedicated satellite links, or by sending hard drives or optical discs.

Home Entertainment

- Currently, the United Kingdom has a number of free-to-air and free-to view and subscription services over a variety of distribution media, through which there are over 480 channels for consumers as well as on-demand content.
- All television broadcasts in the United Kingdom are in a digital format

Scheduled Television

- Free-to-air digital terrestrial television channels include BBC1, BBC2, ITV, Channel 4 and Channel 5
- Virgin Media offers subscription –based cable television
- Sky Television is a subscription-based satellite television service
- Subscription-based online television and film providers include Netflix, Amazon Prime and Curzon Home Theatre.

DVD and Blu-ray

- DVD is a digital disc delivery format. It holds standard definition images, up to 4.7gbs of data.
- Blu-ray is a digital disc delivery format. It holds high definition resolution images, up to 25gbs of data.

Television on demand and Catch-up TV

- Digital distribution over an online delivery medium, such as the Internet, bypasses physical distribution methods.
- Internet-based video services, such as YouTube, Amazon Video, Netflix, Apple ITunes allow content owners to let users access their content on computers, smart phones, tablets or by using appliances such as video game consoles, set-top boxes or Smart TVs.
- TV broadcasters are now making some of their programmes available via the internet, usually after they have been transmitted.
- Because you can choose when you watch these programmes, the service is known as "TV on demand".
- Some on-demand services allow you to download TV programmes to your PC for you to watch at your leisure.
- Other services allow you to watch programmes directly on the broadcasters' websites in a process known as "live streaming".
- All the major UK broadcasters are making at least some of their programming available on demand via the internet.
- Content distributed online may be streamed or downloaded
- Streaming involves a VOD 'video-on-demand' user request.

AO: Identify and discuss the following animation styles and movement:

What is animation?

- A series of sequential frames which, when run together, create the illusion of continuous movement.
- For animated feature films this generally means creating 24 individual frames for each second of action.
- Other forms of animation might use as few as 12 frames per second.

There are **five** basic animation styles:

Rotoscoping

- Animators trace and/or paint over live action footage frame by frame to create a vivid hyper-real effect.
- Rotoscoping is sometimes used in film title sequences.
- An example of a full-length film is Through a Scanner Darkly (2006)

Stop-motion Animation

- The animator movers specially- built character models positioned on set before taking each frame to create the illusion of movement.
- Because the models are actual real-world objects they have a texture.
- Animators must be careful to light their models and scenes correctly and must also ensure that the camera remains correctly focused.
- Examples of stop-motion animation include the Aardman animations Wallace & Gromit films, Coraline (2009) and The Nightmare Before Christmas (1993).
- Ray Harryhausen is perhaps the most celebrated stop motion animator in films such as Jason and the Argonauts (1963).

Pixilation

- This is an animation process similar to stop- motion but using human performers, asking them to alter their position in between frames. Because this form of animation is able to present human beings and real life objects as though they are moving in ways that may be unnatural in reality, it is a technique that is often used to generate unease.
- Czech animator Jan Švankmajer is famed for his use of the technique and he has used it to horrifying and surreal effect in films like Alice (1988). The technique can also be seen in the pop video for Peter Gabriel's song Sledgehammer.

3D CGI animation

- In computer animation, the images used to create individual frame of animation are computer generated.
- In 3D animation the character models, lights, sets and camera are all virtual and don't exist outside the computer.
- Animators, once they've created their sets and characters using 3D modelling tools, can then animate them.
- Examples of 3D animation include Toy Story (1995), Despicable Me (2010) and computer-generated animation is used extensively in modern visual effects. Films such as Jurassic Park (1993) and The Hobbit: The Desolation of Smaug (2013) use computer animation techniques to create fantastical worlds and creatures.
- Motion capture suits are sometimes worn to capture actor performance information that is then 'rigged' to a 3D character.

2D animation

- Here animation is drawn and coloured frame by frame.
- Traditionally 2D animation was achieved by tracing each hand drawn frame onto transparent acetate sheets called cels, colouring the characters and action on the sheet, then photographing each frame (also known as 'cel animation').
- Nowadays 2D animation is generally created using digital tools, such as Flash Animation.
- The frames will be drawn on a graphics tablet and coloured in using commercial illustration packages such as Photoshop. The frames can then be assembled into an animated sequence in editing.
- Examples of traditional 2D animation include classic Disney films such as Bambi (1942) and Warner Brothers' long-running Loony Tunes shorts.
- Modern examples of 2D animation include The Iron Giant (1999) and the TV series The Simpsons.