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# Level 3 Technical Level Entertainment Technology

T/507/6611- Unit 2 Digital Asset Management  
Mark scheme

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June 2018

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Version/Stage: 1.0 Final

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Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from [aqa.org.uk](http://aqa.org.uk)

## Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

### Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

### Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Question	Guidance	Mark
01	C Metadata	1
02	A Thunderbolt	1
03	D DVDs	1
04	D AIFF	1
05	C Capacity	1
06	A ASCII	1
07	C A codec performs data compression and decompression	1
08	D 11000	1
09.1	So that file size is reduced // takes up less storage space // faster data transfer rate – 1 mark for each point – max 2	2
09.2	Types – 1 mark for each compression method given – MPEG or MP3 //Vorbis // AAC // WAV //or other relevant – max 2 marks plus 1 mark for each characteristic given: reference to quality, size, popularity clearly explained – max 2 marks	4
10	Benefits – more up-to-date and likely to be read on modern devices / can fit in portable devices / large storage capacity / ease to use – plug and play – installation is easy / faster data transfer / fairly robust – <b>max 3 marks</b>  Why - new laptops do not come with CD drives / can be used in multiple devices ie cameras and laptops / large storage capacity / reference to cost – <b>max 3 marks</b>  No credit for repetition although some responses can be interchangeable.	6

11	<b>Storage Method</b>	<b>Problem as a storage Method:</b> Max 1 mark from:  	<b>Effects on Content of the Media</b> Max 1 mark from: Do not allow repetition, must give 3 different responses	6
	<b>Plans and drawing</b>	Can get wet/burnt/drawn over/ripped/creased/any other sensible	Unreadable/unable to see all detail/ruined or complete loss of content	
	<b>Songs and Music</b>	Scratched/snapped/melted/warped	Unplayable/track might jump/could cause other tracks to become scratched/will not play at expected quality	
	<b>VHS or Betamax</b>	Recorded over/tape snaps/creases/water damage/magnetic damage/cracked cassette case.	Complete loss of content/unplayable on device/jam in media player/some sections might be erased/	
12	<b>Example of Data</b> <b>1 mark up to 3 different types</b>	<b>File format</b> <b>1 mark for each matching the correct data type – max 1 per data type.</b>		6
	Text	ASCII / Unicode / UTF 8 / HTML		
	Video	3GP / M4V / YUV / WMV / other relevant		
	Images	CGM / SVG / ODG / GIF / JPEG <b>or</b> JPG / PNG / RAW / other relevant		
	Audio	AIFF / BWF / FLAC / MP3 / ACC <b>or</b> M4A <b>or</b> MP4 / other relevant		
	Animation	ANI / APNG / EVA / FLA / FLC / FLI / GIF / MNG / SWF / SWI / webP / other relevant		

13	<p>Interoperability – works with other systems / data can be read and understood between systems / now and in the future / makes developing and sharing easier without having to convert / interface is easy to understand and works with other systems – <b>1 mark for each statement – max 3 marks</b></p> <p><b>Only need to give one body for 1 mark and 2 marks for description relating to that body.</b></p> <table border="1"> <thead> <tr> <th><b>1 mark for standard body</b></th><th><b>2 marks for Description</b></th></tr> </thead> <tbody> <tr> <td>ISO</td><td>Provides guidelines and standards that are universally accepted / used across businesses / sells supportive literature / international / developing computer systems</td></tr> <tr> <td>ANSI</td><td>Sells ISO standards / predominately American / business related / for developing systems</td></tr> <tr> <td>W3C</td><td>Develop web standards / Tim Berners Lee / international community / open – web for all / sharing knowledge</td></tr> </tbody> </table>	<b>1 mark for standard body</b>	<b>2 marks for Description</b>	ISO	Provides guidelines and standards that are universally accepted / used across businesses / sells supportive literature / international / developing computer systems	ANSI	Sells ISO standards / predominately American / business related / for developing systems	W3C	Develop web standards / Tim Berners Lee / international community / open – web for all / sharing knowledge	6		
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16.1	<p><b>Why?</b> 2 marks - Reference to duplicate copy of data // stored elsewhere // to be used if original is lost/damaged/stolen.  1 mark – install customer confidence in business performance // so organisation can continue working/trading // can be expensive to replace lost data // can take a long time to replace lost work // loss of competitive edge. Max 3 marks</p> <p><b>Potential threats</b> 1 mark x 2 for each threat identified - (theft/crime, accidental damage, system failure/power cut, disaster)</p> <p>1 mark x 2 for clear understanding of threat  Theft/crime – this is when an employee or unknown person accesses the system and steals data  Accidental – when an employee fails to save work or is not aware of how to use software to save or export work.  System failure/power cut – work is lost before being saved when power is cut or computer crashes unexpectedly  Disaster – ref to fire, flood earth quake, terror attack and hardware being destroyed</p> <p>1 mark x 2 for detailed understanding of threat -  Answer may expand to include:  Theft/crime – ref to industrial espionage/employee with a grudge/competition  Accidental – lack of training to use system/use wrong key combination/deletion of wrong file through carelessness/ deletion of file believing another to exist.  System failure/power cut ref to – system unable to process current work/trailing cable kicked out/ main power supply shut down automatically during fire drill.  Disaster ref to limited time to respond and move equipment to safety/area too dangerous to enter to save data/ other sensible.</p>	9
16.2	<p><b>Max 5 marks. No more than 3 advantages and 2 disadvantages</b>  <b>Or No more than 2 advantages and 3 disadvantages</b>  from:</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>cost effective – reduce need for hardware</li> <li>No need to carry out maintenance or upgrade internally owned hardware</li> <li>Reduce risk of data loss</li> <li>Ease of use</li> <li>Can access stored work from any device with an internet connection</li> <li>Only pay for what you need – can scale up if required</li> <li>Any other sensible response</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>Concerns over security – cloud attracts hackers</li> <li>Supplier may go out of business</li> <li>Recovery and restore may take a long time</li> <li>Data transfer speeds may be an issue</li> </ul> <p>Final recommendation – 1 mark if clear and convincing</p>	6

17.1	<p><b>Give 1 mark for each clear understanding for 2 of the following:</b></p> <p><b>Piracy</b> - when a copy of the original is made</p> <p><b>Theft</b> - when an internal or external source takes the data</p> <p><b>File sharing</b> – providing unrestricted online access to the data/distributing data through a website</p> <p><b>Give a 2<sup>nd</sup> mark for further detail, which may include:</b></p> <p><b>Piracy</b> – related to loss of earnings/no credit for work/consent not given/unable to cover cost of development</p> <p><b>Theft</b> – without consent/to sell as their own work/to profit from</p> <p><b>File sharing</b> – without consent/can be accessed free of charge/effect on profit/unable to cover costs of development/no credit or income for original developer</p>	4
17.2	<p><b>Role 3 marks</b> – access control technology / to combat piracy / prevent unauthorised distribution / prevent copying / sharing / prevent use beyond that intended.</p> <p><b>Technique 2 marks</b> – limited installs / use of product key / ref to original documents with games / pages / limited duration of use / limited platform use / limit what can be shared / limit tools / features available</p>	5
17.3	<p><b>Licence purpose 2 marks</b> from – contract of use between buyer and seller / outlines what they can and cannot do with software/game / legally binding document</p> <p><b>Reaction 4 marks</b> from – not happy / concerned / makes distribution of her work free / reduce income – less sales of originals / someone / other organisations profit from her work / needs to pay staff from sales / time / effort / ideas used by others</p>	6

Question	Assessment Outcome 1	Assessment Outcome 2	Assessment Outcome 3	Assessment Outcome 4	Assessment Outcome 5	Question Total
<b>Section A</b>						
1	1					1
2	1					1
3		1				1
4		1				1
5	1					1
6		1				1
7		1				1
8	1					1
9	6					6
10	6					6
11		6				6
12		6				6
13		6				6
14			6			6
15			6			6
<b>Section B</b>						
16.1				9		9
16.2				6		6
17.1					4	4
17.2					5	5
17.3					6	6
<b>Total</b>	<b>16</b>	<b>22</b>	<b>12</b>	<b>15</b>	<b>15</b>	<b>80</b>