AQA Level 3 Foundation Technical Level Entertainment Technology: Video Games Art and Mechanics
Business for Video Games

Unit Number: M/507/6610

Mark scheme

Section A

Answer **all** questions in this section

Total for this section: 50 marks

In the multiple choice questions, only **one** answer per question is allowed.

For each answer completely fill in the circle alongside the appropriate answer.

CORRECT METHOD ● WRONG METHODS ⊗ ⊙ ⊜ ⬦

If you want to change your answer you must cross out your original answer as shown. ⊠

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. ⊗

| 0 | 1 |

Simon is planning to startup a business with his new business partner Jess. The business will be a game development studio which makes its own games. He plans to raise investment and build the company so that he can eventually sell to a larger company.

What of the following type of company would be the best option for his new business?

A Limited Liability Partnership ⬭

B Private Limited Company **(Answer)** ⬭

C Public Limited Company ⬭

D Sole Trader ⬭

[1 mark]

| 0 | 2 |

Once Simon has setup his company, he needs to raise investment. Simon is 23 and has just finished his Masters degree in business, which he took after working in a media company for 5 years. He has put together a comprehensive business plan and financial forecasts which he worked on with Jess, who is 22 and has just finished a degree in game development.

Which of the following is likely to be the biggest risk area in terms of the team's experience that would make investors nervous about investing?

A Ability to deliver on the financial forecasts they have produced ⬭

B   Ability to make and release a game within their budget and to their schedule **(Answer)**   ◯

C   Ability to put together a business plan that can work   ◯

D   Ability to run a business   ◯

[1 mark]

| 0 | 3 |

Simon and Jess need to look at where they raise that money from. They know they want to raise investment from an angel investor, but they think they may be able to get other types of funding as well.

Which of the following are Simon and Jess most likely to be able to get to accompany the angel investment?

a) A bank loan   ◯

B   Games tax relief **(Answer)**   ◯

C   Project finance   ◯

D   Work for hire projects   ◯

[1 mark]

| 0 | 4 |

Simon and Jess get an investment offer of £200,000 in return for 45% of their business. Before deciding whether to accept the offer, they look at the deal terms.

Which of the following will be a required position for the investors to take, to invest in their business?

A   Chairman of the board   ◯

B   Director   ◯

C   Non-executive director   ◯

D   Shareholder **(Answer)**   ◯

[1 mark]

| 0 | 5 |

In Simon and Jess's company, Jess takes the role of managing the development of their game, so she needs to plan the development process.

Which of the following would she most likely use to work out the dependencies between tasks on the project?

A   Asset list   ◯

B   Critical path **(Answer)**   ◯

C   Milestone breakdown   ◯

D Task list ⬭

[1 mark]

0 6 Jess also realises that she needs to plan for continued development of their game after it is launched. Their game is going to be 'free to play' with in-app purchases.

Which of the following is the most important system to build into the game to support this continued development?

A Analytics **(Answer)** ⬭

B Game update server ⬭

C Level editing ⬭

D Monetisation ⬭

[1 mark]

0 7 Whilst Jess is planning the game development, Simon is focusing on the business. He needs to be able to keep track of how their business is doing on a weekly basis.

Which of the following tools would be best suited to use to do this?

A Cashflow spreadsheet **(Answer)** ⬭

B Financial accounts ⬭

C Management accounts ⬭

D Tracking expenses ⬭

[1 mark]

0 8 One of Simon and Jess's tasks is to decide on a name for their game, and then get a logo and branding guidelines created. They need to protect the Intellectual Property of the name and brand.

Which of the following is the best type of protection for them to use?

A Copyright ⬭

B Patent ⬭

C Trademark **(Answer)** ⬭

D Design rights ⬭

[1 mark]

0 9 Simon and Jess are still looking for investment as they didn't like the first offer they had received. A new investor is interested but has asked for a more detailed business plan, and she has suggested what sections she would like to see in it.

State three of the sections that an investor is likely to want to see in any business plan, and describe what those sections would be about.

[6 marks]

Answer

Any 3 of the following are correct as sections in a business plan:

- Business Objectives/Objectives
- Vision statement
- Mission statement
- Market segments OR customer segments
- Channels to reach the market segments OR marketing plan OR marketing strategy
- Value proposition OR Unique Selling Point OR USP
- Key activities OR products/services
- Resources OR Team
- Key partners
- Costs OR budget
- Revenue streams
- Financial forecast or Financial projections
- Market analysis OR competitor analysis

1 mark for every correct one from this list (up to 3)

Descriptions of these sections:

- Business Objectives/Objectives: 'goals/aims of the business', 'purpose of the business', 'measurable targets/goals/aims', 'what the business is trying to achieve'

- Vision statement: 'goals/aims of the business', 'where the business wants to be', 'talks about the future'

- Mission statement: 'what the company does', 'purpose of the business', 'how the company will get where it wants to be'

- Market segments OR customer segments: 'who your customers are', 'who you are selling to', 'for who are we creating value'

- Channels to reach the market segments OR marketing plan OR marketing strategy: 'how will we reach our customers', 'how will we market our business/product/service'

- Value proposition OR Unique Selling Point OR USP: 'what value do we offer', 'what is unique/different from our competitors', 'why would customers use us'

- Key activities OR products/services: 'what we do' 'what products/services we offer' AND 'how we do it'

- Resources OR Team: 'the people we need', 'the roles we need', 'the things we need to run the business', 'equipment/software/hardware and people'

• Key partners: 'suppliers', 'supply chain', 'other companies we need to work with'

• Costs OR budget: 'how we will spend money', 'what costs we will have', 'cashflow forecast', 'how much money we need'

• Revenue streams: 'how much money we will make', 'financial forecasts', 'how we will make money'

• Financial forecast or Financial projections: 'how much money we will make', 'how we will make money', 'revenue stream'

• Market analysis OR competitor analysis: 'who are competitors are and why we are different/better', 'understanding the market and other similar companies'
1 mark for any of the phrases or words per section (or wording that is similar but implies the same thing). Where 'AND' is included, they must include multiple phrases or words to get the mark.

1 0 Simon and Jess have raised their funding and now need to start hiring people. They need to work out what roles they need to hire.

State six roles they would need and explain why they would need those roles. Four should be roles involved in making the game, and two should be roles that would be involved in taking the game to market.

[6 marks]

Answer
Must list 4 of the following:
• Programmer OR engineer
• 3D artist OR 3d modeler OR artist
• 3d animator OR animator
• Concept artist
• 2D artist
• UI artist
• Producer
• Project manager
• Tester
• Audio OR composer OR sound effects
• Designer

Must list 2 of the following:
• Marketing
• PR
• Events
• Community
• Analytics
• Director or Chief Executive

1 point per correctly named role with explanation.

Any sub-type of the above is fine, e.g. 'graphics programmer' is valid against 'programmer', '3d environment artist' is valid against '3d artist', 'level designer' is valid against 'designer', 'creative director' is valid against 'director')

Turn over ▶

1 1 Once they have a team in place, Jess sits down with the production team to talk through the project plan, starting with the milestones that they need to meet.

State three of the milestones that she is likely to have in her plan, and describe what each of these milestones usually entails?

[6 marks]

Answer

Any 3 of the following are correct as types of milestones:
- Design
- Prototyping
- Pre-production (this includes Design and Prototyping so if this is used, Design or Prototyping should not be counted)
- First playable OR pre-alpha
- Alpha
- Beta
- Soft launch
- Gold OR launch OR full launch OR release

 1 mark for every correct one from this list (up to 3)

Descriptions of these milestones:

- Design: 'mechanics', 'how the game works', 'why the game will be fun'

- Prototyping: 'testing design', 'testing mechanics' AND 'playable'

- Pre-production (this includes Design and Prototyping so if this is used, Design or Prototyping should not be counted): 'planning' AND 'design'

- First playable OR pre-alpha: 'playable version not feature complete', 'part of the game'

- Vertical slice: 'segment/section of the game that is representative of final game', 'often used for pitching'

- Alpha: 'feature complete'

- Beta: 'finished game' AND 'except for testing', 'except for post-production', 'except for localisation'

- Soft launch: 'launch to limited group of people'

- Gold OR launch OR full launch OR release: 'game complete'

1 mark for any of the phrases or words per milestone (or wording that is similar but implies the same thing). Where 'AND' is included, they must include multiple phrases or words to get the mark.

| 1 | 2 | Simon has setup a meeting with their new accountant and their new bookkeeper. The meeting is to agree between them who will do what in terms of the financial management and tools of the business.

State one financial tool you would expect Simon to manage, another that you would expect the accountant to manage, and another that you would expect the bookkeeper to manage, and describe what each of them are.

[6 marks]

Answer

Any one of the following for each person:

Simon:
- Cashflow
- Payroll
- Invoicing
- Expenses

Bookkeeper:
- Payroll
- Management accounts
- Books
- Expenses

Accountant:
- Financial accounts

1 mark for any correct answer per person

Descriptions for the tools:

- Cashflow: 'money in the bank', 'what money the company has', 'forecast/projection of cash', 'tracking how much money they have', 'when they will run out of money'

- Payroll: 'paying staff and taxes'

- Invoicing: 'creating invoices to send to customers', 'for customers to ask for payment'

- Management accounts: 'profit and loss/P&L' AND 'balance sheet'

- Books: 'balancing income and outgoings with bank balance', 'tracking outgoing and income'

- Expenses: 'things that the company pays for that aren't subject to tax'

- Financial accounts: 'end of year accounts', 'profit and loss', 'balance sheet', 'corporation tax', AND 'legal requirement', 'submit to HMRC'

1 mark for any of the phrases or words per tool (assuming the tool was assigned to correct person) (or wording that is similar but implies the same thing). Where 'AND' is included, they must include multiple phrases or words to get the mark.

1	3

Jess and Simon know that they want to release initially on one platform and then expand to further platforms later. They are going to self-publish so they have raised £1million to market their game. This gives them good financial backing but also means they need to make a lot of money from the game to keep their investors happy.

State what is the most likely platform that they have decided to release on first and describe why with a full description?

[6 marks]

Answer

Platform:

•   2 points for: iOS OR App Store OR iPhone
OR
•   1 point for: Mobile OR google OR Android OR Phone OR smart phone

Describe why:

•   1 point for: it is an open platform / other platforms are closed platforms / you can self-publish
•   1 point for: can market directly to customers/can build relationship directly with customers
•   1 point for: you need significant money to market a game on mobile and they have it
•   1 point for: it is a free to play game and that is most common/suited to mobile platforms
•   1 point for: iOS/App Store/iPhone is the biggest mobile platform
•   1 point for: it is a digital platform so you can self-publish
•   1 point for: they have a small development budget so probably couldn't afford to release on console OR at retail

Up to 4 points in total, for correct description (or wording that is similar but implies the same thing).

1	4

Simon and Jess chose to make their game 'free to play', and to make money by selling in-app purchases in the game. Their game is a puzzle game, with lots of progression and they expect players to play for short periods of a time, but keep coming back every day for months. They are also considering having advertising in the game as well.

Explain, with a full description, why they have chosen this business model, and how this business model has evolved in the industry over the last 15 years.

[6 marks]

Answer

Why they have chosen this model:

•	1 point for: because it is a fast growing OR popular OR most lucrative OR business model in games today

•	1 point for: because the type of game they have designed (must mention 'short play times' OR 'players keep coming back for months') is suitable for the business model

Two points max, for correct description (or wording that is similar but implies the same thing).

How this business model has evolved:

1 point for: MMOs/massively multiplayer online games
1 point for: Facebook
1 point for: mobile OR App Store
1 point for: open platforms
1 point for: digital distribution OR not retail/disc/physical
1 point for: social games
1 point for: casual games
1 point for: releasing games earlier OR testing games on users sooner

Four points max, for correct description (or wording that is similar but implies the same thing).

1	5

Simon and Jess's business plan is to make lots of games based on the same technology they build for their first game. In the future they want to exit the business, probably by selling it to a larger company.

a) State what Intellectual Property they will have created by the time they exit.

[2 marks]

> The IP they will create will be:
> 1 point for: 'The brand of the business/company', 'the company name OR logo trademark'
> 1 point for: 'The brands of the games they create', 'the copyright of the games'
> 1 point for: 'the technology OR code they build/create to make their games with'

a) Describe why Intellectual Property is important for their plans.

[2 marks]

> Why IP is important:
> 1 point for: 'The value in their business will (primarily) be in the IP that they own'

b) What implications do their chosen funding and publishing models have on their Intellectual Property?

> Implications of chosen funding/publishing models:
> 2 points for : 'They can retain the IP that they create within their business'

[2 marks]

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ANSWER IN THE SPACES PROVIDED

Section B	

Answer **both** questions in this section

Total for this section: 30 marks

1 7	*Running a business is a personal challenge for the directors. Their ability to know what they are getting in to, what their own strengths and weaknesses are, building their skills and being able to face challenges are possibly the biggest reasons that any business succeeds or fails.*

If you started a business in the games industry in the next 6 months, in terms of the market but also in terms of your personal goals, what sort of business would you start and why?

What key skills do you think you would need to learn to be able to effectively run the business long term, and what personality traits do you think you have that are either a strength or a weakness to being a good director of a business.

Answer

Quality of response Level	An answer that:	Max 15 marks
3	• Shows ability to understand and consider what running a business would really involve • Shows knowledge of what would be involved in running a business, including analyzing what challenges they would face, why these things are challenging and what they would need to do to address them in terms of building skills • Identify that business is a personal challenge too • Shows good ability to assess themselves in terms of skills and personality traits, and link those to the challenges they have identified in running a business – they should provide a roadmap/plan of how they could get from where they are now to where they would need to be • Identify that experience is also key, so not all skills can be learned through training, some will grow over time – identifying that learning through doing is important / learning from mistakes is important • Shows a strong level of analytical ability, building on what they were taught	11-15 marks
2	• Shows reasonable ability to understand and consider what running a business would involve • Shows reasonable knowledge of some of the things that would be involved in running a business, including what the key challenges actually are e.g. people management – they should not just identify that managing people is a key skill/activity of running a business, but should show some insight into why this is a challenge/skill, and how they could gain this skill • Shows reasonable ability to assess themselves in terms of skills and personality traits, and to a basic level link where	6-10 marks

	they are now and what they would need to learn and work on to run a business effectively – shows reasonable ability to critically assess themselves, but also understand their own strengths • Shows analytical thought, rather than repeating things they have been taught	
1	• Is very brief or lacks coherence • Does not show that they have considered or understand what would be involved in running a business • Shows some limited knowledge of some of the things that might be needed e.g. people management, money management • Shows limited ability to assess themselves and understand their own skills and personality traits • Answer seems to be more repeating things they have been told than actually considering the question in relation to themselves	1-5 marks

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| 1 | 8 | | *'Pocket Pets' are a leading toy brand that sells collectable miniature figures of different animals, from dogs and cats, to lizards and pandas. Their primary audience is kids aged 5-8 years old, 60% girls, 40% boys, in the UK and USA. Their toys are sold in all major toy shops, supermarkets and online.* |

Pocket Pets Ltd wants to expand into video games, as they believe that their existing audience would buy a video game based on their brand. They see this as a major extension to their brand, a new way to bring in revenues from their existing market, and something they want to build long term.

They are looking for ideas on what game they should make. You work for a game development studio that is approached to put together a game design concept for the brand.

Propose a game design idea that is suitable for Pocket Pets existing market, including what the game will be, platform(s) and business model.

Describe the steps that you go through to come up with the game design and justify the decisions you have made including comparisons to other games.

[15 marks]

Answer

Quality of response Level	An answer that:	Max 15 marks
3	- Shows ability to work through the thinking process of designing a game, showing logical chain of reasoning, breaking down the game into key features (ideally 3-5, no more than 7), explaining the mechanics of the game - Shows understanding of the commercial and market aspects of the game, including that the game is being designed for their target market, that they understand what business model is suitable for their game and market, and they have an understanding of the market they are entering by identifying relevant and current competitor games. - Justify every decision they have made - Present a well-focused game design and rationale for it clearly and concisely, demonstrating that they understand how to convey an idea to other people - Explaining the game concisely and clearly so you can picture if your mind how the game will actually play – what you are the player would do - Used diagrams that clearly support and enhance their explanations, in particular game flow/loop diagrams	11-15 marks
2	- Shows reasonable ability to apply process to thinking of a game design idea - Shows reasonable knowledge of what the game design process should be, in particular focusing on how the game works (the mechanics, the features) rather than the story or theme - Demonstrates awareness that game design is linked with market and commercialization, and shows some	6-10 marks

	reasonable ability to design a game whilst considering target market, business model and comparable games • Includes reasonable justification of why they have made at least most of the decisions that they have • Shows reasonable ability of explaining their game design idea, and the rationale behind it - The game design is explained to a reasonable level, but leaves questions in your mind and does not allow you to fully picture what you, as the player, would do when playing this game • May have used diagrams but they have limited effectiveness in conveying their ideas	
1	• Is very brief or lacks coherence • Does not show process in their thinking of the game design idea • Shows some limited knowledge of some of the steps in the process of designing a game • Shows some limited knowledge of the aspects around the game design such as considering the target market, business models, comparable games • May include some limited justification of why they have made the decisions they have, but they lack focus or become confused • Demonstrates very limited ability to link design with market and commercialization • Focuses more on the story or context of the game, rather than on how the game works (e.g. mechanics and features) • No diagrams used, or those that are used are irrelevant or unclear	1-5 marks

Note:
- Full marks cannot be earned without use of at least one diagram explaining how the game loop/flow works
- Maximum of 8 marks if the commercial and market aspects are not considered as a fundamental part of the game design process – this includes the target market, business model and competitor/comparisons to other relevant and current games

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ANSWER IN THE SPACES PROVIDED