



**UNIVERSITI KUALA LUMPUR**  
**MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY**

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**FINAL EXAMINATION**  
**MARCH 2025 SEMESTER**

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**COURSE CODE** : IVB10804

**COURSE NAME** : PROGRAMMING 2

**PROGRAMME NAME** : BACHELOR OF GAME DEVELOPMENT  
(FOR MPU: PROGRAMME LEVEL) TECHNOLOGY WITH HONOURS

**DATE** : 24 JUNE 2025

**TIME** : 9:00am – 11:00am

**DURATION** : 2 HOURS

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**INSTRUCTIONS TO CANDIDATES**

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1. Please CAREFULLY read the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of ONE (1) section; Section A ONLY
4. Answer 4 questions ONLY in Section A.
5. Please write your answers on the answer booklet provided.
6. Answer all questions in English language ONLY.

**SECTION A (Total: 100 marks)****INSTRUCTION: Answer only 4 questions.****Please use the answer booklet provided.****Question 1 (25 marks)**

Explain the if-else statement in Unity C#. Provide a code example that checks a player's score and awards a bonus if the score exceeds a threshold. Discuss why proper condition checks are important.

- a. Explanation of if-else concept and syntax (10 marks)
- b. Correct code example: checking score and awarding bonus (5 marks)
- c. Discussion of condition evaluation and flow control (5 marks)
- d. Explanation of importance of correct conditions in game logic (5 marks)

**Question 2 (25 marks)**

Explain the basic primitive data types in C# (int, float, bool, string). For each type, provide a code example of how it can be declared and used in a Unity script, and discuss why choosing the correct data type is important.

- a. Definition and role of each primitive type (10 marks)
- b. Correct code examples for each type (5 marks)
- c. Explanation of memory use and precision considerations (5 marks)
- d. Discussion on importance of type correctness in game logic (5 marks)

**Question 3 (25 marks)**

Explain the role of the AudioSource and AudioClip components in Unity. Provide a code example showing how to play a sound effect when the player collects an item. Discuss why audio components are essential for game feedback.

- a. Explanation of AudioSource and AudioClip and how they interact (10 marks)
- b. Correct code example to play SFX on item collection (5 marks)
- c. Discussion on audio feedback importance and player experience (5 marks)
- d. Explanation of component configuration in Inspector (5 marks)

**Question 4 (25 marks)**

Explain what a function (method) is in C#. Provide a code example that calculates the distance between two Vector3 points and returns the result. Discuss why functions are important for code reuse and organization.

- a. Definition of function/method and its purpose (10 marks)
- b. Correct code example using Vector3.Distance or manual calculation (5 marks)
- c. Explanation of parameters and return value (5 marks)
- d. Discussion on code reuse, modularity, and organization (5 marks)

**Question 5 (25 marks)**

Explain how to use `Input.GetAxis("Horizontal")` and `Input.GetAxis("Vertical")` to move a player character in Unity C#. Provide a code example that uses these axes to translate a character, and discuss why smoothing input with `GetAxis` is beneficial over direct key detection.

- a. Explanation of `Input.GetAxis` concept and axis configuration (10 marks)
- b. Correct code example using `GetAxis` for movement (5 marks)
- c. Explanation of smoothing and sensitivity settings (5 marks)
- d. Discussion on advantages over direct key input (5 marks)

**END OF EXAMINATION PAPER**