

CONFIDENTIAL



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2022/2023**

COURSE NAME : COMPUTER GAMES
DEVELOPMENT
COURSE CODE : BIM 33103
PROGRAMME CODE : BIM
EXAMINATION
DATE : JULY / AUGUST 2023
DURATION : 3 HOURS
INSTRUCTION : 1. ANSWER ALL QUESTIONS.
2. THIS FINAL EXAMINATION IS
CONDUCTED VIA **CLOSED
BOOK.**
3. STUDENTS ARE **PROHIBITED**
TO CONSULT THEIR OWN
MATERIAL OR ANY EXTERNAL
RESOURCES DURING THE FINAL
EXAMINATION CONDUCTED
VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

TERBUKA

CONFIDENTIAL

Q1 Questions **Q1(a)** - **Q1(d)** are based on **Figure Q1**.

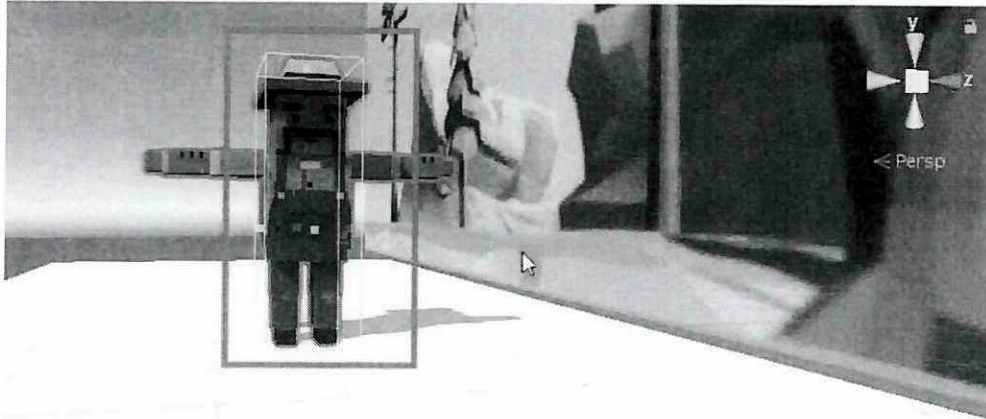


Figure Q1

- (a) Identify a Unity component used to avoid the game character from going through the background image in **Figure Q1**.
(2 marks)
- (b) List **THREE (3)** actions to apply the Unity component identified in **Q1(a)**.
(6 marks)
- (c) Write a Unity code to make the game character in **Figure Q1** jump at the start of the game.
(6 marks)
- (d) Explain **FOUR (4)** steps in Unity to prevent the game character in **Figure Q1** from double-jumping.
(8 marks)

Q2 Questions **Q2(a)** - **Q2(c)** are based on the Unity code in **Figure Q2**.

```
void Update() {
    if (Input.GetKeyDown(KeyCode.Space))
    {
        playerRb.AddForce(Vector3.up * 10, ForceMode.Impulse);
    }
}
```

Figure Q2

- (a) Discuss **TWO (2)** purposes of `ForceMode.Impulse` command in **Figure Q2**.
(6 marks)
- (b) Explain **TWO (2)** steps to increase the gravity and player jumping force in Unity code in **Figure Q2**.
(6 marks)
- (c) Write the Unity code for the answer in **Q2(b)**.
(8 marks)

Q3 Questions **Q3(a)** - **Q3(c)** are based on the game interface in **Figure Q3**.



Figure Q3

- (a) Propose **FIVE (5)** types of screens appropriate for the game interface in **Figure Q3**.
(15 marks)
- (b) Illustrate **THREE (3)** storyboards for isometric view projection of the game sample in **Figure Q3** using 3D third-person view gameplay style.
(15 marks)

- (c) Discuss **TWO (2)** online marketing strategies for the game sample in **Figure Q3**.
(8 marks)

-END OF QUESTIONS –