

**CONFIDENTIAL**



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
ONLINE  
SEMESTER II  
SESSION 2019/2020**

**COURSE NAME** : COMPUTER GAMES DEVELOPMENT  
**COURSE CODE** : BIM 33103  
**PROGRAMME CODE** : BIM  
**EXAMINATION DATE** : JULY 2020  
**DURATION** : 2 HOURS AND 30 MINUTES  
**INSTRUCTION** : 1. ANSWER ALL QUESTIONS.  
 2. PLEASE MAKE SURE TO CLICK "SAVE ANSWER" BUTTON FOR SUBJECTIVE QUESTIONS. OBJECTIVE QUESTIONS ARE SAVED AUTOMATICALLY.

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

**TERBUKA**

**CONFIDENTIAL**

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

- (a) Identify **FIVE (5)** game objects in **Figure Q1** known as foreground elements. (5 marks)
- (b) Propose **ONE (1)** new character to challenge the *Angry Birds* characters. (6 marks)
- (c) Sketch **THREE (3)** action poses for the new character proposed in **Q1 (b)**. (9 marks)
- (d) Explain **THREE (3)** types of screen suitable for the game user interface. (9 marks)
- (e) Draw **TWO (2)** isometric views if the gameplay is changed to 3D environment. (8 marks)
- (f) Propose **THREE (3)** game cutscenes for sample game in **Figure Q1**. (9 marks)
- (g) Discuss **TWO (2)** differences between game cinematics and game cutscenes. (8 marks)
- (h) Suggest **TWO (2)** marketing approach to advertise the game in **Figure Q1** online. (6 marks)

**Q2** Questions **Q2(a)**-**Q2(c)** are based on the following Unity code for character collision detection in **Figure Q2**.

```
private var doorIsOpen : boolean = false;
private var doorTimer : float = 0.0;
private var currentDoor : GameObject;

var doorOpenTime : float = 2.0;
var doorOpenSound : AudioClip;
var doorShutSound : AudioClip;
```

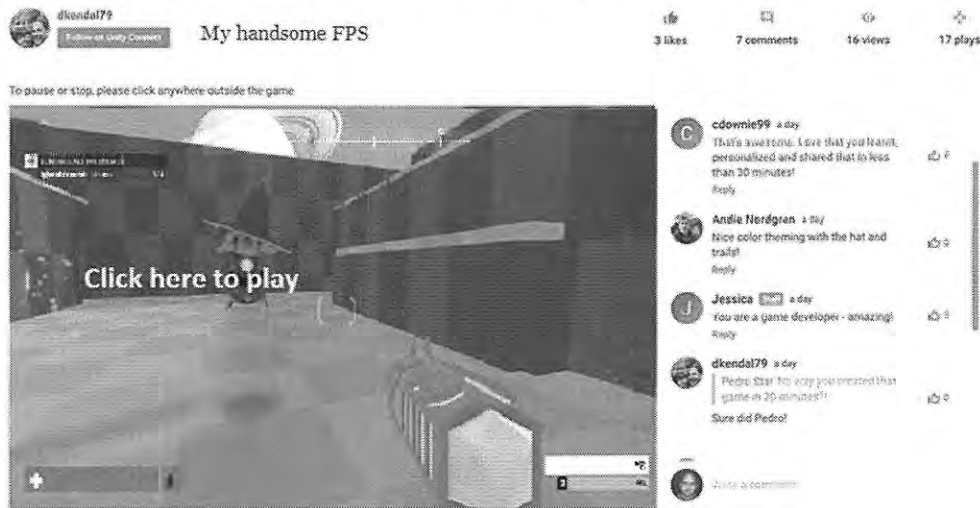
**Figure Q2**

- (a) Explain **ONE (1)** function of `currentDoor` game object. (4 marks)

**TERBUKA**

- (b) Discuss **TWO (2)** differences between `doorTimer` and `doorOpenTime` variables. (8 marks)
- (c) Complete the Unity code in Figure Q2 for a full collision detection function using `Update()` and `OpenDoor()` functions (8 marks)

**Q3** Questions **Q3(a)**-**Q3(c)** are based on the given Unity 3D screenshot in **Figure Q3**.



**FIGURE Q3**

- (a) Explain **TEN (10)** steps to share a Unity game online. (10 marks)
- (b) Suggest **TWO (2)** appropriate file formats for an online game in **Q3(a)** with proper justification. (6 marks)
- (c) Discuss **ONE (1)** reason why WebGL becomes a default format to share a Unity game on the web. (4 marks)

- END OF QUESTION -

TERBUKA

**FINAL EXAMINATION**

SEMESTER / SESSION : SEM II / 2019/2020  
COURSE NAME: COMPUTER GAMES DEVELOPMENT

PROGRAMME CODE : BIM  
COURSE CODE : BIM 33103



**FIGURE Q1**

**(Angry Birds: 2D game user interface example)**

**TERBUKA**