UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2023/2024

COURSE NAME : COMPUTER ANIMATION

COURSE CODE : BIM 20703

PROGRAMME CODE : BIM

EXAMINATION DATE : JULY 2024

DURATION : 3 HOURS

INSTRUCTIONS : 1. ANSWER ALL QUESTIONS
2. THIS FINAL EXAMINATION IS CONDUCTED VIA
☐ Open book
☒ Closed book
3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

TERBUKA

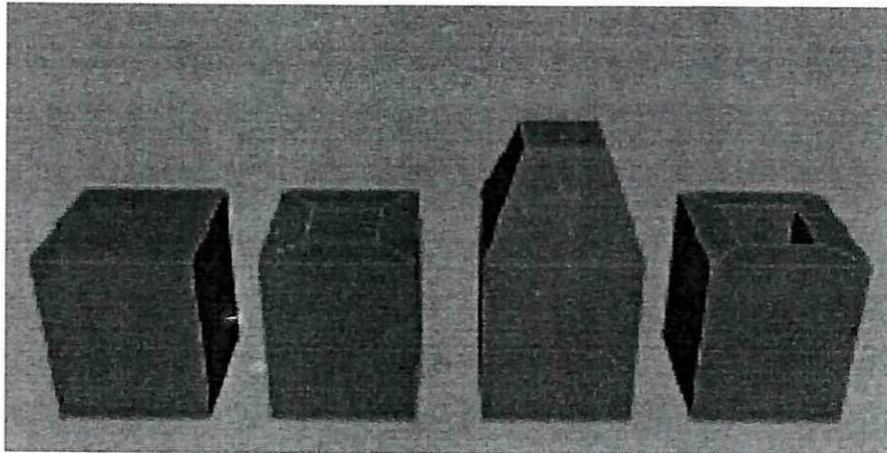**Q1**   Questions **Q1(a) - Q1(d)** are based on **Figure Q1.1**.

Figure Q1.1

(a)   Identify the type of polygon modeling in **Figure Q1.1**.

(5 marks)

(b)   Explain **TWO (2)** benefits of the polygon modeling identified in **Q1(a)**.

(8 marks)

(c)   Draw **ONE (1)** prop based on polygon modeling in **Figure Q1.1**.

(5 marks)

(d)   Discuss **TWO (2)** differences between Primitive Modeling and From-Scratch Modeling techniques.

(8 marks)

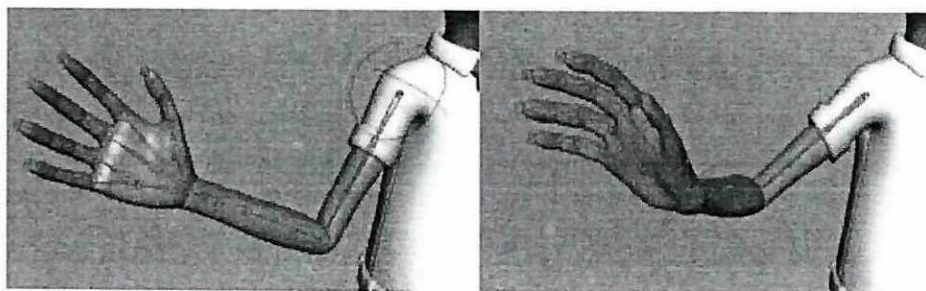**Q2**   Questions **Q2(a) - Q2(c)** are based on **Figure Q2.1**.

Figure Q2.1

TERBUKA

(a) Suggest **THREE (3)** types of skeleton joints appropriate for character articulation in **Figure Q2.1**.

(9 marks)

(b) Sketch **TWO (2)** full-body 3D models if Smooth Skinning Deformer is applied to the character in **Figure Q2.1**.

(10 marks)

(c) Explain **THREE (3)** animation techniques suitable for the characters proposed in **Q2(b)**.

(9 marks)

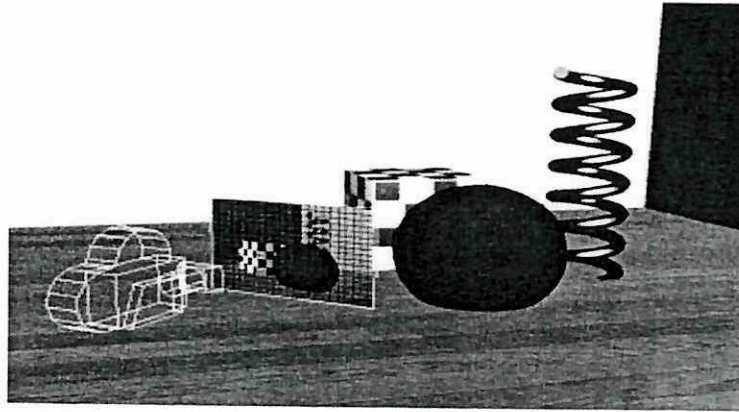Q3 Questions **Q3(a)** - **Q3(c)** are based on **Figure Q3.1**.

Figure Q3.1

(a) Define the meaning of rendering technique in **Figure Q3.1**.

(4 marks)

(b) Explain **SIX (5)** basic rendering workflow for the example in **Figure Q3.1**.

(12 marks)

(c) Illustrate **TWO (2)** storyboards to render the 3D objects in **Figure Q3.1** using Two-Point Lighting and Three-Point Lighting techniques respectively.

(10 marks)

- END OF QUESTIONS -

CONFIDENTIAL