

**CONFIDENTIAL**



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

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

COURSE NAME : 3D MODELLING  
COURSE CODE : BBU 30203  
PROGRAMME CODE : BBF  
EXAMINATION DATE : JULY 2020  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS

**TERBUKA**

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

**CONFIDENTIAL**

- Q1** (a) State the definition of 3D Modeling. (2 marks)
- (b) Elaborate the following type of splines and draw a diagram to support your answer and explain the function in 3D modelling.  
(i) Bezier Splines  
(ii) NURBS (Non-Uniform Rational B-Spline) (8 marks)
- (c) An object can be created by using primitive objects in 3ds Max, Elaborate five (5) primitive objects that you used in 3ds Max. (10 marks)
- Q2** (a) Elaborate the role of camera objects in 3ds Max. (4 marks)
- (b) Explain the differences between Target Camera and Free Camera in 3ds Max. (6 marks)
- (c) Draw a diagram and elaborate step by step procedure in creating a target camera in 3D scene and how to change the view from camera in 3ds Max. (10 marks)
- Q3** (a) State the important of lighting in 3D modeling. (2 marks)
- (b) Explain three (3) basic component of light. (6 marks)
- (c) Define the following terms about lighting in 3ds Max. Draw an image to illustrate your answer.  
(i) Default Light  
(ii) Ambient Light  
(iii) Spot Light  
(iv) Omni Light (12 marks)

**TERBUKA**

- Q4**
- (a) Give six (6) elements that can be used to animate an object in the 3D scene. (3 marks)
  - (b) Discuss what is key frame and its role in 3ds Max. (5 marks)
  - (c) In order to help Ali to animate a ball in 3D scene, elaborate step by step procedure to set up the animation by using a key frames (12 marks)
- Q5**
- (a) What is rendering process in 3D scene? (2 marks)
  - (b) Discuss the following common parameters to be setup in Common tab Render Setup panel.
    - (i) Time Output
    - (ii) Output Size
    - (iii) Option(6 marks)
  - (c) Elaborate step by step procedure to assign materials on an object in the 3D scene. (6 marks)
  - (d) Mapping is term used to describe applying textures to material. Explain three (3) texture map that can be used (6 marks)

**-END OF QUESTIONS-**

**CONFIDENTIAL**

**TERBUKA**