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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESI 2017/2018**

COURSE NAME : 3D MODELING  
COURSE CODE : BBU 30203  
PROGRAM CODE : BBF  
EXAMINATION DATE : JUN / JULY 2018  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS.

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THIS EXAMINATION PAPER CONTAINS **THREE (3)** PAGES

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- Q1** (a) Discuss factors that contribute to the emerging of Virtual Reality in 1980s to 1990s. (6 marks)
- (b) In what scenarios, polygons are usually used to design 3D environment. (6 marks)
- (c) Elaborate the following primitive objects and draw a diagram to support your elaboration. (8 marks)
- (i) Box
  - (ii) Teapot
  - (iii) Cone
  - (iv) Geosphere
- Q2** (a) What is the difference to convert an object using Editable Patch and Edit Patch Modifier (8 marks)
- (b) Elaborate step by step procedure to assign materials on an object in the 3D scene. (6 marks)
- (c) What are the two (2) types of lighting that typically used in 3D Studio Max and give examples in the discussion? (6 marks)
- Q3** (a) What elements that are typically involved to render an object in the 3D scene. (3 marks)
- (b) Discuss the following Common Rendering Panels (CRP) (3 marks)
- (i) CRP Time output
  - (ii) CRP Output Size
  - (iii) CRP Options
  - (iv) CRP Time Output
- (c) Discuss what are the additional antialiasing process that 3D designers can Improve image quality in 3D scene? (8 marks)

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- Q4** (a) Discuss the role of camera objects in 3D Std Max? (4 marks)
- (b) Draw a diagram and elaborate a step by step procedure in creating a target camera in 3D scene. (10 marks)
- (c) Discuss what is the viewing effect if the orthographic projection is ON or Off (6 marks)
- Q5** (a) Give six (6) elements that can be used to animate an object in the 3D scene. (3 marks)
- (b) Discuss what is keyframe and its role in 3D Studio Max. (5 marks)
- (c) In order to help Ahmad to animate a dinosaur in 3D scene, elaborate step by step procedure to set up the animation by using a key frames. (12 marks)

**-END OF QUESTION-**

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