UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020

COURSE NAME   :   3D MODELLING

COURSE CODE   :   BBU 30203

PROGRAMME CODE   :   BBF

EXAMINATION DATE   :   DECEMBER 2019 / JANUARY 2020

DURATION   :   3 HOURS

INSTRUCTION   :   ANSWER **ALL** QUESTIONS

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

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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)

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-

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