BRAINWARE UNIVERSITY

Term End Examination 2018 - 19

Programme – Bachelor of Arts (Honours) in Multimedia & Web Development

Course Name - 3D Rigging and Animation

Course Code - BMW602

(Semester – 6)

Time allotted: 3 Hours   **Full Marks: 70**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Questions)   10 x 1 = 10

1. *Choose the correct alternative from the following:*

(i)   The X Axis is Displayed using what color?
   a. Yellow   b. Red
   c. Black   d. None of the above

(ii) Which node controls the rotation of the Chain ?
   a. Xref Object.   b. Attached Objects
   c. PathDeform Object.   d. Objects.

(iii) Which Nurbs element is being represented by the yellow colored line in the given image?
   a. Lambert   b.   Isoparm
   c. Rendering Nodes   d. None of the above

(iv) What is the full form of IK?
   a. Inverted Kinematics   b. Inverse Kinematic
   c. Independently Kinematics   d. None of the above

(v)   _____ are created by the rigger to assist the animator in manipulating joints within the rig.
   a. Control curves   b. LK
   c. Constraint   d. Parent

(vi) Which light is used to simulate a combination of direct Light and Indirect Light?
   a. Ambient light   b. Point light
   c. Normal light   d. Spot light

(vii) Which of the following in 3D Max refers to the line connecting tow vertex?

    a. Segment   b. Extrude

    c. Vertex   d. Spline

(viii) Which light is represented by the icon in the given image?

    a. Spot light   b. Ambient light

    c. Point light   d. All of the above

(ix) Which output image file formats can store the depth channels in one file?

    a. Maya IFF   b. Maya "I"

    c. Maya XF   d. None of the above

(x) What is a technique used in 3D computer graphics that are meant to add more realistic lighting to a 3D scenes?

    a. Global animation   b. Global imagery

    c. Global illusion   d. Global illumination

Group – B

(Short Answer Type Questions)   3 x 5 = 15

Answer any *three* from the following:

2. Write a short note on Kinematics?   5
3. What do you mean by Skinning?   5
4. What is Set Driven Key?   5
5. What do you mean by Rigging?   5
6. Define about IK Solver.   5

Group – C

(Long Answer Type Questions)   3 x 15 = 45

Answer any *three* from the following:

7. (a) How to create a Skeleton Rig in Maya.   8
   (b) What do you mean by Latices and Curves   7
8. (a) Explain using the Parent and Child in Rigging Animation.   10
   (b) How to create Skeleton Rig?   5
9. (a) Explain the Human Inverse Kinematics in Rigging Animation?   10
   (b) What do you mean by Skeleton Generator?   5
10. (a) Define Skinning Geometry in Rigging Systems.   8
    (b) How to Edit Skin Weights in the Component Editor?   7
11. Explain the Twelve Basic Principles of 3D Animation.   15