BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – M.Sc.(AM)-2020/M.Sc.(AM)-2021/M.Sc.(AM)-2022/M.Sc.(AM)-2023

Course Name – Animation Film Making II - 3D

Course Code - MMM301A-II/MMM301AII

(Semester III)

Full Marks : 60   Time : 2:30 Hours

[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 Question)   1 x 15=15

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

(i)   Select the shortcut of Attribute Editor.

a) Ctrl+A   b) Ctrl+C
c) Ctrl+X   d) Alt+Tab+Ctrl

(ii)   State the full form of MEL.

a) Maya Extreme Logo   b) Maya Embedded Language
c) Maya Embedded Language   d) Maya Error Loop

(iii) Choose from one of these, that is not a scripting language you can use in Maya.

a) Python   b) Ruby
c) Mel   d) Java

(iv) Choose the default views that a 3D model can be viewed from in Autodesk Maya.

a) Front, Side, Top and a free-moving perspective view   b) Left, Right and Back
c) Perspective and Right   d) None of the above

(v)   Identify the tool used to smooth a mesh in Autodesk Maya.

a) Bevel   b) Smooth
c) Extrude   d) Merge

(vi) Choose the tool used to move objects along the X, Y, and Z axes in Maya.

a) Move Tool   b) Rotate Tool
c) Scale Tool   d) Transform Tool

(vii) Identify the shortcut to switch between the perspective and orthographic views in Maya.

a) Spacebar   b) Alt + Spacebar
c) Ctrl + Spacebar   d) Shift + Spacebar

(viii) Choose the function of the 'Slide Edge Tool' in Edge mode.

a) 1. Moves an edge along the surface   b) 2. Duplicates an edge
c) 3. Scales an edge   d) 4. Extrudes an edge

(ix) Choose the correct tool used to create a polygonal bridge between two edges in Maya.

    a) Extrude   b) Bridge
    c) Bevel   d) Merge

(x) Choose the correct method to apply a material to an object in Maya.

    a) Use the Material Editor   b) Apply via UV Texture Editor
    c) Use Hypershade   d) Assign material through Graph Node

(xi) Identify the tool used to view UV layouts in Maya.

    a) UV Toolkit   b) Hypershade
    c) UV Editor   d) Attribute Editor

(xii) Point out the attribute that allows soft, diffused shadows for more natural lighting effects.

    a) Decay Rate   b) Shadow Softness
    c) Intensity   d) Dropoff

(xiii) Identify the best use of Ambient Light in Maya.

    a) General Illumination   b) Focused Spotlight
    c) Highlight Control   d) Shadow Creation

(xiv) Choose the render setting that controls the overall sharpness of the rendered image.

    a) Blur Control   b) Sharpness Control
    c) Anti-Aliasing   d) Image Detail Control

(xv) Point out the control used to manage the number of samples taken for lighting during rendering.

    a) Light Samples   b) Sampling Quality
    c) Render Samples   d) Sample Rate

Group-B
(Short Answer Type Questions)   3 x 5=15

2. Explain the Concept of Normal Mapping in 3D Graphics.   (3)
3. Define UV unwrapping in Maya.   (3)
4. Explain mesh and edge flow in 3D modeling.   (3)
5. Summarize the attribute that controls the softness of shadows.   (3)
6. Explain Splines.   (3)

OR

    Explain the Combining Meshes in 3D modelling.   (3)

Group-C
(Long Answer Type Questions)   5 x 6=30

7. Explain the Role of Shaders of Materials in 3D Rendering   (5)
8. Illustrate the benefits of using the Insert Edge Loop tool for adding detail to a low-polygon model. How does this tool contribute to the model's ability to undergo smooth deformations.   (5)
9. List the main functions of Vertex, Edge, and Face modes in Maya.   (5)
10. Describe the interface of Maya and its key elements.   (5)
11. Explain about Extrude in modelling.   (5)
12. Write About the Key Characteristics of Directional Lights in 3D Rendering.   (5)

OR

    Explain the Role of Point Lights in Adding Realism to 3D Scenes.   (5)

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