



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – M.Sc.(AM)-2022

Course Name – Advanced Animation and CG Production–3d

Course Code - MMM402All

(Semester IV)

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 panel in Adobe Animate CC that indicates what settings are being used for objects and allows you to change those settings.
- a) Properties
b) Library
c) Tool
d) Timeline
- (ii) Select the objects that have been converted so that you can use the same image a number of times in a movie in Adobe Animate CC.
- a) Layer
b) Clipart
c) Tween
d) Symbol
- (iii) Select the characteristics of Anime characters.
- a) Squiggle Eyes.
b) Blushing Cheeks.
c) Make up laden face.
d) Squiggle Eyes , Blushing Cheeks and Make up laden face.
- (iv) Select, To open and change the Interactive Bind Skin Options
- a) Select edit > Interactive Bind Skin
b) Select Skin > Interactive Bind Skin
c) Select control > Interactive Bind Skin
d) None of the above
- (v) Express the collection of computers linked together to render different frames of a single animation are referred to as what.
- a) Render Heard
b) Render Command Module
c) Render Unit
d) Render Farm
- (vi) Write a texture is basically a 2D image placed on a 3D model, including some data is called.
- a) Mapping
b) UV coordinates
c) unwrapping
d) None of the above
- (vii) Select, Which light is physical based 2 dimensional rectangular light source
- a) Point Light
b) Directional Light
c) Area light
d) Ambient Light

- (viii) Identify the full form of HDRI.
- a) High Dynamic Range Images
b) Hollow Dome Range Lights
c) Hyper Dynamic Range Ions
d) None of the above
- (ix) Identify the full form of IES lights.
- a) Incandescent Enhanced Setup
b) Illuminating Engineering Society
c) Interior Environment Setup
d) None of the above
- (x) Select the correct option for In Skydome light.
- a) Each pixel of the HDRI image simulate light.
b) The Sun in the image emit light
c) Additional light is created to emit light
d) All of the above
- (xi) Choose, for which properties of the material we can distinguish between liquid and glass.
- a) Reflection
b) Refraction
c) Bump
d) Roughness
- (xii) Identify the main purpose of creating layouts for an animatic
- a) To establish the visual storytelling
b) To design character walk cycles
c) To add special effects to the animation
d) To refine the character's facial rig
- (xiii) Choose the primary purpose of using blend shapes for facial expressions
- a) To create character walk cycles.
b) To adjust the lighting in the scene.
c) To control facial expressions and emotions.
d) To design character models
- (xiv) Recognize the feature in Maya used for creating and simulating dynamic particle-based effects like smoke, dust, and explosions.
- a) Maya Fluids
b) Maya Bifrost
c) Maya Cloth
d) Maya N-particles
- (xv) Use the appropriate tool to create a fluid container in Maya
- a) Particle Tool
b) Fluid Effects > Create 3D Container
c) Rigid Body Tool
d) Dynamics

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Define CGI. (3)
3. Define Deformers and Lamp Rigging (3)
4. Explain mirror joints and joint parenting. (3)
5. Evaluate the effectiveness of using simulations in creating realistic animations. (3)
6. Analyze the role of Bifrost in Maya and its impact on 3D animation. (3)

OR

- Describe the advantages of using Bifrost for large-scale simulations in Maya. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Evaluate how can animators ensure that blend shapes are integrated smoothly into the overall character rig. (5)
8. Summarize hair simulation and how is it used in visual effects and animation (5)
9. Explain the primary purpose of rigging in 3D animation, and how does it contribute to the overall animation process. (5)
10. Describe constraints in rigging. (5)
11. Write some common applications for fluid, hair, cloth, FX, and particle effects in visual effects and animation (5)
12. Summarize what are the technical requirements for creating expressions in 3D modeling and rigging. (5)

OR

Explain some common challenges associated with working with fluid simulation.

(5)
