



## BRAINWARE UNIVERSITY

### Term End Examination 2020 - 21

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

Course Name – Elements of 3D Animation Part 2

Course Code - BMW501A

Semester / Year - Semester V

Time allotted : 85 Minutes

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 Question)

1 x 70=70

1. *(Answer any Seventy)*

(i) Which node controls the rotation of the Chain?

- |                       |                  |
|-----------------------|------------------|
| a) Inverse Kinematics | b) Driven        |
| c) Blend Shapes       | d) None of these |

(ii) Which solver is animate our “Bones” figure?

- |       |       |
|-------|-------|
| a) HI | b) IK |
| c) KI | d) HD |

(iii) Which keys speed up the animation process for the animators?

- |                |                    |
|----------------|--------------------|
| a) Driver Keys | b) Set Driven Keys |
| c) LK Keys     | d) None of these   |

(iv) What is the full form of IK?

- |                             |                       |
|-----------------------------|-----------------------|
| a) Inverted Kinematics      | b) Inverse Kinematics |
| c) Independently Kinematics | d) None of these      |

(v) The X Axis is Displayed using what color?

- |           |                  |
|-----------|------------------|
| a) Yellow | b) Red           |
| c) Black  | d) None of these |

(vi) The menu to view, modify animation curves and change animation curves value is called\_\_\_\_\_.

- a) Animation Editor
- b) controllers Editor
- c) Graph Editor
- d) None of these

(vii) What is rigging ?

- a) Rigging is the process of setting of a character ready for animation
- b) Rigging is the process create character design
- c) Rigging is the process of chroma character design
- d) None of these

(viii) Once you make a shape, its important to check which of the following options?

- a) Slice on
- b) Base to pivot
- c) Auto grid
- d) Generate Mapping Cords

(ix) Skinning is the process of ?

- a) Attaching objects to other objects
- b) Wrapping a skin around a polygon
- c) Binding the body to the skeleton
- d) Removing the skin from the model

(x) What is skinning?

- a) When you bind a model to a skeleton, it is called skinning
- b) Building the skeletons is skinning
- c) To animate the character
- d) None of these

(xi) You can pose and animate the joints of a joint chain using both FK and IK. This is called

- a) Skinning
- b) Animation blending
- c) Flipping with the IK
- d) None of these

(xii) To create a spline IK handle and automatically create the spline IK NURBS curves

- a) Select Skeleton > Create IK Spline Handle
- b) Select Spline > Create IK Spline Handle
- c) Select rig > Create IK Spline Handle
- d) None of these

(xiii) To delete an IK handle

- a) Select the IK handle>Select File > Delete.
- b) Select the IK handle>Select Edit > Delete.
- c) Select the IK handle>Select merge > Delete
- d) None of these

(xiv) To create a joint or joint chain

- a) Select Chains > Create Joints
- b) In the Rigging menu set (press F3), select Skeleton > Create Joints.
- c) Goto NURBS Modeling
- d) None of these

(xv) Creates a Cluster deformer in rigging

- a) To open and change the Cluster Options, select Deform > (Create) Cluster
- b) Select form > Cluster
- c) Select Deform > Rigging
- d) None of these

(xvi) To Creates a parent constraint

- a) Select Point > Parent
- b) Select Orient > Parent
- c) Select Constrain > Parent
- d) None of these

(xvii) Before a rigger can select the length and capacity of slings needed to lift a load, what two things must he know about the load?

- a) Height, manufacturer
- b) Weight, center of gravity
- c) Color, designated pick points
- d) None of these

(xviii) 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

(xix) Which Nurbs Element Is Being Represented By The Yellow Colored Line In The Given Image?

a) Playing

b) Isoparm

c) Colored

d) None of these

(xx) Which Utility Node Is Used To Obtain Information About The Position Of A Light Relative To A Texture?

a) L texture

b) UV texture

c) Texture Illusion

d) Light info

(xxi) How do you view the polycount in maya in order to Suggest it?

a) Display > Heads up display > Polycount

b) Modify > Heads up display > Polycount

c) Count > display > Polycount

d) None of these

(xxii) The process of building an object on the computer within 3D space is most often called what?

a) Sculpting

b) Modeling

c) Surfacing

d) 3D Drawing

(xxiii) Once the character or object is built in the program, what is the process called of adding color, reflection, transparency, translucency and roughness?

a) Coloring

b) Sculpting

c) Texturing

d) Air Brushing

(xxiv) Light in the real world continually bounces off of objects to illuminate an area. In the 3D software, this real world light simulation is extremely intensive on the computer, but produces beautiful results. Can you guess what most software dubs this simulation?

a) Dynamics

b) Volumetrics

c) Hypervoxels

d) Radiosity



(xxv) Everything in a 3D scene has to be either manually animated or calculated by the computer, as nothing is preset in the software. What is the calculation called to recreate real world effects such as gravity, wind, liquids and collisions?

- a) Dynamics
- b) Simulations
- c) Real world events
- d) Motions

(xxvi) A 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

(xxvii) A texture is basically a 2D image placed on a 3D model, including some data called

- a) Mapping
- b) UV coordinates
- c) unwrapping
- d) None of these

(xxviii) The UV coordinates determine where exactly to apply (or map) the texture on the model. This mapping process is simply called

- a) UV coordinates
- b) mapping
- c) texture mapping
- d) None of these

(xxix) The action of creating or modifying UV coordinates is called

- a) UV coordinates
- b) UV unwrapping
- c) texture mapping
- d) None of these

(xxx) Which light in Maya is used to simulate the combination of direct and indirect lighting.

- a) Ambient Light
- b) Directional Light
- c) Point Light
- d) Spot Light

(xxxix) Which light is used to simulate sunlight because it uses parallel rays of

light as if illuminating the object from far distance.

- a) Point Light
- b) Spot Light
- c) Directional Light
- d) Ambient Light

(xxxii) Which lights in Maya shines evenly in all direction from small point source

- a) Directional Light
- b) Point Light
- c) Spot Light
- d) Ambient Light

(xxxiii) Which light is physical based 2 dimensional rectangular light source

- a) Point Light
- b) Directional Light
- c) Area light
- d) Volume light

(xxxiv) Which textures are commonly used either as backgrounds for objects in your scene or as reflection maps.

- a) Environment textures
- b) Layered textures
- c) Reflection
- d) None of these

(xxxv) What is the shortcut of setting key frame in Maya?

- a) S
- b) P
- c) I
- d) U

(xxxvi) What is the shortcut of applying parent in Maya?

- a) D
- b) V
- c) Q
- d) P

(xxxvii) In 3D, rigging is basically associated with

- a) Animation
- b) Modelling
- c) Rendering
- d) Lighting

(xxxviii) What is the full form of HDRI?

- a) High Dynamic Range Images
- b) Hollow Dome Range Lights
- c) Hyper Dynamic Range Ions
- d) None of these

(xxxix) What is the shortcut of previewing the lights in the Maya Viewport?

- a) 5
- b) 6
- c) 7
- d) 8

(xl) What is the key use of rigging?

- a) Deform the character
- b) Animate the character
- c) Move the character
- d) Rotate the polygonal faces

(xli) In rigging, joints can be classified as:

- a) Animation node
- b) Keyframe Node
- c) Transform Node
- d) None of these

(xlii) What is the significance of Ambient Occlusion material?

- a) Calculating the direct and indirect lights.
- b) Creating a matte white texture
- c) Reflecting the direct light
- d) Create smooth shadows

(xliii) In aiSkydome 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 these

(xliv) The light which emits photons in all direction is called:

- a) Area Light
- b) Directional Light
- c) Point Light
- d) None of these

(xlv) Combining Color map and transparency map creates:

- a) Stencil map
- b) Bump map
- c) Spot light
- d) Transform

(xlvi) For which properties of a material we can distinguish between wood and metal?

- a) Reflection
- b) Refraction
- c) Bump
- d) Roughness

(xlvii) A light which is used to simulate the sun light and works by rotation is called:

- a) Direction light
- b) Area Light
- c) Physical sky
- d) Point light

(xlviii) The name of the process that you can use to create a sequence of images for your scene inside Maya is?

- a) Export
- b) Batch Rendering
- c) Save as
- d) Make Movie

(xlix) The name of the command that you should use to create a copy of your object inside your 3D scene in Maya is called?

- a) Duplicate
- b) Copy
- c) Group
- d) Paste

(l) One of the following is essential to create animations

- a) Coloring shape
- b) Creating motion path
- c) Creating keys
- d) Setting the opacity of the shape

(li) To prepare audiences for next main action that a character is about to do , you have to draw prior to it :

- a) Exaggeration action
- b) Anticipation action
- c) Overlapping action
- d) Nice & strong pose

(lii) One of the following objects will not appear in your rendered frame

- a) A curve
- b) A Cluster

- c) A locator
- d) All of the other options

(lii) The first control that you should move and position to get a proper pose is :

- a) The Legs controls
- b) The Pelvis controls
- c) The Head controls
- d) Non of the other options

(liv) One of the following is a difference between a run cycle and a walk cycle:

- a) Run cycle has more dynamic poses
- b) Feet in Run cycle might lose the contact to the ground
- c) Situation of the hands in run cycle are more bending
- d) All of the other options

(lv) When animating a scene inside Maya, to create a preview for your animation you should:

- a) Create a rendered image
- b) Create a playblast
- c) Move your mouse over each frame on the timeline
- d) Set the playback speed of the timeline to be "play every frame"

(lvi) Which one of the following is considered to be an animation principle?

- a) Spacing.
- b) Overlapping.
- c) Anticipation.
- d) All of the other options

(lvii) What view guideline shows the actual view seen in the rendered image?

- a) The perspective view
- b) The render gate
- c) The view gate
- d) The resolution gate

(lviii) Why make the display size of the joints bigger?

- a) To give the joints more resistance
- b) So they'll be visible when rendering
- c) So it's easier to see the joints' orientations
- d) To activate the joints' movements

(lix) The eyeballs should be bound to the ... ?

- a) Root joint
- b) Eyelids
- c) Head joint
- d) Eye joints

(lx) What is a skeleton chain?

- a) A series of polygonal links
- b) A chain anchoring the skeleton
- c) A series of bones and joints that are bound to the model
- d) A series of skeletons linked together

(lxi) What are fields?

- a) Forces used to animate the motion of dynamic objects
- b) An area of effect within a polygon
- c) Forces used to control the motion of NURBS
- d) The area of effect that's closest to the ground plane

(lxii) Which Editor Is Used To Create, Edit, And Connect Rendering Nodes, Such As Textures, Materials, Lights, Rendering Utilities, And Special Effects?

- a) Hypershade
- b) Node Editor
- c) Graph Editor
- d) Light Editor

(lxiii) What method of animation creates the in between frames when you create the start and end points of the animation?

- a) Motion
- b) Classic
- c) Shape
- d) Tweening

(lxiv) Name the rigging method that determines the poses of the character.

- a) Arc in animation
- b) Spline
- c) Biped
- d) All of these

(lxv) What is the option in 3d that regenerate your final image or animation?

- a) Play
- b) Save

c) Generation

d) Render

(lxvi) One of the following is not a type of animation:

a) Cutout

b) Stopmotion

c) Cel

d) Graphic design

(lxvii) In Maya there are four view ports, what are they?

a) Top, Side, Front, Back

b) Top, Left, Right, Back

c) Top, Perspective, Side, Front

d) Perspective, Camera1, Camera2, Camera3

(lxviii) To activate the snap to grid option you should press :

a) The C key on the keyboard

b) The X key on the keyboard

c) The V key on the keyboard

d) The G key on the keyboard.

(lxix) In Maya , one of the following is not a non-linear deformer

a) Bend

b) Sine

c) Wave

d) Lens flare

(lxx) What are the main poses that you need to have in your walk cycle to get good movement?

a) Contact pose, Down pose, Passing pose, Peak pose.

b) Contact pose, Down pose, Passing pose, Jumping pose.

c) Switching pose, Overlapping pose, Low pose, High pose

d) Down pose, Peak pose, Walking pose, Switching pose.