

CGS3220 Introduction of Computer Aided Modeling

Final - Fall 2006

Please answer the following questions on the scantron sheet:

1. If we create a cube in Maya, the 'Transform' node of this cube contains: ()
(A) Positioning information of it (B) The base shape of the object
(C) The options that drive the creation (D) None of the above
2. Which of the following view panels aren't in Maya: ()
(A) Front (B) Perspective
(C) Side (D) None of the above
3. Which one of the following shading techniques is good for dull or matte effect: ()
(A) Blinn (B) Phong
(C) Lambert (D) None of the above
4. Which combination of the following attributes is used to control the rotation of an object along its motion path: ()
(A) Follow and Front Axis (B) Follow and Bank
(C) Front Axis and Bank (D) None of the above
5. Which one of the following statements about active and passive rigid bodies is true? ()
(A) Active Rigid Bodies react to dynamics.
(B) Dynamics has no effect on Passive Rigid Bodies.
(C) Passive Rigid Bodies can have Active Rigid Bodies collide with them.
(D) All of the above
6. Which one of the following statements about F-stop is true? ()
(A) It's a measure of the aperture. (B) High f-stop for wide aperture
(C) Low f-stop gives large focal depth (D) All of the above
7. Which of the following statements about the Projection Manipulator is true? ()
(A) It is used while creating UVs using planar mapping
(B) It allows us to transform the projection to suit the geometry
(C) It allows us to scale, translate and rotate the projection
(D) All of the Above
8. During optimizing a scene in Maya, we can do the following operations to clean up the scene: ()
(A) Delete Unused Nodes (B) Optimize Scene Size
(C) Delete History (D) All of the Above
9. With 3D paint tool, we can add _____ to the object from the 3D view. ()
(A) color (B) bump mapping
(C) paint effect (D) All of the Above
10. In Maya, we call posing and animating the skeleton using only the rotation tool ____ ()
(A) Inverse Kinematics (B) Forward Kinematics
(C) Rigging (D) None of the Above
11. Which statement(s) of the following about MEL is true? ()
(A) It's short for Maya Embedded Language.

- (B) Everything you can do in the Maya interface has an equivalent MEL command.
 (C) MEL enables you to combine multiple commands into a single script.
 (D) All of the Above
12. Which of the following editors can we use to create a MEL button? ()
 (A) Graph Editor (B) Trax Editor
 (C) Script Editor (D) None of the Above
13. What is the function of the MEL command “select -cl”? ()
 (A) Select a joint named “cl” (B) clear the selection
 (C) Select all the children of root joint (D) None of the Above
14. Which of the following editors can we use to edit a shelf button? ()
 (A) Shelf Editor (B) Script Editor
 (C) Graph Editor (D) None of the Above
15. Which symbol of the following is used for commenting the following code? ()
 (A) “\” (B) “/”
 (C) “\\” (D) “//”
16. When we say Character Skinning is the process of connecting a character’s meat to its bones, we actually mean: ()
 (A) Getting the mesh to control the skeleton
 (B) Changing the influence of the mesh on the joints
 (C) Getting the skeleton to control the mesh
 (D) None of the Above
17. What is the advantage(s) of removing the smoothing and re-smoothing the mesh? ()
 (A) less computationally intensive (B) decreases the complexity of weighting
 (C) gives a smoother result (D) All of the Above
18. Which statement(s) of the following about Skin Weighting is true? ()
 (A) Skin Binding automatically perform a Skin Weighting on the mesh
 (B) Maya creates “skin clusters” that tell each joint how much influence they have on a given point
 (C) Skin Weight can be changed by Weight Painting
 (D) All of the Above
19. Crease is a good property of Subdivision, which of the following statements is true about crease? ()
 (A) It can be used on edges or vertices
 (B) When you define an edge or a vertex the underlying geometry is changed to create the crease
 (C) Full Crease Edge/Vertex gives a sharp boundary at an edge or a vertex
 (D) All of the Above
20. Which of the following statements is true about lighting model, shading model and surface rendering method? ()
 (A) Lighting model is how we calculate the intensity at a point on the surface
 (B) Surface Rendering is how we calculate the intensity at a point on the surface
 (C) Shading model is how we calculate the intensity at each pixel
 (D) None of the Above
21. Which of the following is correct? ()

- (A) Illumination is the transport of light from a source to a point via direct and indirect paths
 (B) Lighting is computing the luminous intensity for a specified 3D point, given a viewpoint
 (C) Shading is assigning colors to pixels
 (D) All of the Above
22. Which of the following statements about the lighting model is true? ()
 (A) The two fundamental components are light source and object
 (B) Light sources' three properties are color, shape and direction
 (C) Objects' three properties are material, geometry and absorption
 (D) All of the Above
23. Which of the following equation about contributions for lights is correct? ()
 (A) Light at a pixel from a light = Ambient + Diffuse + Specular contributions
 (B) $I_{\text{light}} = I_{\text{ambient}} + I_{\text{diffuse}} + I_{\text{specular}}$
 (C) $I_{\text{ambient}} = \text{color}$
 (D) All of the Above
24. Diffuse surfaces follow which law? ()
 (A) Snell's Cosine Law (B) Lambert's Cosine Law
 (C) Snell's Sine Law (D) All of the Above
25. Which one of the following components is "the combination of light reflections from various surfaces to produce a uniform illumination"? ()
 (A) Specular (B) Ambient
 (C) Diffuse (D) None of the Above
26. Which of the following causes a light source to contribute a higher incident intensity to closer surfaces? ()
 (A) Ambient (B) Diffuse
 (C) Attenuation (D) Specular
27. The wire deformer will deform the surface based on a curve, what tool did we use to create the wire itself? ()
 (A) Wire Tool (B) EP curve tool
 (C) Vertex curve tool (D) None of the Above
28. The same wire deformer can be used to affect: ()
 (A) Single mesh (B) Different parts of a single mesh
 (C) Multiple meshes (D) All of the Above
29. Which statement about the difference between point on curve deformer and cluster deformer is **not** true? ()
 (A) The rotation of cluster deformer has no effect, but the rotation of point deformer has an effect.
 (B) The cluster deformer can affect many points at a time, but the point cannot.
 (C) Both work on the wire deformer.
 (D) All of the Above.
30. The Soft modification Tool enables us to do the following operations: ()
 (A) Move, rotate and scale the deformer (B) Change the falloff radius
 (C) Edit the falloff curve (D) All of the Above

Key:

ADCBD

ADDDB

DCBAD

CDDDA

DDDBB

CBDAD