

**CGS3220 Introduction of Computer Aided Modeling**  
**Midterm - Fall 2006**

Answer the following questions on the scantron sheet:

1. Maya provides the three fundamental interactive 3d manipulators to model the object, they are: ( )  
(A) Translation, Rotation, and Scale (B) Tumble, Track, and Dolly  
(C) Transform, Shape, and Input (D) None of the above
2. Most complicated models are made from basic primitives, Maya provides several kinds of primitives, including: ( )  
(A) Polygon Primitives (B) NURBS Primitives  
(C) Subdivision Primitives (D) All of the above
3. In Maya, which primitives are resolution independent: ( )  
(A) Polygon and NURBS (B) NUBS and Subdivision  
(C) Polygon and Subdivision (D) All three kinds of primitives
4. Which of the following descriptions about Procedural Models is correct? ( )  
(A) In Maya, a primitive cube is a Procedural Model  
(B) Procedural Models can be broken down into nodes  
(C) A node of a Procedural Model is a generic object type with specific attributes  
(D) All of the Above
5. A newly created default cube in Maya has which of the following nodes? ( )  
(A) Transform (B) Shape  
(C) Input (D) All of the Above
6. If we create a cube in Maya, the 'Input' 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
7. Which of the following view panels aren't in Maya: ( )  
(A) Orthographic (B) Perspective  
(C) Cylindrical (D) None of the above
8. Hotkeys are one of the most convenient features provided by Maya, suppose we select an object, the hotkey 'F' is to: ( )  
(A) Frame all object (B) Frame selected  
(C) Key-frame the object (D) None of the above
9. When we duplicate an object with 'Duplicate' command, Maya will: ( )  
(A) Create a new object (B) Duplicate the translation, rotation, scale  
(C) Automatically number the object (D) All of the above
10. Which of the following descriptions about NURBS is correct? ( )  
(A) defined by control vertices, which are directly on the curves or surfaces  
(B) deformed based on vertexes  
(C) made up of curves which define the surface  
(D) None of the Above

11. When changing polygonal faces, Maya gives us the options of: ( )  
 (A) Moving the faces without creating new polygons  
 (B) Extruding the faces without affecting the original neighborhood faces  
 (C) Extruding the faces by creating new polygons without affecting the neighborhood faces  
 (D) All of the above
12. To apply colors and texture on the objects we modeled, the editor we need is: ( )  
 (A) Graph Editor (B) Attribute Editor  
 (C) Hypershade (D) None of the above
13. Maya allows us to assign a same texture on: ( )  
 (A) The whole object (B) A single face of an object  
 (C) Multiple faces of an objects (D) All of the above
14. Which one of the following shading techniques is good for creating a plastic effect: ( )  
 (A) Blinn (B) Phong  
 (C) Lambert (D) None of the above
15. Which one of the following shading techniques is good for creating a metal effect: ( )  
 (A) Blinn (B) Phong  
 (C) Lambert (D) None of the above
16. 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
17. Which of the following descriptions about Grouping and Parenting is not true: ( )  
 (A) Hierarchies not only get the scene organized but also play a key role in animation  
 (B) When you transform or rotate a parent object, all of its children objects will be affected  
 (C) A group of objects can share a single pivot point  
 (D) None of the above
18. In Maya, a keyframe can be understood as a snapshot of \_\_\_\_\_ at key points in time. ( )  
 (A) Translation (B) Rotation  
 (C) Scale (D) Values
19. To review and edit the interpolation between keyframes, the editor we need is:( )  
 (A) Graph Editor (B) Attribute Editor  
 (C) Hypershade (D) None of the above
20. To change the mapping method of a 2D image texture in Maya, we need: ( )  
 (A) Graph Editor (B) Attribute Editor  
 (C) Hypershade (D) UV Texture Editor

21. Which of the following options is provided for UV Texture mapping? ( )  
 (A) Cylindrical (B) Spherical  
 (C) Automatic (D) All of the Above
22. In Maya, the Sculpt Polygons Tool allows us to change the polygon surfaces in which mode: ( )  
 (A) Push (B) Pull  
 (C) Smooth (D) All of the above
23. While creating the Blend Shape Deformer in Maya, which of the following statements is true: ( )  
 (A) select the original object first (B) select the original object last  
 (C) the sequence doesn't matter (D) the blend value is always from 0 to 1
24. To attach an attribute to the blend shape in Maya we use the: ( )  
 (A) Blend Shape Editor (B) Connection Editor  
 (C) Attribute Editor (D) None of the above
25. Which one of the following descriptions about path animation is **not** true: ( )  
 (A) Path animation is done by attaching one surface to another  
 (B) The motion path is created by using EP curve tool  
 (C) Path animation creates a motion path node that allows you to key motion along a curve  
 (D) None of the above
26. 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
27. Which one of the following statements about active and passive rigid bodies is **not** 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) None of the above
28. Which one of the following statements about gravity field is true? ( )  
 (A) By default, the gravity field is perpendicular to the global x-z plane.  
 (B) The gravity field doesn't have to affect all the objects in the scene.  
 (C) It has no effect on passive rigid bodies.  
 (D) All of the Above
29. Which one of the following statements about F-stop is true ( )  
 (A) It's a measure of the aperture. (B) Low f-stop for wide aperture  
 (C) High f-stop gives large focal depth (D) All of the above
30. Which one of the following tools lets you choose a portion of a surface divided by a curve, and trash the other part ( )  
 (A) Paint Tool (B) Trim Tool  
 (C) Loft Curves (D) None of the Above

31. What is necessary to create a planar surface? ( )  
 (A) A closed curve or isoparm (B) CVs defining the curve and the surface  
 (C) aligning the CVs to a plane (D) All of the Above
32. Which tool allows creating a surface from a curve? ( )  
 (A) Loft (B) Revolve  
 (C) Planar (D) All of the Above
33. The mirror tool in Maya allows us to mirror ( )  
 (A) Single object (B) Group of objects  
 (C) With different scale (D) All of the Above
34. Where can we see the UV coordinates of our model in 2d? ( )  
 (A) Orthogonal View of Maya (B) Hypershade  
 (C) UV Texture Editor (D) None of the Above
35. UVs are similar to coordinates of vertices, \_\_\_\_\_ ( )  
 (A) and they both live in 3D space (B) and they both live in 2D space  
 (C) but UVs are 2D & vertexes are 3D (D) but UVs are 3D & vertexes are 2D
36. The projection manipulator allows you to do the following operation on the projection of textures. ( )  
 (A) scale (B) translate  
 (C) rotate (D) All of the Above
37. We have the following paint operations available in the 3D Paint Tool: ( )  
 (A) Clone (B) Smear  
 (C) Blur (D) All of the Above
38. 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
39. In Maya, Offset Edge Loop Tool will: ( )  
 (A) add two edge loops along side an existing edge loop  
 (B) help to properly delete a whole edge loop  
 (C) decrease the complexity of the model  
 (D) All of the Above
40. In Maya, Lattice Deformer provide: ( )  
 (A) an easy way to change the proportions of a model  
 (B) S, T, and U Divisions to specify the resolution of manipulators  
 (C) a way to change the proportion of the specific part of a model  
 (D) All of the Above

**Answer Key:**

ADBDD

CCBDC

DCDBA

CDDAD

DDBBA

BDDDB

DDDCC

DDDAD