No. of Printed Pages : 8

BNM-001

BACHELOR OF ARTS IN 3D ANIMATION AND VISUAL EFFECTS

Term-End Theory Examination

01360 **December, 2014**

BNM-001 : ANIMATION PRODUCTION PIPELINE

Time : 3 hours *Maximum Marks : 100*

(Weightage 100%)

Note : *Attempt* ***all*** *questions.*

The following section has objective type questions. Choose the correct answer. Each question carries 2 marks.

1. In Maya you can't animate the display and movement of particles with keys. 2

(a) True

(b) False

2. In Maya _____ causes particles that collide with geometry to create new particles upon contact. 2

(a) Make Collide

(b) Per Point Event Editor

(c) Particle Collision Event Editor

3. In Maya the _____ of a particle object is the value of its position, velocity, acceleration and mass attributes at any frame. 2

(a) dynamic state

(b) static state

(c) idle state

4. In Maya _____ emits particles from a position in the workspace or from particles, vertices, CVs, edit points, or lattice points. 2

(a) Surface Emitter

(b) Point Emitter

(c) Curve Emitter

5. In Maya a goal can be any object that includes a curve on surface. 2

(a) True

(b) False

6. In Maya _____ can be used to reassign collisions between particles and rigid bodies or soft bodies. 2

(a) Collision Relationships Editor

(b) Particle Relationships Editor

(c) Dynamic Relationships Editor

7. In Maya _____ fields influence objects from a stationary or moving position in the work space. 2

(a) Stand-alone

(b) Animated

(c) Object

8. In Maya the combination of the _____ and _____ is a soft body. 2

(a) Objects, Springs

(b) Geometry, Particles

(c) Particles, Springs

9. In Maya a rigid body is a polygonal or NURBS surface converted to a/an _____ shape. 2

(a) unyielding

(b) closed

(c) deforming

10. In Maya _____ fluid effects do not use the fluid solvers to simulate fluid motion. 2

(a) idle

(b) static

(c) non-dynamic

11. In Maya _____ represents the material property (the substance) of the fluid in the real world. 2

(a) Density

(b) Color

(c) Opacity

12. In Maya when you define a fluid property as a _____, you can place different property values in each individual grid unit called voxel. 2

(a) set to gird

(b) add to grid

(c) grid

13. In 3DS Max Particle Flow employs a non-event driven model, using a special dialog called Particle View. 2

(a) True

(b) False

14. In 3DS Max by default, the emitter is the Particle Flow source icon using the _____. 2

(a) Position Object Operator

(b) Position Icon Operator

(c) Particle Icon Operation

15. In 3DS Max Particle Flow the first event is called the _____ event. 2

(a) global

(b) main

(c) master

16. In 3DS Max Particle Flow the _____ contains the particle diagram and provides functions for modifying the particle system. 2

(a) parameters panel

(b) depot

(c) event display

17. Which one of the following test operators determines a specific amount of time has passed since the beginning of the simulation ? 2

(a) Time Test

(b) Age Test

(c) Life Test

18. In 3DS Max Particle Flow which operator controls the initial placement of particles on the emitter ? 2

(a) Position Icon Operator

(b) Birth Operator

(c) Position Object Operator

19. In 3DS Max which operator lets you control particle speed and direction with any object or objects in the scene ? 2

(a) Speed by Object Operator

(b) Speed by Surface Operator

(c) Speed by Geometry Operator

20. In 3DS Max Particle Flow 2D particles have zero thickness, and are invisible when the back of the particle faces the camera at any condition. 2

(a) True

(b) False

21. In 3DS Max Particle Flow _____ replaces each particle with either a rectangle or a box cut out from the particle geometry with an image mapped on to it. 2

(a) Image Map Operator

(b) Image Mark Operator

(c) Shape Mark Operator

22. In 3DS Max space warps are _____ objects that affect the appearance of other objects. 2

(a) non-renderable

(b) non-animatable

(c) renderable

23. In 3DS Max the Motor space warp works like _____, but applies rotational torque to the affected particles or objects rather than a directional force. 2

(a) Vortex

(b) Push

(c) Wind

24. In 3DS Max POmniFlect is a _____ Version of the omniflector type of space warp. 2

(a) cylindrical

(b) spherical

(c) planar

25. In 3DS Max when you use forces and deflectors together, always bind the deflectors before the forces. 2

(a) True

(b) False

26. In 3DS Max a particle-system object, like any other object, can carry only a single material at any time. *2*

(a) True

(b) False

27. In RealFlow Realwave mesh can be influenced by deamons. *2*

(a) True

(b) False

28. In RealFlow with _____ deamon it's possible to define a life-span for the particles and remove them when this limit is reached. *2*

(a) K Life

(b) K Time

(c) K Age

29. In RealFlow _____ is a very important attribute and effective tool to sharpen meshes and eliminate the rounded and "blobby" look. *2*

(a) Filters

(b) Smooth

(c) Particle Density

30. Objects can be modified in terms of polygon or vertex number by RealFlow's GUI. *2*

(a) True

(b) False

Answer the following questions with a detailed diagram / flow chart. Each question carries 10 marks.

31. Explain the production process involved in the creation of "Camp Fire" in 3DS Max. *10*

32. Describe the production process and integration between Maya/Max and RealFlow for the below examples. *10*

(a) Chocolate falling down on a surface (chocolate using RealFlow)

(b) Filling a glass of water (water using RealFlow)

33. Explain the stepwise process involved to create a realistic simulation of a group of arrows coming and hitting the ground using Maya Particle Dynamics. *10*

34. Define Turbulence Field and Vortex Field in Maya and explain their usage in brief. *10*