BACHELOR OF ARTS IN 3D ANIMATION AND VISUAL EFFECTS

Term-End Theory Examination

00293

June, 2018

BNM-001 : ANIMATION PRODUCTION PIPELINE

Time : 3 hours   *Maximum Marks : 100*

(Weightage 100%)

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

SECTION A

The following section has objective type questions. Select the right answer. Each question carries 2 marks.

1. In 3ds Max Particle Flow, spawn particles are new particles that are generated from existing particles in a process called particle _____ .   2

    (a) generation

    (b) spawning

    (c) creation

2. In 3ds Max Particle, systems are objects that generate _____ sub-objects called particles.   2

    (a) editable

    (b) non-editable

    (c) special

3. In 3ds Max Particle Flow, _____ provides the main user interface for creating and modifying particle systems in particle flow. *2*

    (a)   Event Display

    (b)   Depot

    (c)   Particle View

4. In 3ds Max, the easiest way to open Particle View is by pressing the _____ key on the keyboard. *2*

    (a)   5

    (b)   6

    (c)   7

5. In 3ds Max, after being born, particles cannot remain stationary at the emission point. *2*

    (a)   True

    (b)   False

6. In 3ds Max Particle Flow, the Birth operator must always come at the beginning of a particle stream. *2*

    (a)   True

    (b)   False

7. In 3ds Max Particle Flow, the delete operator lets you give them a/an _____ life span. *2*

    (a)   Infinite

    (b)   Finite

    (c)   Undefined

8. In 3ds Max Particle Flow, the _____ operator lets you emit particles from any other object or objects in the scene. *2*

(a) Position Icon

(b) Position Object

(c) Object

9. In 3ds Max Particle Flow, the _____ operator gives an angular velocity to particles in an event. *2*

(a) Rotate

(b) Spin

(c) Rotation

10. In 3ds Max Particle Flow, directional controls provided by the _____ operator are based on the position and orientation of the Particle Flow icon. *2*

(a) Speed

(b) Direction

(c) Rotation

11. In 3ds Max, the _____ space warp simulates the effect of wind blowing particles generated by a particle system. *2*

(a) Wind

(b) Air

(c) Air flow

12. In 3ds Max, the _____ space warp explodes objects into into their individual faces.　　　*2*

(a) PBomb

(b) Bomb

(c) Explode

13. In 3ds Max, the UDeflector is a universal deflector that lets you use any _____ as a particle deflector.　　　*2*

(a) Dummy object

(b) Particle

(c) Object

14. In Maya, a particle object is a collection of particles that share the _____ attributes.　　　*2*

(a) Different

(b) Opposite

(c) Same

15. In Maya, each particle in a scene belongs to some particle object.　　　*2*

(a) True

(b) False

16. In Maya, particle tool can be used to _____ particles in the workspace.　　　*2*

(a) place

(b) paint

(c) both

17. In Maya, _____ emitters emit particles from random, evenly distributed positions on the outer faces of NURBS or polygonal surfaces.　　2

(a)　Curve

(b)　Object

(c)　Surface

18. In Maya, volume emitters emit particles from a _____ volume.　　2

(a)　Open

(b)　Closed

(c)　Attached

19. In Maya, a goal can be any object except a _____ on surface.　　2

(a)　Curve

(b)　Point

(c)　Vertex

20. In Maya, particles can collide with other particles.　　2

(a)　True

(b)　False

21. In Maya, software rendered particles have a render type of _____ .　　2

(a)　Blobby Surface

(b)　Point

(c)　Spheres

22. In Maya, you can add a _____ rgbPP attribute, which means you can set the colour of each particle of the object independently.   *2*

   (a)   Shading group

   (b)   Per particle

   (c)   Per object

23. In Maya, you can set the lifespan for _____ particles or on a per-particle basis.   *2*

   (a)   Selected

   (b)   Random

   (c)   All the

24. In Maya, fields are _____ that you use to animate the motion of particles.   *2*

   (a)   Effectors

   (b)   Influences

   (c)   Forces

25. In Maya, when you make a soft body from geometry or a lattice, Maya creates a corresponding _____ object.   *2*

   (a)   Parent

   (b)   Child

   (c)   Particle

26. In Maya Fluid Dynamics, scaling fluid containers using the scale transform increases the size of the container _____ scaling the properties inside the container.   *2*

   (a)   without

   (b)   including

   (c)   with

27. In Maya, nCloth is composed of a network of many particles connected by many links, that together create a _____ mesh. 2

(a) Static

(b) Stable

(c) Dynamic

28. In RealFlow " _____ " particles are perfectly suited for fast calculations of secondary effects, like spray or foam. 2

(a) Gas

(b) Liquid

(c) Dumb

29. In RealFlow, _____ defines the tendency of particles to stick together. 2

(a) Thickness

(b) Viscosity

(c) Stickyness

30. Which of the following is **not** a particle type in RealFlow ? 2

(a) Gas

(b) Dumb

(c) Water

SECTION B

*Answer **all** the following questions with detailed diagrams/flow charts. Each question carries 10 marks.*

31. Explain the production process involved in creating simulation of an "Asteroid hitting a building" with rigid body dynamics in 3ds Max.   *10*

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

(a)   Honey falling down on a spoon (Honey using RealFlow).

(b)   Milk falling down on a pot (Milk using RealFlow).

33. Explain the stepwise process involved to create a realistic simulation of a "Wall Explosion" using Maya Particles and Rigid Body Simulation.   *10*

34. Define Air field and Drag field in Maya and explain their usage in brief.   *10*

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