BACHELOR OF ARTS IN 3D ANIMATION AND VISUAL EFFECTS

Term-End Theory

December, 2013

01938

BNM-001 : ANIMATION PRODUCTION PIPELINE

Time : 3 hours   *Maximum Marks : 100*

(Weightage 100%)

Note : Attempt All questions.

The following section has objective questions. Please tick the right answers. Each question carries **2 marks :**

1. To use Particle Age Map which operator will be used ?
   (a) Material Dynamic
   (b) Material Static
   (c) Mapping

2. Which one of the following test operator checks whether a specific amount of time has passed since the start of the animation ?
   (a) Life test   (b) Lifespan   (c) Age Test

3. In particle flow user interface the _____ contains all Particle Flow actions. , as well as several default particle systems.
   (a) Event Display
   (b) Depot
   (c) Parameter Panel

4. Which of the following operator uses an animated texture to calculate the timing, location and scale of particles ?
   (a) Birth Texture
   (b) Birth Pain
   (c) Birth

5. Find Target Operator can't be used without any target geometry.
   (a) True   (b) False

6. Spin Rate is the rate of revolution in degrees per
   _____.
   (a) 15th Frame
   (b) Frame
   (c) Second

7. _____ operator lets you control particle speed and direction with any object or objects in the scene.
   (a) Speed By Surface
   (b) Find Target
   (c) Shape Mark

8. Which of the following deflector type is not supported by Collision Spawn Test?
   (a) Deflector
   (b) Dynaflect
   (c) UDeflector

9. The _____ lets you send a specific number of particles to the next event, keeping all remaining particles in the current event.
   (a) Send Out Test
   (b) Split Selected Test
   (c) Split Amount Test

10. _____ applies a uniform, unidirectional force to particle systems.
   (a) Gravity
   (b) Push
   (c) Wind

11. When Decay is set to _____ , the Wind warp has the same strength throughout world space.
   (a) 0.0
   (b) 1.0
   (c) 100.0

12. In 3DS Max Space Warps influence object space.
   (a) True
   (b) False

13. Particles collide with geometry to create new particles upon contact. In Maya the process called _____.
   (a) Per Point Emission Rate
   (b) Particle Collision Event Editor
   (c) Spawn

14. In Maya Sphere Render Type of Particle System can be rendered with Maya Software Renderer.
   (a) True   (b) False

15. In Maya animated image sequence can't be applied to the sprite particle type as texture.
   (a) True   (b) False

16. In Maya 'Scale Rate By Object Size' attribute only available when particle emitter type is _____.
   (a) Volume
   (b) Directional
   (c) Omni

17. Which of the following is not the emitter type available in Real Flow ?
    (a) Circle
    (b) Square
    (c) Hexagonal

18. _____ sets how much the strength of the field diminishes from the central axis.
    (a) Damping
    (b) Use Max Distance
    (c) Attenuation

19. Which of the following field in Maya pushes objects away or pulls them toward itself, like a magnet ?
    (a) Radial
    (b) Newton
    (c) Uniform

20. In Maya _____ contains the number of seconds each particle in the object has existed since the first frame.
    (a) Lifespan
    (b) Lifespan Random
    (c) Age

21. In Maya _____ sets how much a rigid body resists moving from resting contact with another rigid body.
    (a) Rest Friction
    (b) Static Friction
    (c) Dynamic Friction

22. In Maya Spring creation option box attributes _____ creates springs between all particles on the outer edges of a soft body.
    (a) Min/Max
    (b) All
    (c) Wireframe

23. In Maya Fluid dynamics if the _____ value is positive the Density represents a substance that is lighter than the surrounding medium, like bubbles in water, and will thus rise. Negative values cause the Density to fall.
   (a) Buoyancy
   (b) Mass
   (c) Weight

24. In Maya Fluid Dynamics _____ represents the resistance of the fluid to flow, or how thick, and non - liquid the material is.
   (a) Surface Density
   (b) Surface Tension
   (c) Viscosity

25. In Realflow Realwave mesh can be influenced by daemons.
   (a) True   (b) False

26. If one object has surface deformation , which file format should be used to export that deformation from 3DS Max to Realflow?
   (a) SD
   (b) OBJ
   (c) FBX

27. In Realflow which of the following option acts like a constraints between two objects?
   (a) MultiServo
   (b) MultiBody
   (c) MultiJoint

28. In Realflow one object can only be controlled dynamically there is no option for manual animation.
   (a) True   (b) False

29. In Realflow _____ tries to limit a fluid's expansion tendency.
   (a) Int Pressure
   (b) Ext Pressure
   (c) Surface Tension

30. In Realflow with _____ daemon it's possible to define a life - span for the particles and remove them when this limit is reached.
   (a) k Life
   (b) k Age
   (c) k Time

   Answer the below Questions with a detailed diagram / Flow chart. Each question carries **10** marks.

1. Explain the Production process involved in creating a " Animated Character disintegrate into smoke" in 3ds Max.

2. Describe the Production Process and integration between Maya/ Max and Real flow for the below examples.
   (a) Honey falling down on a surface (Honey using real flow)
   (b) CG Ship floating on ocean. (Ocean surface to be created using real flow)

3. Explain the step wise process involved to create a realistic simulation of a Wall Collapse using Maya Rigid Body Simulation.

4. Define Drag field and Radial field in Maya and explain their usage in brief.