

**BACHELOR OF ARTS IN 3D ANIMATION AND
VISUAL EFFECTS**

Term-End Theory 00884
June, 2013

**BNM-001 : ANIMATION PRODUCTION
PIPELINE**

Time : 3 hours

Maximum Marks : 100
(Weightage 100%)

Note : Attempt All questions.

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

1. In 3DS Max The Drag space warp increases particle velocity by a specified amount within a specified range.
 - (a) True
 - (b) False

2. In 3DS Max Particle Flow Birth operator Emit Start option defines the frame number at which the operator starts emitting particles.
 - (a) True
 - (b) False

3. In 3DS Max Particle flow is _____.
- (a) Non Event driven particle system.
 - (b) Event Driven particle system
 - (c) None of the above
4. In 3DS Max _____ tools is used to connect particles with the deflectors.
- (a) Select and Link
 - (b) Group
 - (c) Bind to Space Warps.
5. In particle flow what is the default percentage value of the particles in the system produced in the viewport ?
- (a) 33.33%
 - (b) 50%
 - (c) 100%
6. In 3DS Max which objects are used to deform the shape of an object ?
- (a) Rigid Body
 - (b) Soft body
 - (c) Deflectors
7. Motion blur is supported for hardware particle rendering in mental ray in maya.
- (a) True
 - (b) False

8. In maya the _____ attribute lets you set the value of the attribute for all particles in a particle system.
- (a) Per Particle
 - (b) Per object
 - (c) Goal
9. In Maya softbody particles can be connected to the fields influence with _____.
- (a) Softbody Relationship Editor
 - (b) Field Relationship Editor
 - (c) Dynamic Relationship Editor
10. Which of the following dynamics in maya can affect the movement of passive rigid body ?
- (a) Fluid
 - (b) Particles
 - (c) None
11. Which constraints is used in Maya nCloth to attach specific nCloth components with an object ?
- (a) Transform Constraint
 - (b) Component to Component constraint
 - (c) Point to surface constraint

12. Which option is used to improve nParticles performance in Maya by saving simulation data in server or hard disk ?
- (a) Save as nCloth
 - (b) Export as nCloth
 - (c) nCache
13. Inside reelflow an object can be animated manually or it can be moved dynamically.
- (a) True
 - (b) False
14. _____ format is used to export animated object from any 3D software like 3DS Max to reelflow.
- (a) FBX
 - (b) SD
 - (c) OBJ
15. Which of the below options cannot be added to Force operator in particle flow ?
- (a) Deflector
 - (b) Gravity
 - (c) Vortex

Answer the below questions in brief (min 15 lines) each question carries 10 marks.

1. Define the following terms in maya particle dynamics
- (a) Rate of an emitter
 - (b) Conserve value

2. Explain **shape instance operator** and **material frequency operator** in 3DS Max Particle Flow.
3. Explain 2 different process to control the color of a particle system in maya.
4. Define Maya Fluid Dynamics and give two examples of real world events that can be simulated with Maya Fluid Dynamics.

Answer the below question with a detailed diagram /Flow chart. Each question carries 15 marks. Attempt any 2 question.

1. Explain in detail the production Process and the different departments involved to create a 3D animated Feature Film.
2. Describe the Production Process and integration between Maya /Max and Real Flow for the below examples .
 - (a) Filling a 3D bowl with liquid chocolate (CG liquid chocolate using real flow)
 - (b) Oil spill from a oil tanker.
3. Explain the step wise process involved to create a realistic simulation of a Car Crash using Maya Ncloth.