

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

Term-End Theory Examination

December, 2016

00312

BNMI-009 : FX

Time : $1\frac{1}{2}$ hours

Maximum Marks : 30

Note : *Attempt all questions.*

The following section has objective type questions.

Select the right answer. Each question carries 1 mark.

1. Dynamic animation uses rules of _____ to simulate natural forces. 1

- (a) Chemistry
- (b) Gravity
- (c) Physics

2. You can animate the display and movement of particles with various techniques; for example, keys, expressions and _____ such as gravity. 1

- (a) fields
- (b) external pressure
- (c) pressure

3. You cannot create a particle system containing a single particle. 1
- (a) True
 - (b) False
4. The _____ state of a particle object is the value of its position, velocity, acceleration and mass attributes at any frame. 1
- (a) dynamic
 - (b) static
 - (c) inherit
5. When you select a NURBS surface or curve and add a default emitter, you create a point emitter that emits from all _____. 1
- (a) edit points
 - (b) CVs
 - (c) vertices
6. A goal can be any object except a curve on a surface. 1
- (a) True
 - (b) False

7. You can use the _____ to reassign collisions between particles and rigid bodies. 1
- (a) Particle Collision Editor
 - (b) Particle Collision Event Editor
 - (c) Dynamic Relationships Editor
8. Motion blur is not supported for hardware particle rendering in mental ray. 1
- (a) True
 - (b) False
9. Setting _____ lifespan assigns different lifespans to each particle in the particle object. 1
- (a) per-object
 - (b) random
 - (c) per-particle
10. An/A _____ rigid body reacts to dynamics — fields, collisions and springs — not to keys. 1
- (a) active
 - (b) passive
 - (c) moving
11. You can create _____ on a soft body to alter its deformations and resilience. 1
- (a) springs
 - (b) lattice
 - (c) drag

12. _____ fluids inherently require extra data to define them, which can make them very large. 1
- (a) Dynamic
 - (b) 2D
 - (c) 3D
13. You cannot attach one fur description to many surfaces. 1
- (a) True
 - (b) False
14. The Maya Nucleus Solver is _____ and it provides fast simulation results. 1
- (a) stable
 - (b) powerful
 - (c) unstable
15. The _____ mesh provides the start state for your nCloth object's simulation. 1
- (a) original
 - (b) initial
 - (c) input

Answer the following questions in brief. Each question carries 5 marks.

- 16.** Define the concept of nCloth available in Maya.
Explain with examples. 5
- 17.** Explain in brief the following concepts with their use to create any real world example (any *two*): 5
- (a) Per Particle Attributes
 - (b) Active Rigid Body
 - (c) Shape Instancing
- 18.** Define the following particle emitters available in Maya, with an example of each (any *two*): 5
- (a) Surface
 - (b) Volume
 - (c) Curve
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