

01815 BACHELOR OF ARTS IN 3D ANIMATION AND VISUAL EFFECTS

Term-End Theory

December, 2011

BNM-001 : ANIMATION PRODUCTION PIPELINE

Time : 3 Hours

Maximum Marks : 100

(Weightage 100%)

Note : All parts are compulsory.

1. The following section is objective questions. Please tick the right answers. Each question carries 2 marks.
 - (a) In 3DS Max Space warps are renderable objects.
 - (i) True
 - (ii) False
 - (b) In 3DS Max, Wind is similar in effect to the Gravity space warp, but has added parameters for _____ .
 - (i) Decay
 - (ii) Direction
 - (iii) Turbulence
 - (c) In Maya Multi-Streak particle render type can be rendered with Maya Software Renderer.
 - (i) True
 - (ii) False

- (d) _____ emitter emit particles from a closed volume in Maya. You can choose from cube, sphere, cylinder, cone, and torus as shape.
- (i) Shape
 - (ii) Volume
 - (iii) Point
- (e) Inside Real Flow daemon can influence realwave.
- (i) True
 - (ii) False
- (f) In Real Flow the constraints inside rigid body is
- (i) Multi joints
 - (ii) Multi body
 - (iii) None of the above
- (g) How many rigid body constraints are available in Maya ?
- (i) 5
 - (ii) 6
 - (iii) 7
- (h) Image sequence can be assigned as texture in Maya Particle Sprite Render Type.
- (i) True
 - (ii) False
- (i) In particle flow what is the default percentage value of the particles in the system produced in the viewport ?
- (i) 25
 - (ii) 50
 - (iii) 75
- (j) In Maya, per object attribute lets you set the attribute value for all particles of the object collectively with a single value.
- (i) True
 - (ii) False

- (k) Which option in realflow is used to import multiple objects as single node ?
- (i) Import
 - (ii) Multi Servo
 - (iii) Multi Body
- (l) In Maya the _____ render type is a combination of Streak and MultiPoints render types.
- (i) Sprites
 - (ii) Points
 - (iii) MultiStreak
- (m) Which operator gives an angular velocity to particles in an event, with optional random variation ?
- (i) Spin
 - (ii) Rotation
 - (iii) Speed
- (n) In gravity space warps Increasing the Decay value causes gravity strength to diminish as distance increases from the position of the gravity warp object.
- (i) True
 - (ii) False
- (o) In 3DS Max particle flow _____ operator can be used to kill a particle.
- (i) Particle Age.
 - (ii) Shape Mask
 - (iii) Keep apart.

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

- (a) What is the difference between **uniform field** and **gravity field** in Maya ?
- (b) In 3DS Max explain the **Bounce** and **Friction** attribute of a deflector. Give example for each
- (c) Define particles and give four examples of real world events that can be simulated with particle system.
- (d) Explain in brief 2 Tests in particle flow. Give example of each.

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

- (a) Explain the Production process involved in creating a 3D object blast in Maya.
- (b) Describe the Production process and integration between Maya/Max and Real Flow for the below examples.
 - (i) Filling a 3D glass with water (CG water using real flow).
 - (ii) 3D object transforming into liquid.
- (c) Explain the step wise process involved to create a realistic simulation of a cloth object tearing in 2 pieces.