

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

Term-End Theory Examination

June, 2019

00563

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. Choose the correct answer. Each question carries 2 marks.

1. The birth operator enables _____ of particles within the Particle Flow system using a set of simple parameters. 2
 - (a) Life
 - (b) Display
 - (c) Creation

2. The first event in the Particle Flow system is always a _____ event. 2
 - (a) Global
 - (b) Master
 - (c) Parent

3. The _____ operator creates each particle as a rectangle that always faces a particular object, camera or direction. 2
- (a) Look At
 - (b) Aim
 - (c) Shape Facing
4. In Maya, a goal can be any object that includes a curve on surface. 2
- (a) True
 - (b) False
5. Volume shapes you can use in Maya fields are sphere, cylinder, cube, _____ and torus. 2
- (a) cone
 - (b) pyramid
 - (c) oval
6. In 3ds Max particle flow, the particle flow components are subdivided into three main categories : Operators, Flows and _____. 2
- (a) Nodes
 - (b) Tests
 - (c) Connections
7. In Maya, keys ticks are shown as green marks whereas breakdowns are shown as red marks on the time slider. 2
- (a) True
 - (b) False

8. To use Particle Age Map, which operator will be used ? 2
- (a) Material Dynamic
 - (b) Material Static
 - (c) Mapping
9. Which deflector type is *not* supported by Collision Spawn test ? 2
- (a) Deflector
 - (b) Dynaflect
 - (c) U-deflector
10. To turn on pivot point manipulator, which key is needed to be pressed ? 2
- (a) Insert key
 - (b) 'G' key
 - (c) Space bar key
11. To display a texture assigned to an object in the viewport, activate _____ . 2
- (a) Display standard map in viewport
 - (b) Display in viewport
 - (c) Show standard map in viewport
12. Which editor lets you edit event and sound synchronization and timing ? 2
- (a) Expression Editor
 - (b) Graph Editor
 - (c) Dope Sheet Editor

13. To quickly close the holes in a geometric object, we use the _____ modifier. 2
- (a) Cap
 - (b) Cap Holes
 - (c) None of the above
14. The three world space axis in 3ds Max are _____ . 2
- (a) a, b, c
 - (b) x, y, z
 - (c) p, q, r
15. An array containing multiple arrays is called a/an _____ . 2
- (a) Incorrect Array
 - (b) Group
 - (c) Matrix
16. Which light is used to simulate a combination of direct light and indirect light ? 2
- (a) Ambient light
 - (b) Point light
 - (c) Spot light
17. Which keyboard shortcut lets you edit the particle object in edit mode ? 2
- (a) Enter
 - (b) Insert
 - (c) Shift + A

18. To activate a viewport without accidentally panning or transforming an object, you can _____ the viewport. 2
- (a) double left click
 - (b) double right click
 - (c) right click
19. By pressing _____, you can quickly focus your active viewport to the selected objects. 2
- (a) F
 - (b) K
 - (c) Z
20. There are _____ types of Bake sets in Maya. 2
- (a) two
 - (b) four
 - (c) five
21. To rotate an object, you can use the keyboard shortcut _____. 2
- (a) A
 - (b) E
 - (c) R
22. The Mental Ray equivalent of a radiosity is _____. 2
- (a) Incorrect Final Gather
 - (b) Global Illumination
 - (c) Photon Tracer

- 23.** Hardware rendered particles have a render type of Bloppy surface. 2
- (a) True
 - (b) False
- 24.** If there is no light created in the scene, Maya automatically creates _____ during render. 2
- (a) ambient light
 - (b) point light
 - (c) directional light
- 25.** To flip the renderable side of a surface of a geometry object, _____ modifier is used. 2
- (a) Flip
 - (b) Normal
 - (c) Skin
- 26.** A value between 0 and -1 makes the particles pass through the surface with retraction out of the back side. 2
- (a) True
 - (b) False
- 27.** 3ds Max Text object can use most of the Windows fonts. 2
- (a) True
 - (b) False

28. _____ is the shortcut command to 'show last hidden' object in Maya. 2
- (a) Ctrl + H
 - (b) Alt + H
 - (c) Ctrl + Shift + H
29. In Maya, Script Editor lets you type in single or multi-line scripts in MEL or Python tab. 2
- (a) True
 - (b) False
30. The Time Editor is a comprehensive tool for creating and editing animation in Maya. 2
- (a) True
 - (b) False

SECTION B

All questions are compulsory and each carries 10 marks.

31. Define Vortex and Turbulence field in Maya and explain their usage in brief. 10
 32. Explain step by step production process for creating a "fountain" with particles in 3ds Max. 10
 33. How can a realistic simulation of a group of flying bees be created in Maya using particle dynamics ? Explain in brief. 10
 34. What do you understand by Paint Effect in Maya ? Explain in brief. 10
-