

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

Term-End Theory Examination

December, 2014

01380

BNM-002 : CASE STUDIES

Time : 3 hours

Maximum Marks : 100

(Weightage 100%)

Note : Attempt all questions.

The following section has objective type questions. Choose the correct answer. Each question carries 2 marks :

1. Which mask node can create an open shape in Fusion ? 2
 - (a) Ellipse
 - (b) Polygon
 - (c) Rectangle

2. Which statement is true for Crop tool ? 2
 - (a) Crop tool changes the resolution of the image.
 - (b) Crop tool changes the rotation of the image.
 - (c) Crop tool changes the scale of the image.

3. Nodal Pan Camera motion doesn't gives a parallax. 2
- (a) True
 - (b) False
4. OpenEXR format was developed by _____. 2
- (a) Pixar
 - (b) ILM
 - (c) DD
5. jpg format is capable to store RGBA channel. 2
- (a) True
 - (b) False
6. The _____ tool is used to destroy any particle that crosses or intersects its region. 2
- (a) ParticleKill
 - (b) ParticleTurbulence
 - (c) ParticleFlock
7. The _____ converts the particle system to either an image or geometry. 2
- (a) pBounce tool
 - (b) pKill tool
 - (c) pRender tool

8. Lightwrap effect can be created using Matte control tool. 2
- (a) True
 - (b) False
9. Which statement is *false* for Resize tool ? 2
- (a) Increase or decrease the resolution of an input image.
 - (b) Scale the input image.
 - (c) Control the rotation of the input image.
10. 3D particle system always requires to produce a 2D image using _____ node. 2
- (a) pRender
 - (b) Render
 - (c) 3D Render
11. The pSpawn tool makes each affected particle act as an emitter that can produce one or more particles of its own. 2
- (a) False
 - (b) True
12. Which statement is *true* ? 2
- (a) The DVE tool encompasses image rotations, perspective changes and Z moves.
 - (b) The Transform tool encompasses image rotations, perspective changes and Z moves.

13. In PFTrack, Focal length can be detected using _____ . 2
- (a) Estimate Focal Length
 - (b) Test Object
 - (c) Scene Orientation
14. In PFTrack, candidate numbers define the number of candidate trackers to generate for each frame. 2
- (a) True
 - (b) False
15. _____ is an important term in any tracking software. 2
- (a) Flat
 - (b) Parallax
 - (c) Clip
16. The _____ node can be used to estimate camera motion using a set of feature tracks in PFTrack. 2
- (a) Build Lens
 - (b) Camera Solver
 - (c) Edit Camera

17. The Camera Solver can be run in the background by _____ on the Solve All button. 2
- (a) Alt – Clicking
 - (b) Alt + Shift – Clicking
 - (c) Shift – Clicking
18. Exhaustive parameter increases overall solving process time. 2
- (a) False
 - (b) True
19. The Build Lens node can be used to construct a lens model from multiple images of a _____ in PFTrack. 2
- (a) Circle grid
 - (b) Calibration grid
 - (c) Line grid
20. The Geometry Track node can be used to track _____ object using a triangular mesh in PFTrack. 2
- (a) static
 - (b) moving
 - (c) point
21. In object tracking process, Geometry Track node supports _____ file formats. 2
- (a) .OBJ
 - (b) .MAX
 - (c) .MA

22. User feature in PFTrack cannot be used for _____ . 2
- (a) object track
 - (b) manual track
 - (c) masking
23. The _____ node allows a geometric model to be inserted into the scene to test quality of the camera track. 2
- (a) Camera Solver
 - (b) Test Object
 - (c) Merge Camera
24. The _____ is able to export cameras, trackers and moving objects from the PFTrack Software. 2
- (a) Export Node
 - (b) Camera Solver
 - (c) Test Object
25. The _____ node is able to swap the background clip with another clip. 2
- (a) Input Footage
 - (b) Raw Footage
 - (c) Replace Footage

26. _____ can be removed by using Undistort node in PFTrack. 2
- (a) Barrel distortion
 - (b) Triangle distortion
 - (c) Point distortion
27. Coordinate system once set in PFTrack, can be adjusted in 3D application. 2
- (a) True
 - (b) False
28. Shortcut of video playback in PFTrack is _____ 2
- (a) Shift + A
 - (b) Spacebar
 - (c) Enter
29. The _____ is very helpful when complex image modifications such as lens distortion or rolling shutter fixes are used. 2
- (a) Cache node
 - (b) Test Object node
 - (c) Camera Solver node
30. Frame Rate defines the number of frames per _____ for the clip. 2
- (a) second
 - (b) minute
 - (c) hour

Answer the following questions in brief. Each question carries 10 marks.

- 31.** Why do we use CG render passes in CG-live action integration ? Explain Diffuse and Specular Pass. 10
- 32.** Describe Camera match moving pipeline with flow chart for VFX shot. 10
- 33.** Explain Camera projection method using flow chart. 10
- 34.** Describe the importance of set extension in VFX with supporting compositing tools. 10
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