| **BNMI-011**

BACHELOR OF ARTS IN 3D ANIMATION AND VISUAL EFFECTS

00072

Term-End Theory Examination
December, 2017

BNMI-011 : CHARACTER ANIMATION

Time : 1½ hours   *Maximum Marks : 30*

Note :   *Attempt all questions.*

The following section has objective type questions. Choose the right answer. Each question carries 1 mark.

1. Reflection is divided into three types : diffuse, _____ and glossy.   **1**
    (a) shiney
    (b) highlight
    (c) specular

2. Diffuse refraction scatters light in single angle.   **1**
    (a) True
    (b) False

3. If you render a scene without a light, Maya creates _____ light during render.   **1**
    (a) point
    (b) spot
    (c) directional

4. You can _____ lights with surfaces so that only a specific light illuminates a specific surface. 1
   (a) link
   (b) attach
   (c) group

5. Shadows help to define the _____ of an object. 1
   (a) shape
   (b) world position
   (c) location

6. A depth map represents the _____ from a specific light to the surfaces the light illuminates. 1
   (a) distance
   (b) angle
   (c) length

7. _____ is a type of shadow rendering where the path of individual light rays are calculated. 1
   (a) Path tracing
   (b) Ray tracing
   (c) Light tracing

8. _____, if necessary, is used to distinguish the character, objects from the background. 1
   (a) Backlight
   (b) Background light
   (c) Fill light

9. Hard light produces _____ shadow lines.   **1**

   (a) Diffuse

   (b) Soft

   (c) Sharp

10. Mental ray can render with _____, the light   **1**
    effects that caused by specular reflected or
    refracted light.

    (a) Final Gather

    (b) Caustics

    (c) Global Illumination

11. Which light does not have a decay rate ?   **1**

    (a) Spot light

    (b) Point light

    (c) Directional light

12. A directional light uses parallel rays of light.   **1**

    (a) True

    (b) False

13. Area lights are _____ based and there is no   **1**
    need for a decay option.

    (a) real time

    (b) calculation

    (c) physically

14. A spot light shines a beam of light evenly within a narrow range of directions that are defined by a _____.   1
    (a) triangle
    (b) cone
    (c) cube

15. No mask or _____ channel is produced for the specular pass.   1
    (a) Alpha
    (b) RGB
    (c) Color

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

1. What is the difference between Depth Map and Raytraced shadow ? Explain with proper examples.   5

2. Explain the concept of Final Gather. How does it work in Maya ?   5

3. Define any two of the following lights with one example of each in the real world :   5
    (a) Directional Light
    (b) Area Light
    (c) Spot Light

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