

Term End Examination June – 2026

Course	: BCADES WEF Aug-2024	Date	: 08-06-2026
Subject Code	: BCADES-304 (Animation)	Time	: 11:30am to 01:45pm
Subject Name	: 3D Illusion 1	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain various object selection techniques in Blender and discuss duplication, mirroring, snapping, and pivot point operations with suitable examples.
2. Discuss the tools and techniques used for creating organic objects.
3. Explain the concepts of materials and shaders in Blender. Discuss their role in creating realistic 3D objects.
4. Discuss advanced shader techniques in Blender.
5. Explain texture types, texture mapping, and their applications in 3D models.

Section B

Answer the following (Attempt any four) (20)

1. Write a note on layers in Blender and explain their importance in scene organization.
2. Compare Bézier Curves and NURBS Curves.
3. Differentiate between organic and inorganic modelling with examples.
4. Explain the steps involved in assigning materials to a 3D object.
5. Write a short note on procedural textures and their applications.
6. What is rigging? Explain its importance in character animation.

Section C

Part – A (Multiple Choice Questions) (10)

- 1 Which menu in the 3D View provides tools to navigate in 3D space?
A Select
B Add
C View
D Object
- 2 Which mode in Blender is specifically dedicated to armature posing?
A Edit Mode
B Sculpt Mode
C Particle Edit Mode
D Pose Mode
- 3 Which keyboard shortcut is used to maximize the active area in Blender?
A Ctrl + Z
B Shift + Spacebar
C Alt + Z
D Ctrl + M
- 4 Which viewport shading mode displays meshes with an image applied using the active UV map?
A Solid
B Wireframe
C Textured
D Bounding Box
- 5 Which transform orientation aligns the manipulator with the object's own axes?
A Global
B Normal
C Local
D Gimbal

- 6 Which selection method allows the user to draw a freehand dotted line around objects for selection?
A Border Select B Circle Select
C Point Select D Lasso Select
- 7 Which snap option is commonly used for retopologizing the surface geometry of a model?
A Increment B Face
C Volume D Vertex
- 8 Which object type is commonly used to deform or control other objects through the Lattice Modifier?
A Camera B Empty
C Lattice D Speaker
- 9 Which Bézier handle type keeps both handles in a straight line to maintain a smooth continuous curve?
A Vector B Free
C Automatic D Aligned
- 10 Which keyboard shortcut is used to toggle between an open and a closed (cyclic) curve?
A Alt + C B Ctrl + C
C Shift + C D Ctrl + Alt + C

Part – B (Do as Directed)

(10)

State whether the following statements are true or false

- 1 Blender is a free and open-source 3D animation suite.
- 2 Blender can only run on Windows operating systems.
- 3 In Wireframe mode, objects are displayed using solid-colored surfaces.
- 4 The shortcut key for Grab/Move transformation is G.
- 5 Scaling an object in Blender is performed using the R key.
- 6 The Border Select tool is activated using the B key.
- 7 An object can exist on only one layer at a time in Blender.
- 8 Texture mapping is unrelated to applying images or patterns on 3D models.
- 9 Armatures are used for rigging and animating 3D models.
- 10 NURBS stands for Non-Uniform Rational B-Splines.
