

Dr. Babasaheb Ambedkar Open University
Term End Examination February - 2026

Course	: BCA(DES)	Date	: 14-02-2026
Subject Code	: BCA-303(DES)-Graph.	Time	: 11:30am to 01:45pm
Subject Name	: 3D Graphics-1	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) **(30)**

1. Explain the Autodesk 3Ds Max interface in detail.
2. Discuss Mesh Modeling and Poly Modeling.
3. Describe the Loft object in detail.
4. Explain lighting concepts in 3Ds Max.
5. Discuss maps and texturing techniques.

Section B

Answer the following (Attempt any four) **(20)**

1. Explain the difference between World Space Modifiers and Object Space Modifiers.
2. Explain compound objects in 3Ds Max.
3. Explain surface modeling using Patch Grids.
4. Explain the Material Editor in 3Ds Max.
5. Explain environment settings in 3Ds Max.
6. Discuss rendering output and camera animation.

Section C

Part – A (Multiple Choice Questions)

(10)

- 1 Which modeling method works with Vertex, Edge, and Face?
A NURBS Modeling B Patch Modeling
C Mesh Modeling D
- 2 Which shape is the only ready-made editable spline?
A Line B Rectangle
C Circle D Star
- 3 Which modifier twists an object like a screw?
A Bend B Twist
C Skew D Taper
- 4 Which snap type ignores depth (Z-axis)?
A 3D Snap B 2.5 Snap
C Grid Snap D 2D Snap
- 5 Layer Manager in 3ds Max works similar to layers in:
A MS Word B Excel
C Photoshop D PowerPoint
- 6 Which clone option creates objects that update together?
A Copy B Instance
C Reference D Group

- 7 Which extended primitive is mainly used for architectural walls?
A Capsule B Hose
C Hedra D L-Ext
- 8 Which transformation tool is used to change object size?
A Scale B Rotate
C Move D Snap
- 9 The Command Panel is located on which side of the interface?
A Left B Right
C Top D Bottom
- 10 How many viewports are visible by default when 3ds Max starts?
A 2 B 3
C 4 D 6

Part – B (Do as Directed)

(10)

State whether the following statements are true or false

- 1 3ds Max is widely used for architectural visualization along with AutoCAD.
- 2 In 3D animation, objects are animated mainly by deforming models using bones and skinning.
- 3 Axonometric views show depth using vanishing points.
- 4 Viewport labels are accessed by double-clicking on the viewport name.
- 5 Smooth + Highlights mode displays textures and highlights applied on objects.
- 6 The Menu Bar contains commands related to file operations, editing, creation, and customization.
- 7 Viewport navigation tools include pan, zoom, arc rotate, and full-screen toggle.
- 8 Uniform scaling changes the proportions of an object unevenly.
- 9 AEC Extended objects are designed mainly for animation effects.
- 10 Reference clone option allows changes to affect the parent object partially.

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