

Que 1. Define Terms.**(2 Marks)**

1. What is Game View?
2. Hierarchy
3. What is Normal Vector ?
4. How to open 4 split views?
5. Spot light
6. Physics
7. Material Editor
8. Property inspector
9. Directional Light
10. Raycasts
11. Fixed Timestep
12. Toolbar
13. mono Behavior
14. asset store
15. Animator Controller
16. GPU

Que- 2. Attempt any two (Long answer type)**(10 Marks)**

1. Explain history of Unity
2. write note on Unity Interface.
3. Explain import and export file formats of unity
4. How to Set Your Scripting Environment?
5. How to create user interfaces (UI)
6. Explain Vertex Shader with details.
7. Explain process of Creating environmental background
8. Explain Particle Systems and Rigid Body Simulation in Unity
9. What is process of Character Animation and Simulation?
10. Describe exact process of Rigid Body and Simulation in Unity.

Que- 3. Attempt any two (Short answer type)

(10 Marks)

1. What is Prefabs in Unity 3D?
2. What is the use of AssetBundle in Unity?
3. How assign material or texture to any object?
4. How to Add camera to unity scence?
5. What is 3D game objects?
6. List out the pros and cons of Unity 3D?
7. What are the characteristics of Unity3D?
8. Explain important components of Unity 3D?
9. Explain what is Prefabs in Unity 3D?
10. Explain what is an Unity3D file and how can you open a unity3d file?
11. Explain List of the pros and cons of Unity 3D?
12. How to assign material to any object in Unity?
13. Explain Tool box of 3D Unity.
14. How to show and hide Overlays in Unity?
15. Explain The Hierarchy window.
16. Explain installation process of Unity.
17. Explain Programming workflows
18. What is Alembic in unity?
19. How Python is useful for Unity?
20. what is universal render pipeline?
21. Describe GPU and its usefulness for unity.
22. How to create basic object in Unity?
23. Difference between Update,Fixed Update and Late Update.
24. What is Prefabs in Unity 3D?
25. What is the use of AssetBundle in Unity?

26. What is difference between Resources and StreamingAssets Folder.
27. What is Batching and what is the use of Batching?
28. Difference between Destroy and DestroyImmediate unity function
29. Difference between Start and Awake Unity Events
30. What is the use of deltaTime?
31. Is this possible to collide two mesh collider,if yes then How?
32. Difference between Static and Dynamic Batching.
33. What is the use of Occlusion Culling?
34. How can you call C# from Javascript, and vice versa?
35. What do you mean by Inheritance ? Explain with example.
36. What do you mean by Polymorphism? Explain with example.
37. What is overriding ?
38. What is overloading ?
39. Difference between overriding and overloading.
40. What is Abstract Class ?
41. Difference between Abstract Class and interface.

Solve the all-assignments compulsory.**Assignment No :1****2 Marks Question**

- 1) What is the difference between Blender render & Cycles render?
- 2) What is graph editor window?
- 3) Explain the different state colors of animation in blender?
- 4) What is the use of markers?
- 5) What is F-curve?
- 6) Explain the different types of primitives in blender.

10 Marks

- 1) Explain editing keyframes.
- 2) Describe introduction to keyframes in blender software?
- 3) Explain the interface of blender.
- 4) How video editing is done in blender? Explain the detail.

5 Marks

- 1) What is Animation in blender software?
- 2) What is Rigging in blender software?
- 3) What is keyframes in blender software?
- 4) Different types of bones in Armature.
- 5) Describe three elements of bone structure.
- 6) Keyframes types

Assignment No :2**2 Marks Question**

- 1) Explain the process of Automatic key-framing.
- 2) Name of type of rendering engines available in blender.
- 3) What is the use of blender in industry?
- 4) How can you join mesh in blender?
- 5) Define the term Hilbert spiral tile?
- 6) What is splash screen?

10 Marks

- 1) How can you create & edit objects in blender?
- 2) What are modifiers? Explain the different types of modifiers.
- 3) Explain the various types of lights available in blender.
- 4) Explain the process of video sequence editing.

5 Marks

- 1) Armature-Introduction
- 2) F-curve interpolation mode
- 3) F-curve Dynamic effects
- 4) F-curve Extrapolation mode
- 5) F-curve Handle types
- 6) Back sound of F-curve

Assignment No :3**2 Marks Question**

- 1) Define the term backing?
- 2) How can you edit objects in blender?
- 3) What is simulation?
- 4) Explain the use of layer in blender.
- 5) What is the use of blender software?
- 6) Can blender run without graphics card?

10 Marks

- 1) What is camera? Explain camera Properties in details.
- 2) What is light? Describe point light & spot light.
- 3) Describe following terms
 - a) Point light
 - b) Spot light
- 4) What is blender software? Explain opening & saving files in blender software.

5 Marks Question

- 1) Explain the timeline in blender.
- 2) How can you create text in blender?
- 3) Explain the process of lighting in blender.
- 4) What is rendering? Explain the different render settings.
- 5) What is Ray tracing? Explain in details.
- 6) Explain array & Boolean modifiers.

Assignment No :4**2 Marks Question**

- 1) What is the meaning of blender?
- 2) Which render engine is best blender?
- 3) What are the different types of rendering?
- 4) What are the best blending markers?
- 5) What is a colorless blender marker?
- 6) What are workspaces in Blender?

10 Marks

- 1) What is material? Explain setting Materials in blender.
- 2) Explain View Layer tab in blender software.
- 3) Explain Sidebar in blender software.

5 Marks

- 1) What is Raytracing?
- 2) What is IK?
- 3) Explain material settings in blender.
- 4) Area Light

Assignment No :5**2 Marks Question**

- 1) Where is the toolbar in Blender?
- 2) What is Toolbar in Blender?
- 3) What are Modelling tools?
- 4) What are the 4 types of models?
- 5) What is data Modelling tool?
- 6) What is material maker?
- 7) What are the 4 types of texture?

10 Marks

- 1) Describe following terms
 - a) Materials
 - b) Shaders
- 2) Explain Workspaces in blender software.

5 Marks Question

- 1) Shaders
- 2) Point Lights
- 3) Spot light
- 4) Status Bar

Question Bank
BAST-603- 3D-Maya-III

Q.1 Define following/ Answer in one sentence

1. Write a name of any two renderers?
2. What are maya native files?
3. What is a collider?
4. Define: Key frame animation?
5. What is rendering?
6. What is Maya Fur?
7. What is intensity of light?
8. What is clone paint?
9. Define: Ambient Light?
10. What is Align tool?
11. What is Animation?
12. Write a way to duplicate object in Maya?
13. Define : Camera With Aim
14. What is Freeze Transformation?
15. What is Texture?
16. What is Xgen Interactive Grooming?
17. What is Hair?
18. What is Fur?
19. What is Rigging?
20. What is Renderer?
21. What is Path Animation?
22. What is Polygon Primitive?
23. What is NURBS?
24. What is nCloth?
25. What is nParticle?

Q.1 Long Answer

1. Explain FX menuset in Autodesk Maya?
2. Give detail information on paint in Maya?
3. Explain process of creating sofa and applying fur to it?
4. Explain Absorption, reflection and refraction of light in Autodesk Maya?
5. Give detail information on interface of Autodesk Maya?
6. Explain cameras and lights in Autodesk Maya?
7. Explain Render setting Window in Autodesk Maya with diagram?

8. Give detail information on Modeling and its type?
9. Explain creation of Window Curtain in Autodesk Maya?
10. Create a scene by using modeling techniques and render it with help of light?
11. Explain render setting window?
12. What is render explains any two renderers in detail?
13. What is Brushes?
14. Explain get brush panel in detail?
15. What is modeling and explain its types?

Q.2 Short Answer

1. Write short note on nCloth.
2. Write short note on nHair.
3. Write short note on Lighting in Autodesk Maya.
4. Explain cameras in Autodesk Maya?
5. Explain Outliner Panel?
6. Explain process of creating any one chess piece?
7. Write short note on Attribute editor.
8. Write short note on Layer editor.
9. Explain process of creating Text and applying Neon brush to text?
10. Short note on XGen interactive grooming?
11. Write short note on Spot light?
12. Explain type of Reflection in Maya?
13. Write short note on Wind and Gravity Panel.
14. Write short note on Hypershade.
15. Give brief information on Move, Rotate and Scale.
16. Write a short note on UVs and type of UVs mapping?
17. Write short note on Lighting and Rendering in Autodesk Maya?
18. Write short note on layer editor?
19. Explain creation on sofa ?
20. Explain types of light in detail?
21. Give information on Polygon Primitives?
22. Give information on NURBS primitive?
23. Explain in brief about background Creation?
24. Explain modeling With Neon Brush?
25. Explain Rain Simulation in detail?
26. Explain Water Simulation in detail?
27. What is nPartical explain in detail?
28. What is Difference between Modeling and Sculpting?

29. Give information on the timeline in detail?
30. Give brief detail on FX menuset?

B.Sc.-III Animation Science Semester VI Examination
AR for Animation(BAST –604)

Q1) Define following Term/ Answer in one sentence .

[5x2=10]

1. What is Unity 3D?
2. Scene View
3. Hierarchy
4. function Inspector
5. Game View
6. Rigid body
7. Unity 3D Inspector
8. Raycasts
9. Rigid body
10. Asset store
11. Cache component
12. Camera Grain
13. timeline
14. AR- Camera
15. vuforia
16. meshing
17. Input system
18. depth image
19. Audio Filters
20. IDE
21. Image Targets
22. ARKit
23. mono Behavior
24. Gameobject
25. Notation

Q2) Attempt any two of the following.

[20]

1. Write note on overview of 3D unity Timeline.
2. Explain history of Unity (AR) game designing.
3. Explain Interface of unity with detailed figure.
4. Explain Interface of Unity with 4 split view.
5. Explain chart of import and export file format of Unity
6. Write a short note on terrain objects.
7. Explain history of (AR) Vuforia Camera
8. Explain list of key features of Unity3D and UE4
9. Write a short note on terrain objects.
10. Mention What Is The Function Of Inspector In Unity 3d?
11. What A Vertex Shader ?
12. What A Pixel Shader ?
13. Explain Why Deferred Lighting Optimizes Scenes With A Lot Of Lights And Elements?
14. Explain What Is An Unity 3D File And How Can You Open A Unity3d File?
15. Explain Why Time.deltaTime Should Be Used To Make Things.

Q3) Attempt any four of the following.

[20]

1. What are the characteristics of Unity3D?
2. How to open Autodesk Maya file format in unity?
3. Explain animation process of cube using physic parameters.
4. How to create key frame Animation in unity?
5. Explain Audio Overview.
6. How set Gizmos for terrain object?
7. Define Tracker Modules

8. Explain Common types of Assets
9. How to activate online license of Unity?
10. What is Vuforia?
11. Describe Timeline overview
12. How to import image in Vuforia?
13. How to Import Vuforia (AR) Camera in Unity?
14. What Is Prefab?
15. Describe Timeline overview with details.
16. What is HoloLens?
17. What is function of animator in unity?
18. List Out The Pros And Cons Of Unity 3d?
19. what is function of inspector in unity?
20. Explain the use of Asset bundle In Unity3d?
21. explain 4 split view with details.
22. explain lights and types of unity
23. explain Particle system of unity.
24. what does actually color space in unity?
25. How to Built-in physics engines for object-oriented projects?
26. explain Unity audio filters with details.
27. what is Native Audio Plug-in SDK?
28. How to Setting up Scripting Environment?
29. What is Unity XR plug-in framework?
30. Describe process of hiding Game-object in unity ?