1. What is MonoBehaviour?

MonoBehaviour is the base class from which every Unity script derives.

2. List out all UI element?

- 1.Image
- 2.Panel
- 3.Button
- 4.slider
- 5.scroll view
- 6.Text
- 7.RawImage
- 8.Canvas
- 9.Drop down
- 10.Input field

3. List Out unity Lifecycle elements

- 1.Awake()
- 2.OnEnable()
- 3.OnStart()
- 4.FixedUpdate()
- 5.Update()
- 6.LateUpdate()
- 7.OnGUI
- 8.OnDisable()
- 9.OnDestroy()

4. Write Difference between Start and awake method

Awake is execute before Start method if script is inactive then awake is called but start wont called

5. How Update function called?

Function is the most common function, it called only once per frame(FPS).

6. When fixed update function used?

Function can be called multiple times, or zero times per frame. This is used for Physics Calculations in Unity.

7. when Late update function used?

This function is called once per frame after Update has finished. It is used to perform for any calculations.

8. When OnEnable function called?

This function is always called just when the GameObject is Enabled.

9. When OnDisable function called?

This function is called when the GameObject is inactive or disable in-game.

10. What is purpose of console window?

Window use to shows the list of errors, warnings, and other messages generated by Unity IDE

11. Is Scripting editor part of Unity?

No

12. How you can pause the game?

Time.timeScale = 0

13. What is the difference between Transform and Recttransform

Transform is a component for defining a GameObject's relative position, rotation, and scale. while RectTransform is a Transform, but with extra info for managing an object as a UI element. So, some aspects might be constrained (greyed out) by parent objects. This includes information for managing a relative pivot and anchor

14.List out all input to control your game

- 1. Keyboards and mice
- 2.Joysticks
- 3.Controllers
- 4.Touch screens
- 5. Movement-sensing capabilities of mobile devices, such as accelerometers or gyroscopes
- 6.VR and AR controllers

15.List out Ways To Move Gameobject In Unity?

- 1.Transform.Translate
- 2.Vector3.MoveTowards
- 3.Keyboard Inputs
- 4. Move Object Using Lerp
- 5. Move Object Using Physics

16.What is EventSystem?

Event System is a way of sending events to objects in the application based on input, be it keyboard, mouse, touch, or custom input.

17.What is time.Deltatime?

In Unity the MonoBehaviour method Update is called once per frame. With methods that are called repeatedly such as Update, the variable Time.deltaTime is changed so that it is equal to the time between these calls. As such, when it is used in Update, Time.deltaTime is equal to the time between frames.

18. Type of Rigidbody.

1.Rigidbody

1.Rigidbody 2D

19. Different between Collider and Trigger

collision detection through the various green lines (or boundaries). They define the shape of game objects for the purposes of physical collision while Triggers are a special setup of the Colliders that give them the ability to trigger events when they touch each other or overlap

20.What is prefab?

a copy of a GameObject that can be duplicated and put into a scene, even if it did not exist when the scene was being made. prefabs can be used to dynamically generate GameObjects.

21.what is scriptable object?

ScriptableObject is a serializable Unity class that allows you to store large quantities of shared data independent from script instances

22. What is different between Prefab and Scriptable object?

A Prefab can be useful when you want to store a set of objects together, while scriptable objects are useful for storing types of data.

23.what is playerprefs in unity?

PlayerPrefs is a class that stores Player preferences between game sessions. It can store string, float and integer values into the user's platform registry.

24.what is line renderer in unity?

line renderer is used to draw free-floating lines in 3D space. This class is a script interface for a line renderer component.

25.what is trail renderer in unity?

The trail renderer is used to make trails behind objects in the Scene as they move about. This class is a script interface for a trail renderer component.

26.List out any three light which is used in unity 3D scene

1. Point lights 2. Spot lights. 3. Directional lights. 4. Area lights. 5. Ambient light.

27. Difference between image and sprite in unity?

Sprite is a class for an image, it's not a component. Sprite renderer renders a sprite in the scene, ui image renders a sprite in UI. Sprite renderer Contain Transform object component while Ui image contain rect transform object component. Sprites use a SpriteRenderer and UI uses a CanvasRenderer.

28.If want to colider happen between two object what component object should gether? Collider and rigidbody.

29. What is Physic Material?

Physic Material is used to adjust friction and bouncing effects of colliding objects.

30.what is shader in unity?

small scripts that contain the mathematical calculations and algorithms for calculating the color of each pixel rendered, based on the lighting input and the Material configuration.

31. What invoke method does in unity?

Invoke functions allow you to schedule method calls to occur at a later time

32. What is an IEnumerable Unity?

IEnumerator is a . NET type that is used to fragment large collection or files, or simply to pause an iteration.

33.how to call Ienumerable method in unity?

with using coroutines we can call lenumerable method in unity

34. What is the name of the component used to connect animation clips (animations) with particular game object?

Animator Controller

35.A simplified humanoid bone structure that Mecanim understands how to animate is called?Avatar

36.To define input axes and game actions for your project you need?

Input Manager

37.What component game object need to have to be considered by the Unity physics engine? Rigidbody

38. To make rotational movement to Rigidbody you would use:

AddTorque()

39. What update method should be used when applying forces, torques, or other physics-related functions?

FixedUpdate()

40.what is PlayerPrefs in unity?

PlayerPrefs is a class that stores Player preferences between game sessions. It can store string, float and integer values into the user's platform registry.

41.what is 9-slicing Sprites in unity?

9-slicing is a 2D technique which allows you to reuse an image at various sizes without needing to prepare multiple Assets. It involves splitting the image into nine portions, so that when you re-size the Sprite. the different portions scale or tile (that is, repeat in a grid formation) in different ways to keep the Sprite in proportion.

42. What is shape module in unity?

This module defines the the volume or surface from which particle. can be emitted, and the direction of the start velocity.

43.what is spine animation?

spine Animator is component which animates your skeleton's spine bones accordingly to movement without loosing any keyframed animation motion. It's simulating real animal-like spine movement without any need of additional animating or coding.

44.What is an asset?

An asset is content that you use to create your game or app. An asset can be a prefab, texture, material, audio clip, animation, etc.

45. What is an address?

An address identifies the location in which something resides. For example, when you call a mobile phone, the phone number acts as an address. Whether the person is home, at work, in Paris or Pittsburgh, the phone number can connect you.

46. What is an Addressable Asset?

The Addressable Asset System provides an easy way to load assets by "address". It handles asset management overhead by simplifying content pack creation and deployment.

47. What assets use for dynamic animation?

do tween or else iTween

48.what is terrain in unity?

Unity's Terrain system allows you to add vast landscapes to your games. At runtime, terrain rendering is highly optimized for rendering efficiency while in the editor, a selection of tools is available to make terrains easy and quick to create.

49. What is the difference between terrain and plane in Unity?

If you want landscape, use terrain. And conversely, if you only need a flat surface, use a plane.

50.What is raycast used for?

Raycast is a blazingly fast, totally extendable launcher. It lets you complete tasks, calculate, share common links, and much more.

51.what is navmesh unity?

A NavMesh is a designated mesh in your Unity scene, which specifies navigable areas in your environment, including areas where characters can walk, as well as obstacles.

52. What is mesh vs material Unity?

Meshes are the main graphics primitive of Unity. They define the shape of an object. Materials define how a surface should be rendered, by including references to the Textures it uses, tiling information, Color tints and more.

53. What is material and texture in Unity?

A material specifies one specific shader to use, and the shader used determines which options are available in the material. A shader specifies one or more textures variables that it expects to use, and the Material Inspector in Unity allows you to assign your own texture assets to these these texture variables.

54.List out Mouse event in unity?

- 1.MouseDown Event
- 2.MouseUp Event
- 3.MouseMoveEvent
- 4. Mouse Enter Event
- 5.MouseLeaveEvent
- 6.MouseOverEvent
- 7.OnMouseDrag

55.what is shader graph?

Shader Graph lets you visually author shaders and see the results in real-time. This node-based system opens up the field for artists and other team members – simply connect nodes in a graph network.

56. What type of controller does Unity input use?

1.AxisControl 2.ButtonControl 3.KeyControl 4.Vector2 Control 5.Vector3 Control 6. StickControl 7.DpadControl 8.TouchControl

57.Can two GameObjects, each with only an SphereCollider, both set as trigger and raise OnTrigger events? Explain your answer.

No. Collision events between two objects can only be raised when one of them has a RigidBody attached to it. This is a common error when implementing applications that use "physics."

58. How do I make an object follow a path in Unity?

Rename the create empty (Gameobject) as a target. Drag and drop the enemy script onto the Enemy. Call the target. The enemy will be the object to follow a path.

59.what is firebase unity?

Firebase is a BaaS (Backend-as-a-Service) that allows you to create web and mobile apps without server-side programming, making development easier and faster.