1. **Fundamentals of UI Design and UX Designs:**

(i) **Consistency:**
- It maintains colours, typography, button styles and layout structures.
- It helps users to easily regnize the patterns.

(vi) **Accessibility:**
- It designs for everyone, including users with disabilities.
- It follows the WCAG to ensure readability, contrast and screen reader.

(iii) **User Experience:**
- It considers intuitive, efficient and enjoyable the interface.
- It ensures smooth navigation, minimal function and user centered.

(iv) **Colour:**
- It chooses the colour that align with brand identity.
- It relates cultural association, contrast and colour blindness.

2. Diff b/w UI & UX using real-world case study.

Case 1:

App : Netflix

User Interface :

(i) It uses a dark theme, high quality thumbnails and smoothy animation

(ii) The designs will remain the same across all the devices.

(iii) The users see motion previews when they hover a show.

User Experience :

(i) AI suggests content based on the user preferences.

(ii) Users can find content easily through searches.

(iii) Helps users resume content without any extra effort.

Case 2:

App : Snapchat.

User Interface:

(i) It has brighter and a playful design to attract younger audience.

(ii) It does not have a ~~home~~ home page and lands directly in the camera page.

(iii) It has custom avatars and AR filters.

(iv) It has filters and Bitmoji.

User Experience:

(i) It enables the users to snap to others and ~~to~~ disappears after viewing.

(ii) It enables the users to share content 24 hours.

(iii) It encourages to use it daily by the method streak and trophies.

(iv) Disadvantages is the interface ~~this~~ which is a bit different for new user.

3. Relationship b/w UI and UX design :

Let's take a example about the video game.

User Interface

- Let's think about the game's menu. If the button's big and easy to press? Is the text clear and readable?

- Visiblity of the health bar? How much health your character left?

- It Is the map easy to read and understand?

User Experience:

- Is the game interactive? Does it feel fair?

- It too must have a easy to learn control feature.

- It has to be enaging and exciting to play.

- It must have smoothness in the game play.

Therefore,

     Together, it must have amazing graphics. But it should be balanced.

Case 1:

     A game with amazing graphics may have frustrating, if the controls are graphics. So, you might lose interest.

Case 2:

     A game with simple graphics can be super fun, if the gameplay is smooth with no lag. This attracts users.

4. Various UI/UX Design tools:

(i) Figma

- It is a digital Drawing Board.
- It enables the users to collaberate and work together.
- It is used to design web pages and Apps.
- It creates a prototype of anything.

~~(ii) Adod~~

(ii) Adobe XD:

- It is similar to Figma with few differences.

- It is a product of Adobe family.

- It creates animations and transition and make your design a bit lively.

- It visualizes an app or website.

(iii) InVision:

- It is magic tool turns any design into an interactive one.

- It's design are working one so it feels like a real one

- It's a great option to get feedback from the users.