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Q.1:-

a)What is the main aim of the Don Norman's Book (The Design of Everyday things)?

ANS: The Design of Everyday Things shows that good, usable design is possible. The rules are simple: make things visible, exploit natural relationships that couple function and control, and make intelligent use of constraints. The goal: guide the user effortlessly to the right action on the right control at the right time.

The Design of Everyday Things is a powerful primer on how — and why — some products satisfy customers while others only frustrate them.

b) Explain Deductive and Abductive reasoning with examples.

ANS: Deductive reasoning: also deductive logic, is the process of reasoning from one or more statements (premises) to reach a logically certain conclusion.[1]

Deductive reasoning goes in the same direction as that of the conditionals, and links premises with conclusions. If all premises are true, the terms are clear, and the rules of deductive logic are followed, then the conclusion reached is necessarily true.

Inductive reasoning : makes broad generalizations from specific observations. Basically, there is data, then conclusions are drawn from the data. This is called inductive logic. **An example of inductive logic is,** "The coin I pulled from the bag is a penny. That coin is a penny. A third

coin from the bag is a penny. Therefore, all the coins in the bag are pennies."

Q.2: Analyze the following scenario and write down seven stages of action for given particular

scenario for solution.

Scenario is:

Suppose I want to go to University, but the tyre of my car got punctured. Now I have to repair it.

You are required to write the seven stages of Gulf of Execution and Evaluation to solve the scenario.

ANS:- starting with the execution part:

1. Specifying my goal: what to do?
2. Forming intention for an act: forming the intention to cross road and to reach the tyre repair shop.
3. Sequence of actions or taking an action to lead me to my goal: I will use the action to press the key to start the car, and cross walk signal to cross the road.
4. Executing the action: by physical action that I crossed the road.

Evaluation part:

5. Perception of the system or the world: perceiving that I am on the other side of the road to reach the shop.

6. Interpretation of perception based on your expectation: I interpret this perception and help of others to find it.

Q.3:

a) Differentiate slip and mistake.

ANS:- slip:

Slip occur when a user intends to perform an action but he she ends up with doing another action or similar action causes are poor physical skill and an attention.

Example:

Accidentally putting a liquid hand wash.

Mistake:-

Mistake occur when user have goals but they are inappropriate for the current task or problem.

Causes are incorrect understanding of something

Example:

If someone understood the petrol gauge of the car with the engine oil warning sign of the car, no matter how carefully he added the certain volume but still the problem will remain the same.

b) Explain self perception and object perception.

ANS: Self-perception:-

Self-perception is a process in which people develop a view about themselves. It is developed through socialization by having interaction with different types and group of people.

Object perception:-

Object perception is a process in which a group of individuals develop a view of objects they see around.

It is actually an optic illusions of objects.

Q.4:

Write the steps involved in perceptual process.

ANS:

1. Environmental stimulus.
2. Attended stimulus.
3. Image of the retina
4. Transduction
5. Neural process
6. Perception
7. Recognition
8. Action

b) Differentiate between perception and recognition

ANS:-

perception:-

Everything that we sense, we hear, we smell, we see etc are perceived.

Example:

Let's consider an example : I am going to university by the street from my town and I perceive that there will be something on the gate when I leave town.

Recognition:-

Perception does not involve becoming consciously aware of the stimuli. It is necessary for the brain to interpret and recognize what is the thing I am sensing.

Example:

Keeping the above example in mind at the recognition stage of the perceptual process that I realize that I am going to face the security guard of town at the gate.

Q.5:

a) A graphic designer, wants to design a 3d shape using Adobe Illustrator, he select a shape, apply some gradient on it and then apply drop shadow effect. In the given scenario in the light of interaction identify the Goal, Problem domain and the task.

ANS:- Goal:

Designing 3D shape.

Problem domain:

Does the graphic designer have goat the expertise in 3D designing, Because we are taking about D design and we have a graphic designer without knowing if he has the expertise in certain field of our requirements.

Task:

Task is depended on steps to be taken:

1. go to shapes select the shape
2. apply some gradient
3. apply some shadow effects

b) Explain Gulf of Execution and Gulf of Evaluation.

ANS:- Gulf of execution how do I know what I can do?

This lead to the concept of discoverability. In simple words when you boil something new from the market and it's the first time that you are

using that item you just go using it and you are finding its features that is called discoverability which at certain time occur due to poor designing of something.

Gulf of evaluation:

How do I know what happened? this lead to the concept of feedback in simple word feedback can be understood as you are using a button for some action to perform an action just considered you are in a develop country, trying to cross the road you press the cross walk button and the machine is not responding by pressing the button continuously that is called as feed back.