NAME: M. NAEEM: ID#: 14146: SUBJECT: HUMAN COMPUT

HUMAN COMPUTER INTERACTION.

Q1) Part (a) Ans): The aims and purposes of Don Norman Book (The design of everyday things) are quite simple and very easy to understand. Because this book tell us how to design things easily and it is possible to design a thing which can be usable. The rules of making things are very easy, our design must be visible, and it can be control easily. The main goal is that to design a thing which is control easily and workable, like the use of the word "PUSH" and "PULL" for the door handle. Things must be designed like it doesn't need manuals because no one reads manuals a good design is needed to avoid manuals.

Q1) Part (b) Ans): Deductive reasoning:

General to particular. Deductive reasoning mean moving towards the decision directly on the basis of logics. Deduced from the logical statements. For example if the VC car is in the parking place then he will be in the office. So the car is in the parking place he will be in the office.

Adductive reasoning: it is basically start from the observation and seeks to finds the the simplest explanation for the observations. Reasoning from event to cause. Example. Atiq come late to class because he played pubg whole night. If we see atiq is late assume he played pubg. But this can also be wrong because may be atiq study whole night therefore he is late.

Q2) Ans): The seven stage of action are given below.

- User must set a goal. (EXECUTION)
- 2. Formulates the intention.
- 3. Specifies actions at interface.
- 4. Execute action. (EVALUATION)
- 5. Perceive system state.
- 6. Interpret system state.
- 7. Compare system state with goal.

Now all these action will be applied on the given scenario.

- 1. In this I will set a goal and the goal will be like that is I am going to university and the tyre of the car got punctured and I will go to repair it first this will be goal.
- 2. In this I will form an intention. This is what would satisfy the goal. This goal can be satisfied by the car which is repaired.
- 3. In this stage what will achieve the intention? I would need to repair the car to meet the requirements set in the goal.
- 4. Execution of the action. Here I will do those steps of actions which can repair the car.
- 5. Perceiving the state of the system. In this I will gather information that my repaired car would be able to reach me to university.
- 6. Interpreting the system state. Now I will see what has changed? Punctured tyre of my car has been changed and it can now workable and can move now.
- 7. Evaluating the outcome. I will come to the conclusion that did I achieve my goal If I got my goal so I can go to university easily because I am succeeded in my goal.

Q3) part (a) Ans: **Slip**: Slip mean when you want to do something right and also you have the right intentions but you failed to do it this is called slip. The slip can be caused by poor physical skills. For example you are supposed to bring a pack of biscuits from the shop and instead of biscuits you brought chocolate this is called slip. We must be skillful to avoid the slip.

<u>Mistake</u>: Mistakes means when you are doing something which is not right and you are doing it intentionally called mistake. It means that your intentions are not right from the start. The incorrect understanding can cause the mistake. For example you don't know how to drive the car and you are sitting in the car to drive it so you are making mistakes

Part (b) Ans: **Self-perception:** it is when our attitudes and feelings are uncertain or ambiguous. Accounts for responses when people attitudes are vagous or uncertain.

Part (b) Ans: **Object perception:** Object perception is the ability to consider that the object is the same object even when viewed from a different direction.

Q 4: part (a) **Perception process:** Perception is the process by which we attach meaning to the world around us. Perception is unique to each person. No one can perceive 100% of all things at all times. Perception process consists of Selection, Organization and Interpretation. In selection we select the stimuli to which we attend. We select the stimuli through our senses: sight, sound, smell, taste and touch. In organization stage we mentally arrange the stimuli or information so we can understand or make senses out of the stimuli. In Interpretation we attach meaning to the stimuli. Our interpretations are based on our values, needs, self-concept, belief and other personal factors.

Q4: part (b): **Perception**: It is mental process of transforming sensory stimuli to meaningful information. It is the process of interpreting something that we see or hear in our mind and use it later to judge and give a verdict on a situation, person, group etc.

Recognition: Recognition is a method which help us to identify objects which are present in a image. Recognition actually categorize the objects, example if we see a picture which consists of many shapes like triangle, square, rectangle etc. a square in the image can be recognized as a square only.

Q5: part (a): Ans: **Domain**: It is the area of work under study. But in the given scenoiro the domain will be Graphic designing. **Goal** is what we want to achieve but here we are designing a 3d shape by using adobe illustrator it's our goal. **Task** is the action about how we are going to do it. Here selecting the shape, apply some gradient and apply some drop effects are the task.

Part(b): Ans: **Gulf of Execution:** Difference between the user formulation of action to reach the goal and actions allowed by the systems. It means that certain goal set in human mind and want to reach goal followed respective set of actions.

Gulf of evaluation: It is the distance between the physical presentation of the system state and expectations of the user.