**Introduction to Psychology**

Mid-term Assignment

Instructions: Attempt all questions in Microsoft Office document. Format your document with 12 size Font and Times New Roman. Make sure you do not copy material directly from the internet or other materials. This is an open source assignment and you can take help from any material available to you. However, it is important to apply your own knowledge and understanding of the concepts. Copied answers will not be marked. Assignments will be checked for plagiarism as well. Only original content will be marked.

**ID: 15583**

**SHAHIR AHMAD FAQIRI**

Q1: How is perception different from sensation? Can you form perception without sensation? Give examples to strengthen your arguments.

**ANSWER:**

**SENSATION:**

It is the process of sensing our environment through our five senses i.e. touch, taste, sight, smell and sound.

**PERCEPTION:**

It refers to the process of interpretation, analysis and sorting out information and stimuli that comes from the brain and senses.

Sensation occurs because of specialized neurons called the sensory receptors. When information is deducted by a receptor, sensation occurs. For example, when light enters the eye, the cells sends messages in the form of action potential to the central nervous system (CNS). Conversion of sensory stimuli to action potential is called transduction.

Sensation also depends on the threshold of stimulus. Minimum amount of stimulus that should be present, to be detected 50% of the time is called absolute threshold.

It is also possible for an individual to get a message which maybe below the threshold are called subliminal messages. Perception is also an important process which helps in rationalizing and making sense of the information that is related to physical stimulus. Perception occurs when the brain process the information and gives meaning to it.

Sensation and perception are related processes. They have close relationship but qualities due to which they differentiate from one another.

**DIFFERNCE:**

Sensation are major elements in perception.

1) Sensation are simple awareness of qualities like taste, odor and color.

2) Perception is more complex process as compared to sensation. Perception involves the fusion of ideas with sensation.

3) Perception involves combination and selection of stimulus and arranging them into patterns, whereas sensation does not involve any such thing.

4) Perception involves the excitation of associative areas as sensory area of cerebrum but sensation does not involve any excitation.

Perception and sensation are different because perceptions are psychological and sensations are physical. Mostly sensation arise because the body gets a stimulus whereas perception are individual thoughts of people/individual.

There are different factors that may affect sensation and perception such as attention, motivation, values, expectations, experiences and prejudices.

**CAN PERCEPTION OCCUR WITHOUT SENSATION?**

Perception and sensations are elements which balances one another. Both of these processes work together to identify and create meanings from the stimuli.

Perception is not possible without sensation. Although perceptions are built from sensations, not all sensations results in perception but for the occurrence of perception, sensation is an integral part. Perception follows sensation as it arranges the stimuli into patterns after it is sensed.

Sensation is the most important part of bottom up processing, it means the sensory organs send information to the brain. While perception is the top down processing that is perception takes place when the brain analyze and interpret the information and sends back the signals to sensory organs for response. Similarly, when perception is done a person is able to make sense of the sensations.

**FOR EXAMPLE:**

When we see the light it is sensation but then determining the color is perception.

If someone touches us with a stick it is sensation, but to interpret it as if it is painful or not is how we perceive it.

If we smell something through our nose it is sensation but to tell that whether it is a good odor or bad is perception.

Q2: Take any three print ads from Google Images. Identify the type of perceptual organization / optical illusions used. Try to explain why the organization has chosen to use them and how do they make the advertisement effective.

**ANSWER:**

**1) FORMULA TOOTHCARE**



In the advertisement it’s shown that toothpaste will make your teeth shiny and strong. Formula Tooth care found the right formula by using an illusion to make it seem like the man in the ad is biting the billboard. The illusion helped in the advertisement in making the audience think that the tooth care formula will make their teeth so strong that they can bite off anything as hard as billboard. It’s okay to look at your advertising from a different angle. Formula Tooth care did just that, and in the process, took a big bite out of the competition.

**2) ANANDA MILK**



 Ananda Milk, a dairy supplier in India, wanted to appeal to kids by showing a strong young man moving buildings with his milk machismo. The illusion works on a grand scale. People who see the building in Mumbai, whether it’s tourists or residents, will immediately be curious to know more about the company. Also the kids seeing this add will be motivated to drink more milk so they become strong.

**3) SNOOTY PEACOCK**



Snooty Peacock, a small jewelry boutique in Texas, takes advantage of negative space to create a dual woman and peacock. This logo decorates their social media, storefront, and even some of their merchandise. The logo is a clever way to reflect both the name of the company and the services they offer. The illusion of both a woman and peacock can attract people as it represents the brand name snotty i.e. the arrogant beautiful woman wearing jeweler and a peacock. It’s not overly complicated, and with the distinct purple and white, it’s also extremely memorable.

Q3 a: Give everyday life examples for every type of memory discussed in the chapter.

**ANSWER:**

**MEMORY:**

Memory is the power of brain to recall information or past experiences. In memory information is encoded and stored, later it is retrieved.

There are three types of memories

1) Sensory memory

2) Short-term memory

3) Long-term memory

**1) SENSORY MEMORY:**

It is the shortest form of memory, not more than a flash. It acts as a buffer for information that is received through senses. For example when we see someone and remember who they are sensory memory works just in seconds.

Sensory memory has the following types:

**a) Iconic memory**

These are the visual memories which takes place immediately. For example if two pictures flashes on television for 0.5 seconds and you remember it, this is known as iconic memory.

**b) Echoic memory**

It is the auditory memory these memories are stored longer than iconic memory. For example, if you listen to music for second or two and you start to hum it back, is the echoic memory.

**c) Haptic memory**

It involves memories related to sense of touch. For example, if someone touches with a hard stick for second and it makes us recall past events, its haptic memory.

**2) SHORT-TERM MEMORY**

Short term memory is that part of brain which holds the information for minutes. It means it works longer than sensory memory, it is also called working memory. Information that is processed in the short term memory is either dismissed quickly or is either sent to long term memory that’s why it is said that short term memory has low capacity. For example, if you have to memorize a ten digit number, one have to divide the number into chunks. Within 15-20 seconds if you revise the number it might transfer to long term memory otherwise you have to memorize the 10 digits again.

**3) LONG-TERM MEMORY**

Long-term memories are very complex and the information stays from 5 minutes to 20 years or till the whole life. Long term memory sometimes works in the conscious, whereas it works in the unconscious as well. For example, we can recall our childhood stories or what happened to us in college, like a friend tripped and it was funny.

Following are types of long-term memory:

**a) Explicit Memory:**

It is the conscious memory, helps in the intentional recall of information. For example, when someone recall their telephone number or address.

**b) Declarative Memory:**

It helps in the recall of facts, such as events, dates. For example, if someone remembers his/her friend’s birthday or wedding anniversary.

**c) Semantic Memory**

It helps in the storage of key facts, vocabulary, and general knowledge. For example, if someone remembers the capital of Japan, if someone remembers the meaning of different words, their antonyms and synonyms.

**d) Episodic Memory:**

It is a form of declarative memory that helps in recalling the experiences of life. For example, recalling what happened to someone last week or how did someone spent their vacations last year.

**e) Implicit Memory:**

It is referred to the unconscious memory. For example, If Sarah visited a beach with her parents when she was 7 years old. Later she visits that beach after 10 years with her friends and remembers everything about the beach.

**f) Procedural Memory:**

 It is a form of implicit memory which helps us to recall how to do certain things or perform certain actions. For example, in the beginning, when we desire a car we check mirror, seat, seatbelts and also aware about them, but once we get used to it we perform them in routine checks even without thinking about it.

**g) Auditory memory**

It helps in recalling information based on sound. For example, auditory memory helps us retain information based on the sound we hear. When a child is learning about the sounds, letters make, it’s their auditory memory that will allow them to remember the letter “B” making the sound we hear in the word “ball”. So, as a child learns his letters, there might be one page in the book that shows the letter “B”. The parent or teacher will model the sound the letter makes. On the next page, they might find the word “ball”. In order for the child to be successful, he will have to remember the “B” sound from the previous page.

b: What do you think will happen if someone’s long term memory stops functioning? What will happen if the short term memory stops functioning?

**SHORT TERM MEMORY LOSS:**

If short term memory stops working, a person may forget things they have seen, heard or done. Usually it happens to people of older age. Person whose short term memory is not working may:

a) Ask the questions repeatedly

b) Forget main events that happened recently

c) They may forget where they might have put something

d) Forget something they have read recently

**LONG TERM MEMORY LOSS**

Long term memory loss is when an individual have trouble to recall information. It may occur for different reasons, due to aging, head surgery, high dose medication etc.

Following results may occur if an individual loses his long term memory:

**1) DEMENTIA**

 It is a condition in which there is a problem with recalling important information, decline in language, problem solving skills.

**2) ALZHEIMER’S DISEASE**

It is a common form of dementia. This condition is characterized by:

a) Decline in proper display of actions and behavior

b) Decline in retrieving information

c) Dysfunctioning in social skills.

**3) LEWY BODY DEMENTIA (LBD)**

It affects the thinking, behavior of individual, mood, temper and also affect movement.

**4) FRONTOTEMPORAL DEMENTIA**

The frontal lobes and temporal lobes of the brain are affected, it further affects the language, behavior and personality of individuals. It results in poor judgment, speech difficulties and loss of attention and concentration.

**5) PROGRESSIVE SUPRANUCLEAR PALSY (PSP)**

Death of some volumes of the brain occurs which may lead to slow the movements, loss of balance, mood swings and difficulty in moving eyes. It also leads to forgetfulness.

**6) NORMAL PRESSURE HYDROCEPHALUS**

The ventricles of brain enlarges. It results in difficulty in moving and walking. It also lead to dementia. It may involve forgetfulness, confusion and lack of interests in daily activities.

**7) CREYTZFEDLT-JAKOB DISEASE (CJD)**

It is also called mad-cow disease. It includes problems with coordination, memory, behavior and actions, it is fatal brain disorder. It may also lead to blindness, dementia and coma.