

NCERT Solutions for Class 11

Psychology Chapter 8

Thinking Class

Review questions : Solutions of Questions on Page Number : 167

Q1 :

Explain the nature of thinking.

Answer :

- Thinking is the basis of all cognitive activities and processes, which are unique to humans. It involves manipulation and analysis of information received from the environment.
- It is the higher mental process through which things are manipulated and the required information is analysed. For example, while playing a video game the mind thinks of strategies or techniques to win it.
- Thus, thinking is organised and goal-directed. It is an internal mental process that is inferred through overt behaviour.

Q2 :

What is a concept? Explain the role of concept in the thinking process.

Answer :

A concept is a mental representation of a category and refers to a class of objects, ideas or events that share common properties.

It plays an important role in the thinking process as concept formation helps in organising knowledge so that it can be accessed with less time and effort.

Q3 :

Identify obstacles that one may encounter in problem solving.

Answer :

The obstacles that one may encounter in problem solving are as follows:

i. **(i) Mental Set**

- It is a tendency of a person to solve problems by following the previously tried mental operations based upon prior success.
- It can create a mental rigidity and hinder problem solving since the problem solver does not think of new rules and ideas.
- It is also related to functional fixedness, whereby people fail to solve a problem because they get fixed or stuck on the usual function of things.

i. **(ii) Lack of Motivation**

- Motivation is a very important condition to solve problems. Sometimes people give up easily while encountering a problem or when they have had met a failure previously.
- Thus, they become de-motivated and are unable to solve problems.

Q4 :

How does reasoning help in solving problems?

Answer :

Reasoning helps in problem solving as it is the process of gathering and analysing information to arrive at conclusions. Thus, reasoning helps to arrive at conclusions through certain information. This can be achieved through the following ways:

- i. **(i) Deductive reasoning:** It begins with an assumption that is believed to be true and the conclusion is based on that assumption. Thus, it is reasoning from general to particular.
- (ii) Inductive reasoning:** It is based on specific facts and observations. It involves the drawing of a general conclusion based on a particular observation.

Q5 :

Are judgment and decision-making interrelated processes? Explain.

Answer :

Judgement and decision-making are interrelated processes. In judgment the conclusions are drawn from opinions or events, based upon evidences. Decision-making requires choosing among the alternatives by evaluating the cost and benefit associated with each alternative. Thus, decision-making and judgment are both based upon conclusions that are arrived at by reasoning.

Q6 :

Why is divergent thinking important in creative thinking process?

Answer :

Divergent thinking is important in creative thinking process because it generates a wide range of original ideas that form the basis of creative thinking. It also plays an active role in this process as it includes fluency, flexibility, originality and elaboration. Further, creative thinking refers to the originality and uniqueness of ideas and solutions that did not exist previously. Therefore, divergent thinking helps creative thinking to construct new and original ideas.

Q7 :

What are the various barriers to creative thinking?

Answer :

The various barriers to creative thinking are:

- i. **(i) Habitual** - The tendency to be overpowered by habits according to a particular think acts as a barrier to creative thinking. It hinders the generation of thought from a fresh perspective.
- (ii) Perceptual** - It prevents the formation of novel and original ideas.
- (iii) Motivationa** - Lack of motivation acts as a barrier for any thought and action.
- (iv) Emotional** - Emotions like fear of failure, rejection and negativism lead to negative assumptions and result in incapability to think differently.
- (v) Cultural** - It refers to excessive adherence to traditions, expectations, conformity pressures and stereotypes. Cultural block arises due to the fear of being different, tendency to maintain status quo, social pressure, etc.

Q8 :

Does thinking take place without language? Discuss.

Answer :

According to Benjamin Lee Whorf's linguistic relativity hypothesis, the contents of thought are determined by language. Linguistic determinism suggests that the limits and possibilities of thoughts are also determined by language and linguistic categories.

However, according to Jean Piaget, thought precedes and determines language. An example is the imitation of adults by young children that is a manifestation of thought without language. He opines that language is one of the vehicles of thinking and thought is necessary to understand language.

A third view by Vyogotsky argues that thought is used without language in non-verbal thinking and language is used without thought when expressing pleasantries. The overlapping of thought and language leads to verbal thought and rational speech.

Therefore, different views have been presented by different scholars, whereby some believe that thinking can take place without language and some believe that it cannot take place without language. However, it is important to note that thinking and language are interrelated processes.

Q9 :

How is language acquired in human beings?

Answer :

Language is acquired among human beings in various following stages:

- Infants cry, make variety of sounds and learn to babble at six months. These patterns repeat and occur at nine months.
- Holophrases develop by the age of one year and two-word telegraphic speech occurs at 18-20 months.
- Behaviourists like B.F. Skinner are of the view that humans learn language by imitation, reinforcement and associating words with objects. Further, children produce sounds that are appropriate to the language of the care-giver and are reinforced leading to approximation of desired responses.
- The patterns of reinforcement lead to regional differences in pronunciation and phrasing.
- According to linguist Noam Chomsky, children throughout the world have a critical period for learning language and go through the same stages of language development.
- Chomsky emphasises on built-in readiness that is present in general among all children and helps in acquiring language without direct teaching.

Exercise : Solutions of Questions on Page Number : 167

Q1 :

How can creative thinking be enhanced?

Answer :

Creative thinking can be enhanced by the following ways:

- i. (i) Becoming more aware and sensitive in order to notice and respond to the feelings, sights, sounds and textures around.
- (ii) Generating maximum amount of ideas or solutions to a given task, in order to increase the flow of thoughts and choosing the best out of them.
- (iii) Using Osborn's 'brainstorming' technique to increase the flexibility of ideas. It involves the idea of thinking freely, without any limitations or pre-conceptions.
- (iv) Experience and practice leads to an independent thinking while making judgments.
- (v) Engaging in activities that require the use of imagination and original thinking.
- (vi) Getting a feedback on the proposed solutions and also thinking of solutions others may offer.

- (vii) Giving the ideas a chance to incubate.
- (viii) Drawing diagrams for easily understanding the solutions and visualising causes or consequences of all the solutions.
- (ix) Resisting the temptation of getting immediate rewards.
- (x) Being self-confident, positive and aware of all the defences concerned with the problem.