

Unit: Learning

Solved Textual Questions & Answers

A. 1-Mark (Very Short) Answers

1. Define learning.

Learning is a relatively permanent change in behavior that occurs as a result of experience or practice.

2. Who gave the theory of classical conditioning?

Ivan Pavlov.

3. What is reinforcement in learning?

Reinforcement is any stimulus or event that strengthens or increases the likelihood of a behavior.

4. Name the psychologist who proposed the trial-and-error theory.

Edward L. Thorndike.

5. Mention one law of learning according to Thorndike.

The Law of Effect.

B. Short Answer (2–3 Marks)

1. State two characteristics of learning.

- a. Learning brings change in behavior.
- b. Learning is purposeful and goal-oriented.

2. Differentiate between classical conditioning and operant conditioning.

Classical conditioning involves associating a neutral stimulus with an involuntary response. Operant conditioning involves reinforcement or punishment to increase or decrease voluntary behavior.

3. What is the Law of Effect?

According to Thorndike, behaviors followed by satisfying outcomes are likely to be repeated, while those followed by discomfort are less likely to recur.

4. Define insight learning with an example.

Insight learning is a sudden realization of a solution without trial-and-error. Example: Kohler's chimpanzee using sticks to get a banana.

5. What do you mean by cognitive learning?

Cognitive learning involves active processing of information and understanding, including observation, perception, and memory.

C. Long Answer (4–6 Marks)

1. Explain the trial-and-error theory of learning.

Proposed by Thorndike, it suggests that learning occurs through repeated attempts. The learner gradually eliminates incorrect responses and retains the correct one. Key elements include motivation, multiple responses, and reinforcement.

2. Describe Pavlov's experiment and theory of classical conditioning.

Pavlov trained dogs to salivate at the sound of a bell by pairing the sound (neutral stimulus) with food (unconditioned stimulus). Over time, the dog salivated (conditioned response) even without food. The experiment established the basis of stimulus-response learning.

3. Discuss the laws of learning given by Thorndike.

Thorndike proposed three major laws:

- Law of Readiness: Learning is effective when the learner is ready.

- Law of Exercise: Practice strengthens learning.
- Law of Effect: Behaviors followed by rewards are reinforced.

4. **What is operant conditioning? Explain with Skinner's experiment.**

Operant conditioning involves learning through rewards and punishments. Skinner placed rats in a box; pressing a lever delivered food. The rats learned to press the lever for rewards. This demonstrated reinforcement-based learning.

5. **Explain the stages of learning.**

- **Motivation:** Desire to learn.\
- **Goal:** Target behavior or outcome.\
- **Block or barrier:** Challenges in the learning process.\
- **Effort:** Attempts made by the learner.\
- **Insight or trial-and-error:** Method of finding the solution.\
- **Success:** Acquiring desired behavior.

Additional Questions with Model Answers

Short Answer (2–3 Marks)

1. **Mention two types of learning.**

- Cognitive learning\
- Motor learning

2. **What is meant by latent learning?**

Latent learning is learning that occurs without any obvious reinforcement and is not immediately demonstrated in behavior.

3. **Name two educational implications of classical conditioning.**

- Use of praise and rewards to build positive classroom behavior\
 - Reducing fear through association with pleasant stimuli
4. **What is meant by transfer of learning?**
Transfer of learning is the influence of prior learning on new learning or performance.
 5. **Mention two limitations of trial-and-error learning.**
 - Time-consuming\
 - May involve unnecessary repetition and frustration
 6. **State one difference between insight learning and trial-and-error learning.**
Insight learning involves sudden problem-solving; trial-and-error involves multiple attempts.
 7. **Give an example of operant conditioning in school.**
A teacher praises a student who completes homework regularly, increasing the likelihood the student will continue doing so.
 8. **What is extinction in classical conditioning?**
When the conditioned stimulus is repeatedly presented without the unconditioned stimulus, the conditioned response gradually fades.
 9. **What is spontaneous recovery?**
The reappearance of a conditioned response after a rest period following extinction.
 10. **Define observational learning.**
Learning by observing and imitating the behavior of others, as proposed by Albert Bandura.

Long Answer (4–6 Marks)

11. **Discuss the role of reinforcement in learning.**

Reinforcement strengthens the likelihood of a behavior. Positive reinforcement adds desirable outcomes; negative reinforcement removes unpleasant conditions. Both encourage repetition of desired behavior.

12. **Explain cognitive learning theory.**

Cognitive theory emphasizes mental processes—thinking, understanding, memory. Learners actively construct knowledge. It focuses on internal events over external reinforcement.

13. **How does learning differ from maturation?**

Learning is acquired through experience; maturation is a natural growth process. Learning requires practice; maturation happens biologically with age.

14. **Explain the educational significance of operant conditioning.**

Useful in behavior modification, classroom management, and motivation. Rewards and punishments shape student behavior and enhance discipline and learning outcomes.

15. **Write a note on insight learning with Kohler's experiment.**

Kohler's chimpanzee experiment showed problem-solving through insight—the sudden perception of relationships. The chimp used a stick to reach bananas, indicating cognitive learning rather than trial-and-error.

16. **Describe different types of learning.**

- **Motor Learning:** acquiring physical skills.\
- **Cognitive Learning:** knowledge and reasoning.\
- **Verbal Learning:** learning through language.\
- **Concept Learning:** identifying patterns/categories.

17. **Explain observational learning with example.**

Albert Bandura's Bobo Doll experiment showed children imitated aggressive behavior modeled by adults. It proves learning can occur through observation, even without reinforcement.

18. **What are the main characteristics of learning?**

- Brings change in behavior\
- Continuous and lifelong\
- Goal-directed\
- May be intentional or unintentional

19. **Write the main principles of cognitive learning.**

- Active involvement\
- Use of prior knowledge\
- Goal setting\
- Organization and structuring of information

20. **What is the educational importance of insight learning?**

Develops problem-solving skills, promotes creative thinking, encourages independent learning, and is more efficient than rote or trial-and-error methods.
