

CBSE Class 12 Psychology Question Paper with Solutions(Memory Based)

Time Allowed :3 Hour	Maximum Marks :60	Total Questions :24
----------------------	-------------------	---------------------

General Instructions

Read the following instructions very carefully and strictly follow them:

- Answers to this Paper must be written on the paper provided separately.
- You will not be allowed to write during the first 15 minutes
- This time is to be spent in reading the question paper.
- The time given at the head of this Paper is the time allowed for writing the answers,
- The paper has four Sections.
- Section A is compulsory - All questions in Section A must be answered.
- You must attempt one question from each of the Sections B, C and D and one other question from any Section of your choice.

1. Explain the concept of 'Intelligence Quotient' (IQ) and how it is calculated.

Solution:

Concept: The **Intelligence Quotient (IQ)** is a measure used to assess a person's intellectual abilities in relation to others. It indicates an individual's capacity for reasoning, problem-solving, learning, and understanding complex ideas. IQ tests are widely used in psychology and education to evaluate cognitive abilities.

Step 1: Meaning of Intelligence Quotient.

Intelligence Quotient (IQ) refers to a numerical score obtained from standardized tests designed to measure human intelligence. It compares a person's mental ability with the average performance of individuals of the same age group.

Step 2: Concept of Mental Age and Chronological Age.

The calculation of IQ is based on two important concepts:

- **Mental Age (MA):** The level of intellectual functioning of an individual as determined by intelligence tests.
- **Chronological Age (CA):** The actual age of a person measured in years.

Step 3: Formula for calculating IQ.

The Intelligence Quotient is calculated using the formula:

$$IQ = \frac{\text{Mental Age (MA)}}{\text{Chronological Age (CA)}} \times 100$$

Step 4: Example of IQ calculation.

If a child of chronological age 10 years has a mental age of 12 years, then:

$$IQ = \frac{12}{10} \times 100 = 120$$

This indicates that the child's intellectual ability is above the average level for their age group.

Step 5: Interpretation of IQ scores.

IQ scores are generally interpreted as follows:

- 90 – 110: Average intelligence
- 110 – 120: Above average intelligence
- 120+: High intelligence
- Below 90: Below average intelligence

Quick Tip

The traditional formula for IQ is:

$$IQ = \frac{MA}{CA} \times 100$$

A score of **100** represents average intelligence, where mental age equals chronological age.

2. Compare and contrast the Psychometric and Information-Processing approaches to intelligence.

Solution:

Concept: Psychologists have developed different approaches to understand human intelligence. Two important approaches are the **Psychometric approach** and the **Information-Processing approach**. While both aim to study intelligence, they differ in their focus, methods, and explanations of cognitive abilities.

Step 1: Psychometric approach to intelligence.

The psychometric approach focuses on **measuring intelligence through standardized tests**. It assumes that intelligence can be quantified and compared using numerical scores such as IQ. Psychologists using this approach analyze patterns of test performance to identify underlying mental abilities.

Step 2: Key features of the psychometric approach.

- Intelligence is measured using standardized intelligence tests.
- Emphasis is placed on individual differences in cognitive abilities.
- Statistical techniques such as factor analysis are used to identify components of intelligence.
- The results are expressed in numerical scores like IQ.

Step 3: Information-processing approach to intelligence.

The information-processing approach focuses on **how people think and solve problems**. Instead of measuring intelligence through scores, it examines the mental processes involved in perceiving, storing, and retrieving information.

Step 4: Key features of the information-processing approach.

- Emphasizes cognitive processes such as attention, memory, and problem-solving.
- Studies how individuals process information step by step.
- Focuses on strategies and mental operations used in thinking.
- Explains intelligence in terms of efficiency and speed of information processing.

Step 5: Comparison between the two approaches.

- The psychometric approach focuses on **measuring intelligence**, whereas the information-processing approach focuses on **understanding cognitive processes**.
- Psychometric theories emphasize **test scores and statistical analysis**, while information-processing theories emphasize **mental operations and strategies**.
- The psychometric approach explains **what intelligence is**, whereas the information-processing approach explains **how intelligence works**.

Quick Tip

Psychometric Approach → Focuses on **measuring intelligence using IQ tests**.

Information-Processing Approach → Focuses on **understanding the mental processes involved in thinking and problem-solving**.

3. Describe the various defense mechanisms proposed by Sigmund Freud with suitable examples.

Solution:

Concept: Defense mechanisms are unconscious psychological strategies used by individuals to protect themselves from anxiety, conflict, or unpleasant emotions. Sigmund Freud and his followers proposed that these mechanisms help the ego reduce internal tension and maintain emotional balance when faced with stressful situations.

Step 1: Repression.

Repression involves pushing unpleasant or painful thoughts and memories into the unconscious mind so that they do not cause anxiety. *Example:* A person who experienced a traumatic event in childhood may not consciously remember it because the mind has repressed the memory.

Step 2: Denial.

Denial occurs when a person refuses to accept reality or facts that are too painful to acknowledge. *Example:* A person who has a serious illness may refuse to believe the medical diagnosis and act as if nothing is wrong.

Step 3: Projection.

Projection involves attributing one's own unacceptable thoughts or feelings to another person. *Example:* A student who dislikes a classmate may claim that the classmate dislikes them.

Step 4: Displacement.

Displacement occurs when emotions or impulses are redirected from the original source of frustration to a safer target. *Example:* An employee who is angry with their boss may express that anger by arguing with family members at home.

Step 5: Rationalization.

Rationalization involves creating logical explanations to justify unacceptable behavior or failure. *Example:* A student who fails an exam may say that the exam was unfair instead of accepting their lack of preparation.

Step 6: Regression.

Regression is a defense mechanism in which a person reverts to childish behaviors when faced with stress or anxiety. *Example:* A child may start sucking their thumb again after the birth of a younger sibling.

Step 7: Sublimation.

Sublimation is considered a positive defense mechanism where unacceptable impulses are transformed into socially acceptable activities. *Example:* A person with aggressive tendencies may channel that energy into sports or physical exercise.

Quick Tip

Defense mechanisms are **unconscious strategies used by the ego** to reduce anxiety. Common examples include **repression, denial, projection, displacement, rationalization, regression, and sublimation.**

4. Discuss the 'Big Five' factors of personality (OCEAN model) in detail.

Solution:

Concept: The **Big Five model of personality**, also known as the **OCEAN model**, is one of the most widely accepted theories in personality psychology. It explains personality through five broad dimensions that describe consistent patterns of thoughts, feelings, and behaviors. These five traits are **Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.**

Step 1: Openness to Experience.

Openness refers to a person's willingness to explore new ideas, experiences, and creativity. Individuals high in openness tend to be imaginative, curious, and open-minded. They enjoy learning new things and engaging in creative activities. *Example:* A person who enjoys art, literature, and trying new cultural experiences demonstrates high openness.

Step 2: Conscientiousness.

Conscientiousness reflects a person's level of organization, responsibility, and self-discipline. Individuals high in conscientiousness are dependable, hardworking, and goal-oriented. They plan their activities carefully and strive to achieve success. *Example:* A student who completes assignments on time and carefully organizes their study schedule shows high conscientiousness.

Step 3: Extraversion.

Extraversion refers to the tendency to be sociable, energetic, and enthusiastic. Extroverted

individuals enjoy interacting with others and often feel comfortable in social situations. They tend to be talkative, assertive, and active. *Example:* A person who enjoys attending social gatherings and meeting new people demonstrates high extraversion.

Step 4: Agreeableness.

Agreeableness reflects a person's tendency to be cooperative, compassionate, and friendly toward others. Highly agreeable individuals are trusting, helpful, and considerate of other people's feelings. *Example:* A person who willingly helps colleagues and maintains harmonious relationships at work shows high agreeableness.

Step 5: Neuroticism.

Neuroticism refers to emotional instability and the tendency to experience negative emotions such as anxiety, anger, and sadness. Individuals high in neuroticism may feel stressed or worried more easily. *Example:* A person who frequently experiences mood swings or anxiety in stressful situations shows high neuroticism.

Step 6: Importance of the Big Five model.

The Big Five model helps psychologists understand and measure personality traits in a systematic way. It is widely used in psychological research, personality assessment, career counseling, and understanding individual differences in behavior.

Quick Tip

The Big Five personality traits can be remembered using the acronym **OCEAN**: **O** – Openness **C** – Conscientiousness **E** – Extraversion **A** – Agreeableness **N** – Neuroticism

5. Differentiate between 'Eustress' and 'Distress' with real-life scenarios.

Solution:

Concept: Stress is the body's response to demands or challenges in life. Psychologists classify stress into two main types: **Eustress** and **Distress**. While both are responses to pressure, they differ in their effects on an individual's well-being and performance.

Step 1: Meaning of Eustress.

Eustress refers to **positive or beneficial stress** that motivates individuals and enhances performance. It helps people stay focused, energetic, and prepared to face challenges. Eustress often leads to personal growth and improved productivity.

Example: A student feeling excited and motivated before participating in a competition or preparing for an important exam experiences eustress.

Step 2: Meaning of Distress.

Distress refers to **negative stress** that causes anxiety, tension, and emotional discomfort. It occurs when the demands placed on an individual exceed their ability to cope, leading to decreased performance and mental strain.

Example: A person feeling overwhelmed by excessive workload or facing financial problems may experience distress.

Step 3: Key differences between Eustress and Distress.

- **Nature:** Eustress is positive and motivating, whereas distress is negative and harmful.
- **Effect on performance:** Eustress improves focus and productivity, while distress reduces efficiency and causes fatigue.

- **Emotional response:** Eustress creates feelings of excitement and enthusiasm, whereas distress leads to anxiety and frustration.
- **Outcome:** Eustress promotes personal growth, while distress may result in psychological or physical health problems.

Step 4: Importance of understanding stress types.

Recognizing the difference between eustress and distress helps individuals manage stress effectively. Positive stress can be harnessed to improve performance, while negative stress should be reduced through coping strategies such as relaxation, time management, and social support.

Quick Tip

Eustress = Positive stress that motivates and improves performance.

Distress = Negative stress that causes anxiety and reduces well-being.

6. Describe the clinical symptoms and types of Schizophrenia.

Solution:

Concept: Schizophrenia is a severe mental disorder characterized by disturbances in thinking, perception, emotions, and behavior. Individuals suffering from schizophrenia often experience difficulty in distinguishing between reality and imagination, which affects their daily functioning and social relationships.

Step 1: Clinical symptoms of schizophrenia.

The symptoms of schizophrenia are generally categorized into positive symptoms, negative symptoms, and cognitive symptoms.

- **Positive Symptoms:** These involve the presence of abnormal behaviors such as hallucinations, delusions, and disorganized thinking. *Example:* Hearing voices that are not actually present.
- **Negative Symptoms:** These refer to the absence or reduction of normal emotional and behavioral functions, such as lack of motivation, reduced emotional expression, and social withdrawal.
- **Cognitive Symptoms:** These include difficulties in attention, memory, and decision-making, which can affect the ability to perform everyday tasks.

Step 2: Types of schizophrenia.

Psychologists have classified schizophrenia into several types based on the dominant symptoms.

- **Paranoid Schizophrenia:** Characterized mainly by delusions and hallucinations, especially feelings of persecution or suspicion that others are plotting against them.
- **Disorganized (Hebephrenic) Schizophrenia:** Marked by disorganized speech, inappropriate emotions, and unpredictable behavior.
- **Catatonic Schizophrenia:** Characterized by extreme disturbances in movement, such as rigid posture, lack of movement, or excessive and purposeless activity.

- **Undifferentiated Schizophrenia:** Symptoms do not clearly fit into a single specific category but show features of different types.
- **Residual Schizophrenia:** Occurs when the major symptoms of schizophrenia have reduced, but some mild symptoms such as social withdrawal or lack of motivation remain.

Step 3: Impact on daily life.

Schizophrenia significantly affects an individual's ability to function socially, academically, and professionally. Early diagnosis and proper treatment, including medication and psychological therapy, are important for managing the disorder.

Quick Tip

Key symptoms of schizophrenia include **hallucinations, delusions, disorganized thinking, social withdrawal, and cognitive difficulties**. Common types include **paranoid, disorganized, catatonic, undifferentiated, and residual schizophrenia**.

7. Explain the process of 'Systematic Desensitization' used in Behavior Therapy.

Solution:

Concept: Systematic Desensitization is a behavior therapy technique developed by Joseph Wolpe to help individuals overcome phobias and anxiety disorders. It is based on the principle of **classical conditioning** and involves gradually exposing a person to a feared object or situation while teaching them relaxation techniques. The goal is to replace anxiety with a relaxed response.

Step 1: Relaxation Training.

The first step in systematic desensitization involves teaching the client relaxation techniques such as deep breathing, meditation, or progressive muscle relaxation. These techniques help the individual reduce anxiety and remain calm when facing stressful situations.

Step 2: Construction of Anxiety Hierarchy.

The therapist and client work together to create an **anxiety hierarchy**, which is a list of situations related to the fear arranged from least frightening to most frightening. *Example:* For someone afraid of dogs:

- Looking at a picture of a dog
- Watching a dog from a distance
- Standing near a dog
- Touching or playing with a dog

Step 3: Gradual Exposure to the Fear Stimulus.

The client is gradually exposed to each level of the anxiety hierarchy while practicing relaxation techniques. The process starts with the least anxiety-provoking situation and gradually moves toward the most feared situation.

Step 4: Counterconditioning.

Through repeated exposure combined with relaxation, the fearful response is replaced by a

calm and relaxed response. This process is known as **counterconditioning**, where anxiety is replaced with relaxation.

Step 5: Completion of Therapy.

The therapy continues until the individual can face the previously feared situation without experiencing significant anxiety. Over time, the person becomes desensitized to the fear.

Quick Tip

Systematic Desensitization involves three main steps: (1) **Relaxation Training** (2) **Creating an Anxiety Hierarchy** (3) **Gradual Exposure to the Fear Stimulus**

8. Describe the factors that influence 'Pro-social Behavior'.

Solution:

Concept: Pro-social behavior refers to voluntary actions intended to benefit or help other people. Such behaviors include helping, sharing, cooperating, donating, and showing empathy toward others. Psychologists have identified several factors that influence whether a person engages in pro-social behavior.

Step 1: Individual factors.

Personal characteristics such as empathy, moral values, and personality traits influence pro-social behavior. Individuals who are compassionate, cooperative, and emotionally sensitive are more likely to help others in need.

Step 2: Situational factors.

The situation in which a person finds themselves can affect whether they help others. For example, people are more likely to help when the need is clear, when they feel responsible, or when the situation involves fewer bystanders.

Step 3: Social norms and cultural values.

Cultural expectations and social norms encourage individuals to behave in ways that benefit others. Norms such as the *norm of reciprocity* (helping those who help us) and the *social responsibility norm* (helping those in need) promote pro-social behavior.

Step 4: Modeling and learning.

People often learn pro-social behaviors by observing others. Children and adults may imitate helping behaviors demonstrated by parents, teachers, or role models in society.

Step 5: Emotional state and mood.

A person's emotional state also influences their willingness to help. Individuals in a positive mood are generally more likely to engage in pro-social behavior, while stress or negative emotions may reduce helping tendencies.

Step 6: Cost-benefit considerations.

Sometimes individuals evaluate the potential benefits and costs of helping. If the perceived benefits (such as appreciation or satisfaction) outweigh the risks or effort involved, they are more likely to help others.

Quick Tip

Pro-social behavior is influenced by **personal traits, situational conditions, social norms, learning from role models, emotional state, and cost–benefit evaluation.**

9. Discuss the reasons for 'Group Polarization' in decision-making processes.

Solution:

Concept: Group polarization refers to the tendency of group members to make decisions that are more extreme than the initial opinions of individual members. After group discussions, individuals often adopt stronger positions in the direction already favored by the group. This phenomenon commonly occurs during collective decision-making processes.

Step 1: Persuasive arguments.

During group discussions, members are exposed to new arguments that support their existing viewpoints. Hearing additional supporting reasons strengthens their confidence, leading them to adopt more extreme positions.

Step 2: Social comparison.

Individuals often compare their opinions with those of other group members. To gain approval or be seen favorably by others, they may shift their attitudes slightly toward what they perceive as the dominant or socially desirable viewpoint of the group.

Step 3: Desire for group acceptance.

People often want to maintain harmony and acceptance within a group. As a result, they may exaggerate their views to align more closely with the group's dominant opinion.

Step 4: Reinforcement of shared beliefs.

When group members hold similar beliefs, discussions tend to reinforce those beliefs. This repeated reinforcement strengthens existing attitudes and pushes members toward more extreme conclusions.

Step 5: Confidence gained from group support.

When individuals realize that many others share their views, their confidence in those views increases. This increased confidence may lead them to adopt stronger or more radical positions.

Step 6: Limited exposure to opposing views.

Sometimes groups discuss issues without considering alternative perspectives. Lack of exposure to opposing viewpoints can intensify existing opinions and contribute to group polarization.

Quick Tip

Group Polarization occurs when group discussions push members toward more extreme decisions due to **persuasive arguments, social comparison, group acceptance, reinforcement of shared beliefs, and increased confidence.**