



**INDRAPRASTHA INSTITUTE *of* INFORMATION TECHNOLOGY
DELHI**

**PSY 305/50
Attention & Perception
Winter 2024
Mid-Term Examination**

Name :

Roll Number :

Section –A: Single choice/answer questions (12 Marks)

Attempt any 12 questions

12 X 1 marks

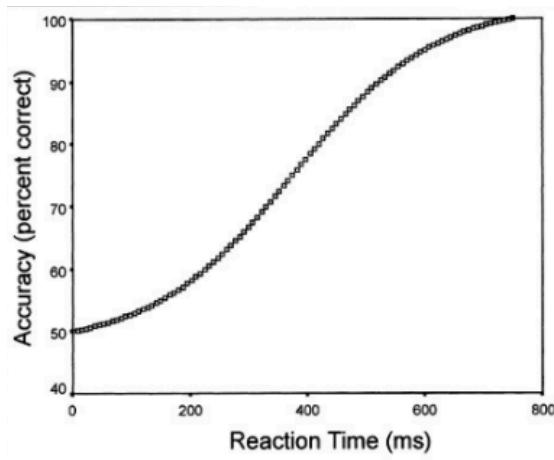
Choose the most appropriate option

1. What is the distinguishing factor between Overt and Covert attention?
 - a) Overt involves physical eye movement, while Covert does not.
 - b) Overt attention is slower than Covert attention.
 - c) Overt attention is only related to auditory stimuli.
 - d) **Overt involves physical eye movement, while Covert might not.**

2. What theoretical framework is commonly used to analyze participants' ability to differentiate between signal and noise in perception tasks?
 - a) Reaction Time
 - b) **Signal Detection Theory**
 - c) Psychometric Curve
 - d) Eye Movements

3. During a magic show, the magician directs the audience's attention to a specific area on the stage using a bright light. This manipulation targets:
 - a) Endogenous Attention
 - b) **Exogenous Attention**
 - c) Covert Attention
 - d) Divided Attention

4. What type of recording involves measuring the electrical activity outside neurons, typically through the use of microelectrodes?
- Intracellular recording
 - Extracellular recording**
 - fMRI
 - Pupillometry
5. Sarah is attending a crowded party. Despite the noise, she hears her name being called from across the room. What cognitive phenomenon is demonstrated here?
- Object-Based Attention
 - Feature-based attention
 - Cocktail Party Effect**
 - EEG
6. Looking at the graph below, determine which of the following statements is incorrect.



- The graph represents Speed - Accuracy tradeoff.
 - Increased response time is associated with decreased performance accuracy**
 - The S-shaped form of the function reflects that when RTs are relatively fast, any decreases in RT are accompanied by large costs in accuracy.
 - Response decisions are made slowly with high accuracy or fast with high error rate.
7. Sarah enjoys playing Tennis with her friends after school. Throughout the game, her main focus of attention is on the tennis ball and its trajectory. Sarah uses _____
- Overt attention**
 - Divided Attention
 - Covert Attention
 - Involuntary Attention
8. **True** or False; The dorsal pathway is associated with "where" and "how" information of the visual environment.

9. Which of the following statements is incorrect
- Focusing attention on a specific object or region improves processing efficiency at that point.
 - In terms of response time, feature-based cues outperform spatial cues.**
 - The ability to adjust the size of attentional focus is dependent on the presence of perceptual groups in the display.
 - If the attended area is smaller, the concentration of attention will be higher.

10.

	Signal Present	Signal Absent
Observer Responded	a	b
Observer Did Not Responded	c	d

In a signal detection task, participants were instructed to identify a visual signal (blue circle) and press the buzzer as soon as it appeared on screen. In the given matrix (refer to the above figure), the correct order sequence in place of a,b,c,d

- a= Hit, b= False Positive, c= Miss, d= Correct Rejection**
 - a= Miss, b= False positive, c= Hit, d= Correct Rejection
 - a=Hit, b= Correct Rejection, c=Miss, d= False positive
 - a=Hit, b= Miss, c=False Positive, d= Correct Rejection
11. In an experiment, participants are presented with a display containing various shapes in various colors and oriented in different directions. They are asked to identify a specific combination of color, shape, and orientation within the stimuli.
- What is the one key aspect of attention that this experiment primarily assesses?
- Object-based attention, as participants must focus on specific combinations of color and shape.
 - Feature integration, as participants are instructed to combine individual features to identify the target.
 - Space-based attention, as participants are asked to attend to specific locations within the display.
 - Endogenous attention, as participants are directed to shift their focus between different features voluntarily.**
12. In a visual search paradigm experiment, participants are asked to identify a specific target letter (e.g., "X") among varying set sizes of distractor letters. According to the paradigm's characteristics, how would you expect the reaction time (RT) to vary with changes in set size?
- RT will decrease as the set size increases.
 - RT will increase linearly with set size.**
 - RT will remain constant across different set sizes.
 - RT will exhibit a fluctuating pattern with set size changes.

13. Imagine you are in a grocery store and looking for a specific cereal brand on the shelves. The cereal boxes have distinctive colors, but the one you want has a unique logo, making it stand out. In this scenario, which visual search process is most likely at play?



- a. Feature Search
 - b. Feature Conjunction Search**
 - c. Both Feature Search and Feature Conjunction Search as they are equally applicable in a grocery store setting.
 - d. Neither Feature Search nor Feature Conjunction Search, as these processes are not relevant in real-life visual search tasks.
14. During a Psychological Refractory Period (PRP) experiment, participants are asked to respond to two consecutive auditory tones. What is observed when the second tone closely follows the first?
- a) Faster response to the second tone
 - b) Slower response to the second tone**
 - c) No difference in response time between tones
 - d) Improved accuracy in responding to the second tone
15. Ram was looking at the weather forecast when his phone rang. He tried to listen to the forecast while also answering the phone. What attention phenomenon did Ram use here?
- a) Divided Attention**
 - b) Attention as a spotlight
 - c) Capacity Limited Attention
 - d) Involuntary Attention