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. Which function is not typically associated with the parietal lobe?
    a. Eye movement control during visual tasks
    b. Processing spatial locations of objects
    c. Recognizing a person based on their facial features
    d. Both a and c

2. **True** or False: In covert attention, stimulus perception can occur without directly fixating on the stimulus.

3. **EEG** measures voltage fluctuations generated by the ionic currents within the neural networks of the brain.

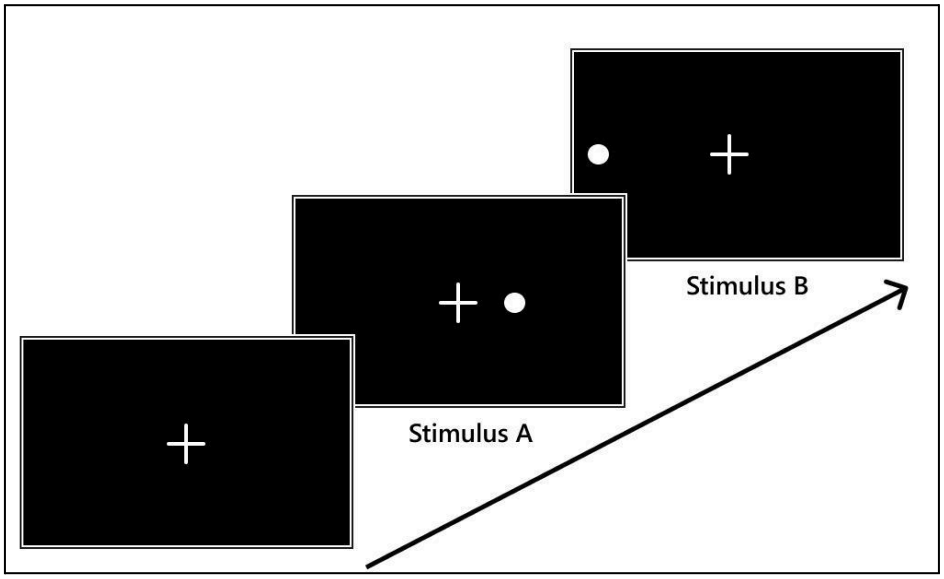
4. In a classic experiment, researchers discover that MT neurons respond selectively to:
    a. Static images
    b. Auditory stimuli
    c. Direction of motion
    d. Color variations

5. In a visual processing task, if the dorsal pathway is responsible for guiding hand movements, what specific aspect of the task is the ventral pathway likely contributing to?
    a. Color discrimination
    b. Shape recognition

c. Spatial navigation
d. Object motion detection

6. How does the Zoom Lens Model differ from the Attention as a Spotlight model?
   a. The Zoom Lens Model emphasizes selective focus, while Attention as a Spotlight suggests an evenly distributed focus.
   b. The Zoom Lens Model suggests an evenly distributed focus, while Attention as a Spotlight emphasizes selective focus.
   c. Both models describe attention as a fixed spotlight.
   d. Both models suggest attention behaves like a zoom lens.

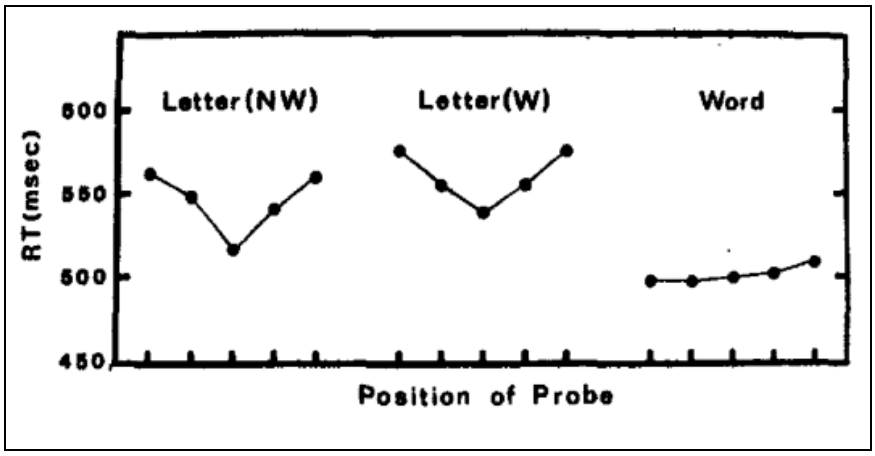
7. Experiment Paradigm: Participants fixate on a central cross (+) and are presented with two white dots (Stimulus A and Stimulus B). Stimulus A appears within their visual field, while Stimulus B extends beyond the visual field. Participants are instructed to maintain fixation and covertly attend to the stimulus.



Considering the Gradient Model of Attention, What is the most likely outcome?

   a. Participants may perceive Stimulus A but not Stimulus B.
   b. Participants cannot see either stimulus due to the restriction on eye movements.
   c. Participants can perceive both Stimulus A and B based on the gradient model of attention.
   d. According to the gradient model, Participants can see only Stimulus B, as attention shifts from the center to the left side.

8. In the LaBerge (1983) study, reaction times (RTs) were faster for probes presented to the middle letter when attention was directed to the middle letter compared to probes presented to other letter positions.



This finding suggests that:

a. Attention is focused on a single letter at a time when processing words.
b. Attention is spread over a broader region when processing words, but with a peak at the attended letter.
c. Attention is focused on the entire word simultaneously.
d. Attention is focused on the first and last letters of the word, with the middle letters receiving less attention.

9. Imagine you're tasked with finding a specific letter amongst many on a screen. What happens to the number of letters you can effectively pay attention to as the difficulty of identifying the target letter increases?
    a. It stays the same.
    b. It doubles.
    c. It decreases.
    d. It increases proportionally to the difficulty.

10. Imagine tracking a dot on a screen. Sometimes a sound predicts where it goes next (helps!). Other times, the sound misleads you. What explains faster and smoother tracking when the sound helps, and the dot moves smoothly?
    a. Sound always distracts, slowing you down.
    b. The helpful sound lets you pre-plan your eye movement.
    c. Misleading sounds force you to use slower eye corrections.
    d. Smooth movement always requires more precise eye tracking.
11. Which phrase best captures the relationship between the area of attention and processing efficiency?
    a. Area of attention is inversely proportional to processing efficiency
    b. Area of attention is directly proportional to processing efficiency
    c. Area of attention and processing efficiency are unrelated
    d. Area of attention is exponentially related to processing efficiency

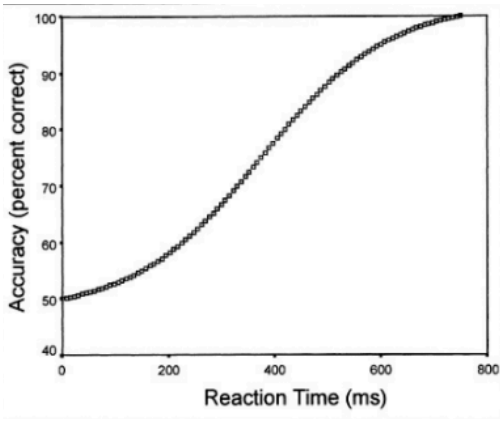
12. What term describes the quick, simultaneous movement of both eyes between two or more phases of fixation in the same direction?
    a. Covert
    b. Saccades

c. Smooth Pursuit
d. Overt

13. During a magic show, the magician strategically uses verbal instructions to focus on a sudden burst of fireworks. Subsequently, the magician verbally instructs the audience to focus on a specific card in that corner.
    Choose **True**/False:
    The magician employed exogenous and endogenous cues during the magic show to manipulate the audience's attention, capturing it involuntarily and directing it intentionally.

14. 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?
    a) Object-Based Attention
    b) Feature-based attention
    c) Cocktail Party Effect
    d) EEG

15. Looking at the graph below, determine which of the following statements is incorrect.



a) The graph represents Speed - Accuracy tradeoff.
b) Increased response time is associated with decreased performance accuracy
c) 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.
d) Response decisions are made slowly with high accuracy or fast with high error rate.