

# Proposal for creating Software/App for assessing Attention

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Professor

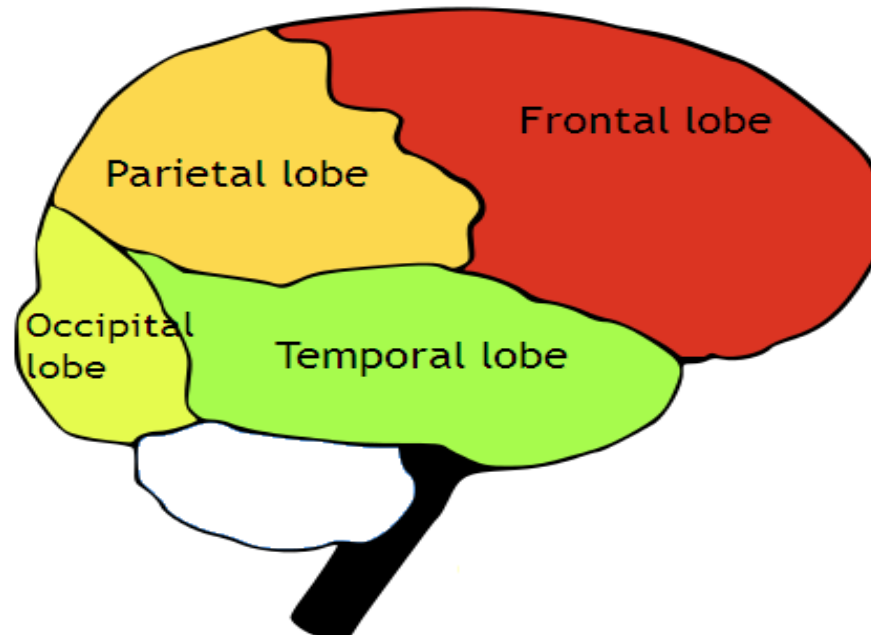
Sri Venkateshwaraa College of Physiotherapy

Puducherry University

ATTENTION



Know your Attention



# Software Requirements

## **Demographic details: UID (Office use):**

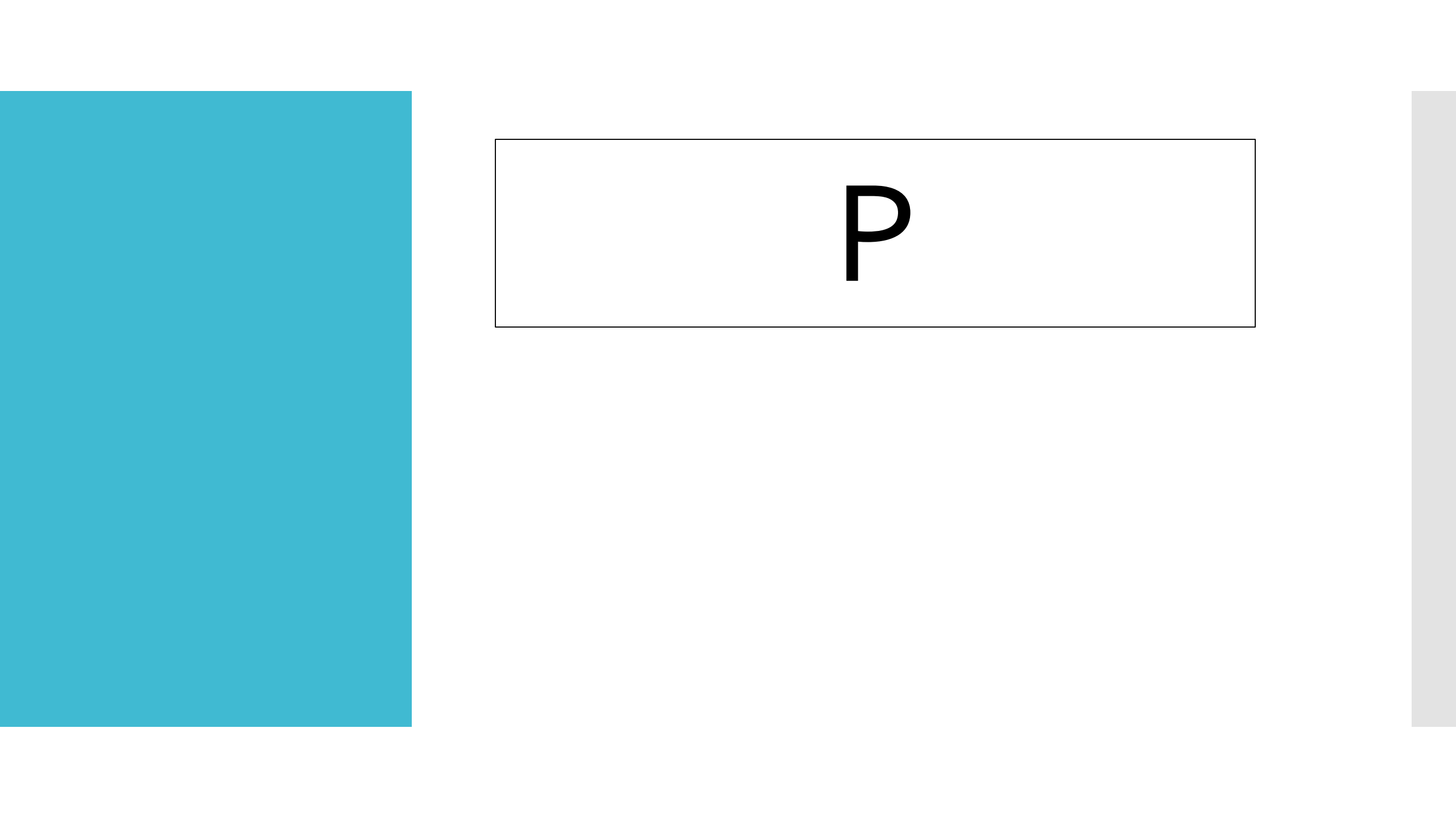
- Name:
- Gender:
- Age/DOB:
- Date of Assessment:

# Software Requirements

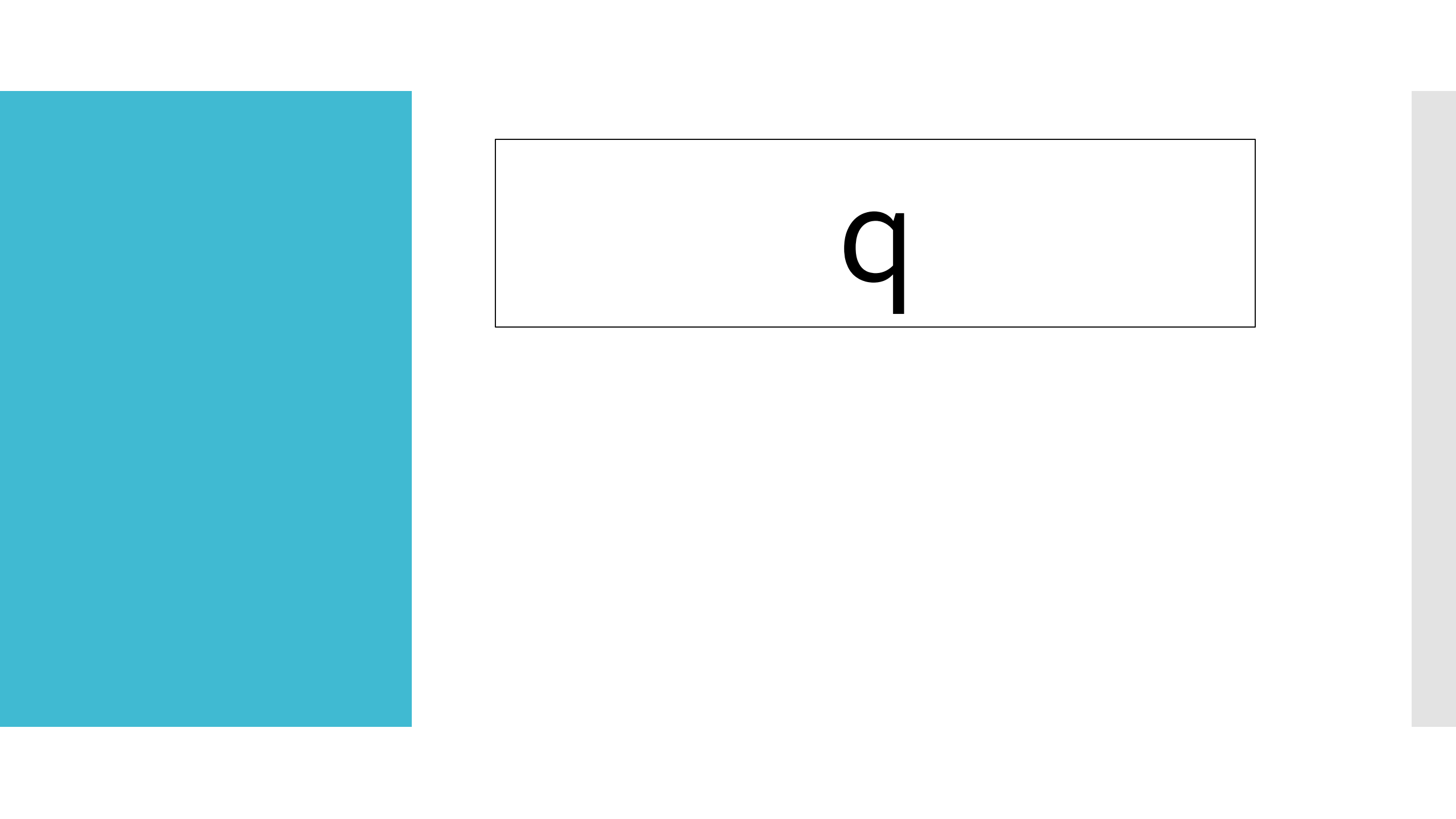
## Component-1

### Instruction:

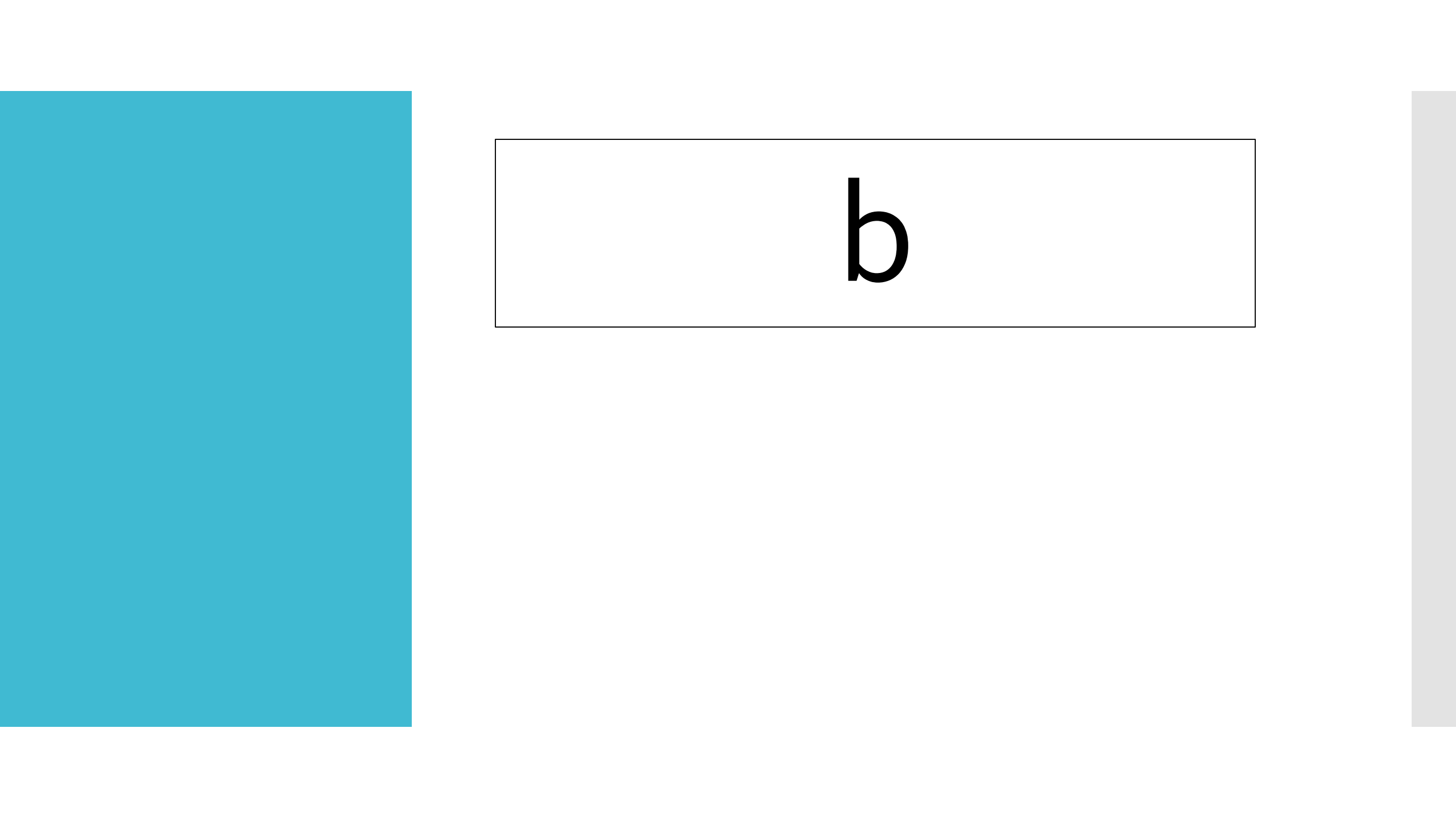
- The alphabet such as 'P,b,d,q,R' will appear on the computer screen.
- Each of the mentioned alphabets will be displayed one at a time in computer screen for 1 second.
- You have to click 'P' whenever the alphabet 'P' appears on the screen. Do not press any other key.
- Totally 200 stimuli will appear. After 50 stimuli there will blank screen for 30 seconds, likewise 4 sets will be displayed
- Total time will be approximately 5 minutes.



P



q



b



R



# Office Purpose: (other than P all other key should be inactive)

- Number of correct response: How many times Target response 'P' is clicked, when target stimuli 'P' appeared.
- Number of incorrect response: How many time Target response 'P' is clicked, when non target alphabets 'b,d,q,R' appeared. (To measure impulsiveness/inhibition)
- Reaction time: Time taken for each correct target, and incorrect response
- Number of no response: When target stimuli 'P' appeared and no action captured.
- Total matter score processed: Quantitative measurement of performance for all relevant and irrelevant processed matter (addition of number of correct & incorrect response).
- Frequency rate: Difference between Maximum number of processed (addition of number of correct & incorrect response) and non processed items/alphabets (number of no response)
- Total errors: all no response and incorrect response
- Error percentage (%): qualitative aspect of performance that gives error rate of all processed matter.
- Concentration performance: subtract incorrect response and correct response.
- **Please Note: All the above measures are required for all the 4 sets separately as well as cumulative average scores.**

# Instructions

## Component-2

- Each alphabet will be given with a number.
- At the end there will be blank spaces where according to the alphabet number the alphabet is identified and typed.
- For Example: Below this \_\_, blank line, if 8 is mentioned then you should write H in the blank space.
- You can choose the response only once, correction is not allowed.
- You have to attempt sequentially, do not skip any blank lines.
- Maximum 50 blanks lines will be displayed.
- Total time 1 minute.

Timer can be  
inserted for 1  
minute

A	B	C	D	E	F	G	H	I	J
1	2	3	4	5	6	7	8	9	10

K	L	M	N	O	P	Q	R	S	T
11	12	13	14	15	16	17	18	19	20

U	V	W	X	Y	Z
21	22	23	24	25	26

          
16

Timer can be  
inserted for 1  
minute

A	B	C	D	E	F	G	H	I	J
1	2	3	4	5	6	7	8	9	10

K	L	M	N	O	P	Q	R	S	T
11	12	13	14	15	16	17	18	19	20

U	V	W	X	Y	Z
21	22	23	24	25	26

          
25

Timer can be  
inserted for 1  
minute

A	B	C	D	E	F	G	H	I	J
1	2	3	4	5	6	7	8	9	10

K	L	M	N	O	P	Q	R	S	T
11	12	13	14	15	16	17	18	19	20

U	V	W	X	Y	Z
21	22	23	24	25	26

# Office Purpose:

- Calculation/result computation
- **Number of correct response:**
- **Number of incorrect response:**
- **Number of no response:**
- **Reaction time: Time taken for each correct target, and incorrect response**
- Total matter score processed: Quantitative measurement of performance for all relevant and irrelevant processed matter (addition of number of correct & incorrect response).
- Frequency rate: Difference between Maximum number of processed (addition of number of correct & incorrect response) and non processed items/alphabets (number of no response)
- Total errors: all no response and incorrect response
- Error percentage (%): qualitative aspect of performance that gives error rate of all processed matter.
- Concentration performance: subtract incorrect response and correct response.

## Instructions:

### Component-3

- You will see a sequence of colour and an audio sound saying 'Green/Red/yellow/violet/blue/orange/indigo'
- You should click the colour as you hear in audio.
- Sequence of colour will be displayed for 2 seconds,
- You can choose the response only once.
- Total duration is 1 minute



Timer can be  
inserted for 1  
minute




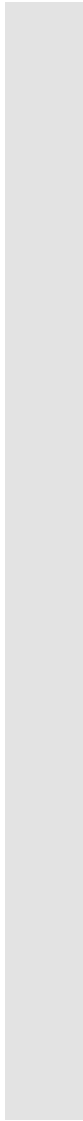


Timer can be  
inserted for 1  
minute



Timer can be  
inserted for 1  
minute



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- SELECTIVE ATTENTION-
  - Number of correct response

Selective Attention

	SET-1	SET-2	SET-3	SET-4
Number of correct response				
Number of incorrect response				
Reaction time				
Number of no response				
Total matter score processed				
Frequency rate				
Total errors				
Error percentage				
Concentration performance				

Sustained Attention

Number of correct response	
Number of incorrect response	
Reaction time:	
Number of no response	
Total matter score processed	
Frequency rate	
Total errors	
Error percentage	
Concentration performance	

Alternating Attention

Number of correct response	
Number of incorrect response	
Reaction time	
Number of no response	
Total matter score processed	
Frequency rate	
Total errors	
Error percentage	
Concentration performance	

Divided Attention

Number of correct response	
Number of incorrect response	
Reaction time	
Number of no response	
Total matter score processed	
Frequency rate	
Total errors	
Error percentage	
Concentration performance	