

# ADDENBROOKE'S COGNITIVE EXAMINATION

|                        |
|------------------------|
| Name:                  |
| Date & place of birth: |
| I.D. No.:              |

Years of education: \_\_\_\_\_ Hand: L R B

Occupation:

Date of testing: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

*All instructions to the tester are in italics. All instructions to be said aloud to the patient are in bold non-italic print.*

## ORIENTATION

*Ask the subject the following questions and score a point for each correct answer. Record all errors.*

|                       |       |                   |         |       |
|-----------------------|-------|-------------------|---------|-------|
| Q1a) What is the Year | _____ | Q1b) Where are we | Country | _____ |
| Month                 | _____ | Area of Country   |         | _____ |
| Date*                 | _____ | Town              |         | _____ |
| Day                   | _____ | Hospital/building |         | _____ |
| Season                | _____ | Floor/Level*      |         | _____ |

*\*Allow an error of  $\pm 2$*

Total score for orientation [0 - 10]  O

## ATTENTION/CONCENTRATION

Q2) **Tell the subject I am going to ask you to recall the names of three things.**

*Say aloud: כדור, דגל, עץ Then ask the subject to repeat them. Give one point for each correct answer at first attempt only.*

*If score < 3 repeat all three items until the subject learns them all*

[0 - 3]

*Maximum trials allowed = 5.*

Q3) **Ask the subject to take away 7 from 100.**

1. Give one point only for the right answer (93).

2. If the subject's answer is wrong then tell the correct answer.

3. Ask the subject to **now take away 7 from the correct answer (93).**

*Repeat steps 1 to 3 for a total of 5 subtractions (93, 86, 79, 72, 65). Score the total number of correct subtractions.*

*If score < 5 then ask the subject to **Spell שולחן backwards**. Score the number of letters in the correct order, e.g. שולח = 4.*

*Take score of better of the two tasks. Record errors:*

[0 - 5]

MEMORY

Q4) Ask the subject to recall the names of the 3 things learned earlier in question 2.

Score one point for each correct answer.

[0 - 3]

Q5) Anterograde Memory: Tell the subject I will read a name and address and ask you to repeat it when I have finished. Now read aloud the following name and address. Score one point for each element recalled correctly. Regardless of the score after the first trial, repeat the instruction and the task twice in exactly the same way. Record scores for each of the three trials.

|             | 1st trial | 2nd   | 3rd   | 5 min delay | 20 min delay |  |
|-------------|-----------|-------|-------|-------------|--------------|--|
| משה אברהמי  | ---       | ---   | ---   | ---         | ---          |  |
| רח' אלון 53 | -----     | ----- | ----- | -----       | -----        |  |
| סינסינאטי   | ---       | ---   | ---   | ---         | ---          |  |
| אוהיו       | ---       | ---   | ---   | ---         | ---          |  |
|             | /7        | /7    | /7    | /7          |              | Trial 1-3 [0 - 21] <input type="text"/>    |
|             |           |       |       |             |              | 5 min delay [0 - 7] <input type="text"/> M |

Q6) Retrograde Memory: Score one point for each correct answer and record errors. Tell me the full name of the prime minister, the last prime minister, the President of Israel, the President of the United States

\_\_\_\_\_ [0 - 4]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

VERBAL FLUENCY

Q7) Letter: Ask the subject to: tell me all the words you can think of, but not people and places, beginning with the letter מ . Time the subject for 1 minute and record all answers in the space provided below. Error types: perseverations and intrusions.

Q8) Category: Say: Now tell me the names of as many animals as you can, beginning with any letter of the alphabet. Time the subject for 1 minute and record all responses in the space provided below. Error types: perseverations and intrusions.

|            |              |                |              |
|------------|--------------|----------------|--------------|
| <b>מ</b>   |              | <b>Animals</b> |              |
| (continue) | (start here) | (continue)     | (start here) |
|            |              |                |              |

| Raw Score |        | Scaled Score |
|-----------|--------|--------------|
| מ         | Animal |              |
| > 17      | > 21   | 7            |
| 14-17     | 17-21  | 6            |
| 11-13     | 14-16  | 5            |
| 8-10      | 11-13  | 4            |
| 6-7       | 9-10   | 3            |
| 4-5       | 7-8    | 2            |
| < 4       | < 7    | 1            |

Record the total number of responses. To calculate the raw score give one point for each correct response and exclude all repetitions. Enter the scaled scores using the table shown above.

מ Total response \_\_\_\_\_ Raw score \_\_\_\_\_ Scaled Score [0 - 7] = \_\_\_\_\_

Animals: Total response \_\_\_\_\_ Raw score \_\_\_\_\_ Scaled Score [0 - 7] = \_\_\_\_\_

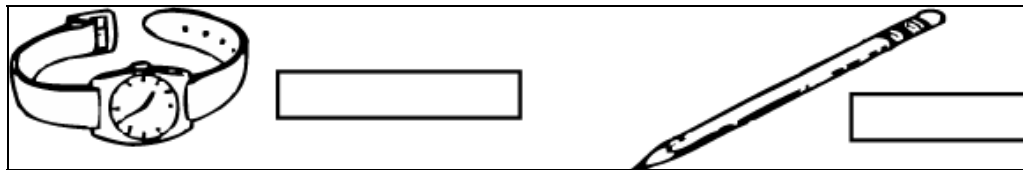
Total Scaled Score [0 - 14]  V

Q9) Now to check delayed recall ask the subject **Can you tell me the name and address that I told you and that you practised at the beginning of the test.** Record points, scores and errors as for question 5 in the space provided in question 5 on page 1.

## LANGUAGE

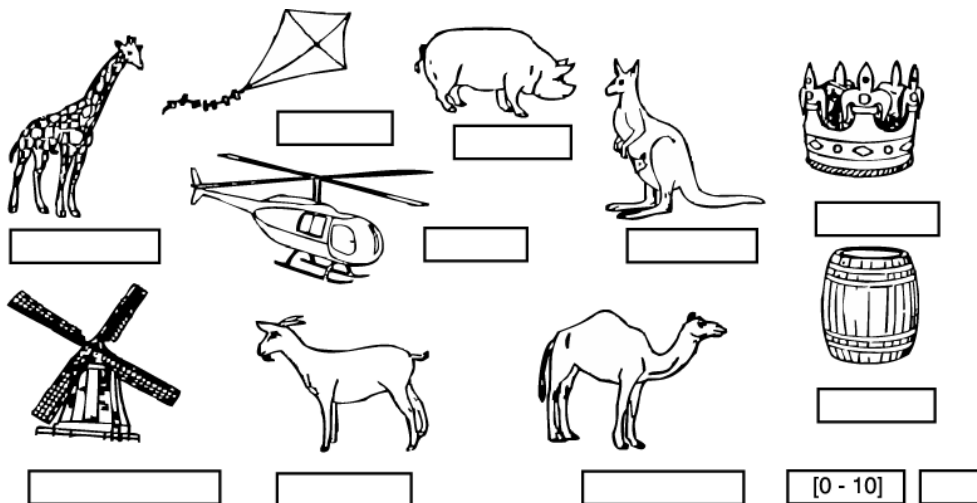
Q10) Naming: Show the subject the following two line drawings and ask him/her to name each of them. Record responses and errors. Give one point for each correct response.

[0 - 2]



Q11) Naming: Show the subject the following ten line drawings and ask him/her to name each of them. Record responses and errors. Give one point for each correct response. Allow close synonyms (e.g. tub for barrel; coronet for crown; dromedary for camel etc)

[0 - 10]



Q12) Comprehension (one-stage): Ask the subject to **please obey the following simple commands.**

- point to the door
- point to the ceiling

[0 - 2]

Show the subject the following instruction and ask him/her to **read this aloud and obey it.**

עצום את עיניך

Score one point if performed correctly.

[0 - 1]

Q13) *Comprehension (3-stages): Give the subject a piece of paper and tell him to take this paper in your right hand. Fold it in half. Then put the paper on the floor.*

*Score one point for each correctly performed step.*

[0 - 3]

Q14) *Comprehension (complex grammar): Ask the subject to please obey the following commands.*

- point to the ceiling, then the door
- point to the door after touching the bed/desk

*Score one point for each correctly performed command.*

[0 - 2]

Q15) *Repetition (single words): Ask the subject to repeat each of these words after me. Score one point for each correct repetition. Allow only one repetition.*

- חום
- הבעה
- אולטימטום

[0-3]

Q16) *Repetition (phrases): Ask the subject to repeat each of these phrases after me. Allow only one repetition.*

• לא כל הנוצץ זהב הוא.

[0 - 1]

• התזמורת ניגנה והקהל נהנה.

[0 - 1]

Q17) *Reading (regular): Ask the subject to read each of these words aloud and show him/her the following five words.*

- רץ
- כתב
- קרש
- להבות
- גשרים

*Score one point only if all five words are read correct.*

[0 - 1]

Q18) *Reading (irregular): Ask the subject to read each of these words aloud and show him/her the following five words.*

- נתפר
- פגום
- משכיל
- תקופתית
- הגבהה

*Score one point only if all five words are read correct.*

[0 - 1]

Q19) *Writing: Ask the subject to make up a sentence and write it down in the space below. If stuck suggest a topic e.g. weather, journey. Score one point if the sentence has a correct subject and verb and is meaningful.*

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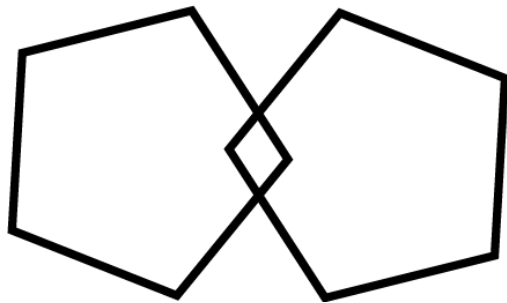


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[0- 1]

## VISUOSPATIAL ABILITIES

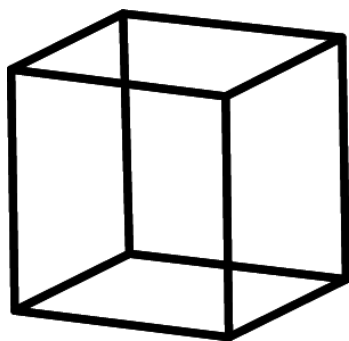
Q20) *Overlapping pentagons:* Show the subject the following figure and ask him/her to **copy this diagram in the space provided next to it.**



*Score one point if copied correct.*

[0 -1]

Q21) *Wire cube:* Show the subject the following figure and ask him/her to **copy this diagram in the space provided next to it.**



*Score one point if copied correct.*

[0 -1]

Q22) *Clock:* Ask the subject to **draw a clock-face with all the numbers and the hands at ten past five.**

*Score 1 pt. each, for correct circle, numbering of clock-face and position of the hands.*

[0 - 3]

**CHECK: Have you tested & recorded the delayed recall for name & address in Question 5 on page 1?**

|                         |  |           |                      |                        |
|-------------------------|--|-----------|----------------------|------------------------|
| <b>OVERALL SCORES</b>   |  | MMSE*** = | <input type="text"/> | <b>/30</b>             |
|                         |  | ACE** =   | <input type="text"/> | <b>/100</b>            |
| <b>VL/OM RATIO :</b>    | <input type="text"/> V + <input type="text"/> L* | =         | <input type="text"/> | = <input type="text"/> |
| <b>If &lt; 2.2: FTD</b> |  |           |                      |                        |
| <b>If &gt; 3.2: AD</b>  | <input type="text"/> O + <input type="text"/> M  |           |                      |                        |

\*\*\*Sum of scores entered in the shaded boxes.

\*\* Sum of scores entered in all boxes.

\* Sum of scores entered in all boxes from Question 10 to Question 19

**Source:**

Mathuranath PS, Nestor PJ, Berrios GE, Rakowicz W & Hodges JR. A brief cognitive test battery to differentiate Alzheimer's disease and frontotemporal dementia. *Neurology* 2000;55:1613-20.

גרסה עברית ע"י ד"ר יהושע נאמן, פברואר 2001

**FRONTAL ASSESSMENT BATTERY**

**Similarities** /3

- 1.
- 2.
- 3.

**Lexical Fluency** /3

**Motor Series** /3

**Conflicting Instructions** /3

**Go-No Go** /3

**Prehension** /3

**/18**

**Source:**

Dubois B, Slachevsky A, Litvan I & Pillon B. The FAB: A frontal assessment battery at bedside. *Neurology* 2000;55:1621-26.

**ATTENTION & CONCENTRATION**

**20-1:**

**ABC:**

**Serial Threes:**