

## Directives for administration of MMSE - WHITEHALL II (Phase 5)

***All participants who are at least 60 years of age on the day of their screening appointment must have the MMSE administered. This should be processed by the receptionist, but please check date of birth for all participants.***

1. The following equipment is required to administer the MMSE:
  - a. a watch with a second hand on it
  - b. a pencil
  - c. 2 blank sheets of paper (A4)
  - d. a laminated card with “**CLOSE YOUR EYES**” written in large letters
  - e. a laminated card with two 5-sided figures intersecting to make a 4-sided diamond figure.
  - f. MMSE questionnaire on which a label with name and study number are placed.
  
2. Introduce yourself and try to gain the subject’s confidence.
  
3. Before the questionnaire is administered, be sure that the subject is sitting down facing you and that he/she is comfortable.  
Assess the subjects ability to hear and understand very simple conversation,  
*eg:- What is your name, please?*  
If the subject uses hearing or visual aids, make sure the subject has and uses them these before starting.
  
4. It is important that you speak slowly and clearly. If the subject appears not to have heard or understood, repeat the question (unless the item specifically prohibits repetition).  
Ask each question a maximum of three times. If the subject does not respond - score 0.  
**DO NOT CORRECT IF A WRONG ANSWER IS GIVEN, and MAKE SURE NOT TO SHOW ANY FACIAL EXPRESSIONS.**
  
5. If the subject answers “What did you say?” - do not explain or engage in conversation - merely repeat the same directions (*eg:- What year is this?*) to a maximum of 3 times.  
  
If the subject answers incorrectly - score 0 and do not hint, prompt or ask the question again,  
*eg:- What year is this? - 1952.*  
Accept that answer - do not ask the question again, hint or provide any physical clues such as head shaking, etc.
  
6. If the subject interrupts *eg:- “What’s this for?”* Just reply:  
“I will explain in a few minutes when we are finished. Now if we could just proceed please, we are almost finished .or this will take only a few minutes” if you have just started.
  
7. Make note of any unusual responses including any extra memory items recalled.

## Mini-Mental State Examination (MMSE)

I am going to ask you some questions now which have to do with your concentration and memory. Some of them may seem rather easy, others may be difficult, but we need to ask everyone the same questions.

### 1. ORIENTATION

#### *Time*

(a)	“What day of the week is it?”	<b>TDAYWK</b>	Incorrect	0	Not asked	9		
			Correct	1				
(b)	“What is the date today?”		Incorrect	0	Not asked	9		
			Day	<b>TDATEDAY</b>			Correct	1
			Month	<b>TDATEMTH</b>			Incorrect	0
			Correct	1	Not asked	9		
	Year	<b>TDATEYR</b>	Incorrect	0	Not asked	9		
			Correct	1				
(c)	“What is the season?”	<b>TSEASON</b>	Incorrect	0	Not asked	9		
			(write season _____),	Correct			1	

*Allow flexibility when season changes, eg:-*

March	=	Winter/ Spring
June	=	Spring/ Summer
September	=	Summer/ Autumn
December	=	Autumn/ Winter

#### *Place*

(d)	“Can you please tell me which county or borough you live in ?”	<b>TCOUNTY</b>	Incorrect	0	Not asked	9
			Correct	1		
(e)	“Can you tell me where we are now ? For instance, What is the name of this city (or town)?”	<b>TTOWN</b>	Incorrect	0	Not asked	9
			Correct	1		
(f)	“Now, can you tell me if we are north or south of the river Thames ?”	<b>TNORTH</b>	Incorrect	0	Not asked	9
			Correct	1		
(g)	“What floor of the building are we on?”	<b>TFLOOR</b>	Incorrect	0	Not asked	9
			Correct	1		
(h)	“What is the name of this place?”	<b>TPLACE</b>	Incorrect	0	Not asked	9
			Correct	1		

## 2. REGISTRATION

“I am going to name three objects. After I have finished saying all three, I want you to repeat them. Remember what they are because I am going to ask you to name them again in a few minutes.”

Name the following three objects taking 1 second to say each: **apple, table, penny.**  
Tick items which are correct on the first attempt and enter number correct under total.

Apple \_\_\_\_\_  
Table \_\_\_\_\_  
Penny \_\_\_\_\_  
Total **TREGTOT (max 3)** Not asked 9

If any errors or omissions are made on the first attempt, **repeat all the names** until subject learns all three (maximum of five repeats). Record number of repeats (record 0 if all correct on first attempt)

First attempt:\_\_\_ Repeat 1: \_\_\_ Repeat 2:\_\_\_ Repeat 3:\_\_\_ Repeat 4: :\_\_\_ Repeat 5:\_\_\_

## 3. ATTENTION/ CONCENTRATION

“Now I would like you to take 7 away from 100.  
Now take 7 away from the number you get.  
Now keep subtracting 7 until I tell you to stop.”

Record answers. Score 1 point each time the difference is 7, even if a previous answer was incorrect.

Maximum score = 5 points

Subject	Response	Correct
93	_____	_____
86	_____	_____
79	_____	_____
72	_____	_____
65	_____	_____
<b>TTATTOT (max 5)</b>		
Total	_____	Not asked 9

Say “**Spell the word “WORLD”**”. (subject’s response)\_\_\_\_\_

(you may help subject to spell world correctly)

Incorrect	0		
Correct	1	Not asked	9

(If the subject cannot spell “world” even with assistance - score 0.)

Say “**now spell it backwards please**” (subject’s response)\_\_\_ **TATWRDBA (max 5)**

Allow 30 seconds to spell backwards.

Incorrect	0		
Correct	1	Not asked	9

## 4. MEMORY RECALL

“What were the three objects I asked you to repeat a little while ago?”

Tick each item answered correctly  
and enter number correct under total

Apple \_\_\_\_\_  
Table \_\_\_\_\_  
Penny \_\_\_\_\_  
Total \_\_\_\_\_ Not asked 9

**TRTOTAL (max 3)**

**5. EXPRESSION: NAMING**

Accurate naming is needed; descriptions of function or approximate answers are not acceptable. Some items may have more than one correct name, as has been indicated. Errors include description of function (eg:- ‘used for telling the time’ for watch). In the case of approximate answers, you should say ‘Can you think of another word for it?’

Tick each item correctly named and enter number correct under total.

	Show pencil			<u>Correct</u>
(a)	<b>“What is this called?”</b> (write response _____)	Pencil	_____	
	Show wristwatch			
(b)	<b>“What is this called?”</b> (write response _____)	Watch	_____	
		Total		<b>TEXTOT (max 2)</b>

**6. EXPRESSION: REPETITION**

Only one presentation is allowed so it is essential that you read the phrase clearly and slowly, enunciating all the S’s

**“I am going to say something and I would like you to repeat it after me:  
‘No ifs, ands or buts’**

**TREPEAT**

Incorrect	0		
Correct	1	Not asked	9

**7. LANGUAGE: READING COMPREHENSION**

Show card that says “CLOSE YOUR EYES”. It is not necessary for subject to read aloud. If subject reads instruction but fails to carry out action, say ‘**Now do what it says**’.

**“Read this page and then do what it says. “**

Close your eyes

Incorrect	0		<b>TREADING</b>
Correct	1	Not asked	9

**8. PRAXIS: IDEATIONAL**

Read the following statement and then hand to the subject a sheet of paper. Make a point of handing to the subject’s mid-line.

Do not repeat instructions or coach. Score a move as correct only if it takes place in the correct sequence. Tick each correct move and enter number correct under total. Maximum score = 3 points. (Note 0 if not done or not done correctly; 1 if correct).

**“I am going to give you a piece of paper.  
When I do, take the paper in your right hand.  
Fold the paper in half with both hands,  
and put the paper down on your lap.”**

Right hand	_____		
Folds	_____		
On lap	_____		
Total	_____	Not asked	9

**TPRTOT (max 3)**

## 9. PRAXIS: COPYING AND DRAWING

The subject should draw and write on the sheet of paper provided. Each pentagon should have 5 sides and 5 clear corners and the overlap should form a diamond.

“Copy this design” (show card with pentagon)

Incorrect

—

**TPRDRAW**

Correct

—

Not asked

9

***Thank the participant.***

Staple the pentagon sheet to the MMSE questionnaire and make sure study number is on it.

**(NO WRITING SECTION IN PHASE 5)**

**“CLOSE YOUR EYES”**