

## **APPENDICES**

APPENDIX :3: A:1LUDWIG (1966) CRITERIA FOR EVALUATING ALTERED STATES OF CONSCIOUSNESS

## A. ALTERATIONS IN THINKING:

(Subjective disturbances in concentration, attention, memory and judgement; archaic modes of thought; reality testing impaired; distinction between cause and effect blurred; pronounced ambivalence; existence of incongruities)

## B. DISTURBED TIME SENSE:

(Sense of time altered; feelings of timelessness, time coming to a standstill; acceleration; slowing of time; time of infinite or infinitesimal duration)

## C. LOSS OF CONTROL:

(Fear of losing grip on reality and self control; resisting the experience or welcoming the relinquishing of volition; feelings of impotence or gaining of greater control through the loss of power)

## D. BODY IMAGE CHANGE:

(Distortion in body image; depersonalization, a schism between body and mind; feelings of derealization, dissolution of boundaries between self, and others and world; experiences may be strange or transcendental; oceanic feelings; parts of body are distorted; also dizziness, weakness, tingling etc.)

## E. CHANGE IN EMOTIONAL EXPRESSION:

(Sudden displays of more primitive and intense emotion; emotional extremes from ecstasy to profound fear; detachment; uninvovement)

F. PERCEPTUAL DISTORTIONS:

(Hallucinations, pseudo hallucinations, increased visual imagery; hyperacuteness, illusions)

G. CHANGE IN MEANING AND SIGNIFICANCE:

(Increased meaning to subjective experiences, ideas or perception; eureka experience or psychotic insight)

H. SENSE OF THE INEFFABLE:

(Inability to communicate the essence of the experience; varying degrees of amnesia)

I. FEELINGS OF REJUVENATION:

(New sense of hope, rejuvenation, renaissance or rebirth)

J. HYPERSUGGESTIBILITY:

(Increased susceptibility to uncritically accept and respond to statements; and **cues** from a leader; tendency to misperceive or misinterpret various stimuli based on inner fears and wishes, need to seek out certain props to allay anxiety associated with the loss of control).

APPENDIX: 3: A:2TART (1975) EXPERIENTIAL CRITERIA

- A. EXTEROCEPTION (sensing the external world):  
(Alterations in various sensory characteristics of the perceived world)
- B. INTEROCEPTION (sensing the body):  
(Alteration in perceived body image; alteration in detectable physiological parameters; respiration, heart-rate, muscle tonus, perception of special bodily feelings not normally present; feelings of energy in the body or change in the quality of energy)
- C. INPUT PROCESSING:  
(Sensory excitement; decreased sensory intensity; alterations of dominance - interaction hierarchies of various sensory modalities; illusion, hallucinations, perception of patterns not existing otherwise)
- D. EMOTION:  
(Alteration in emotional response: overreacting, underreacting, not reacting at all; extreme intensity of emotion)
- E. MEMORY:  
(Changes in continuity of memory; checking fine details of perceived environment against memories of how they should be)
- F. TIME SENSE:  
(Unusual feeling of here-and-nowness; slowing or speeding of time; orientation to past and/or future regardless of relation to present; feeling of archetypal quality to time; atemporal experiences)

G. SENSE OF IDENTITY:

(Sense of unusual identity; alienation, detachment, perspective on usual identity or identities)

H. EVALUATION AND COGNITIVE PROCESSING:

(Alteration in rate of thought, quality of thought and rules of logic)

I. MOTOR OUTPUT

(Alteration in amount or quality of self control; change in the active body image; restlessness, partial paralysis)

J. INTERACTION WITH THE ENVIRONMENT:

(Performance of unusual behaviours, change in anticipation of consequences of specific behaviours; change in voice quality; change in feeling of degree of orientation to the immediate environment; change in involvement; change in communication with others)

APPENDIX 3:A:3BOWERS AND FREEDMAN (1968)EXPERIENTIAL CRITERIA

## I. THE DESTRUCTURING OF PERCEPTION AND AFFECT:

## a. THE EXPERIENCE OF HEIGHTENED AWARENESS:

1. Feelings of inexpressible urgency
2. Insomnia
3. Acute visual and auditory sensations
4. Thoughts and perceptions come faster than they can be assimilated
5. Individual feeling that the mind has awakened, is functioning at a high level and that creative powers are enhanced
6. Emotions are experienced with singular intensity, there is a sense of benevolence or overwhelming fear
7. Memories of childhood, long forgotten emotions and emotionally coloured events are predominant
8. Barriers to inner and outer sensations are removed and there is confrontation of raw experience in the here and now and with experience from the individual's intrapsychic past.
9. Heightened sense of self
10. Feeling of communion with people, the world, God.

## b. IDEAS OF REFERENCE AND INFLUENCE:

(Qualitative alteration in experience)

1. Things have hidden meanings, neutral individuals are animated with strange ideas
2. Curious connections between feelings and perception are experienced

3. Categories of relevance, normally capable of sifting experience automatically, are broadened
4. Overwhelming anxiety leads to hyper vigilance and increased sensory scanning
5. Affect and perception normally interdependent tend to cross-contaminate each other and lead to affectively induced reality distortion or reality induced alterations in affect and self experience
6. Blurring of perceptual and conceptual boundaries

## II. THE DESTRUCTURING OF THE SENSE OF SELF:

### a. THE EXPERIENCE OF IDENTITY DISSOLUTION:

1. Loss of immediate ongoing sense of self

## III. SHIFT TO THE RECEPTIVE MODE

(A state organized around the intake of the environment; sensory-perceptual system is dominant; parasympathetic functions are dominant)

1. Sudden, sharp and extreme shift to the receptive mode
2. Decreased self object differentiation
3. Heightened sensory intake
4. Nonverbal, nonlogical thought processes

## IV. THE FUNCTION OF DELUSIONS:

1. Impasse, dread and overwhelming anxiety
2. Altered experience of self and world
3. Press for "making sense" of the experience
4. Overcoming of constraints imposed by normal reality guards
5. A certain amount of relief and comfort experienced with the delusional idea.

APPENDIX: 3: A:4PENFIELD AND JASPER. (1954)

## CHARACTERISTICS OF TLE SEIZURES:

## A. HALLUCINATIONS:

(Hallucinations similar to dreaming states; hallucinations made up from past personal experience; patient conscious of his surroundings and hallucinations).

## B. PERCEPTUAL ILLUSIONS:

(Feelings of being out of the world; feelings of things being silly, the situation absurd; objects appear to come near; feelings of being far away; feelings of unreality; feelings of familiarity; seems to be a spectator to some event in which he is actually playing a part; auditory illusions with sounds, body image changes; feelings of remoteness as if he is far removed from his body and environment; visual illusions; macropsia, micropsia)

## C. EMOTIONS:

(At the onset, feelings of fear, loneliness, sadness and fright, ictal emotions include fear, fright, terror, sadness and loneliness)

## D. FORCED THINKING:

(Alterations in thinking; crowding of thoughts of a stereotyped pattern; loss of control over thoughts)

## E. AUTOMATISM:

(Loss of control in behavior and willingness to be directed by others)

APPENDIX 3: A:5BEAR (1972)

## CHARACTERISTICS OF INTERICTAL TLE BEHAVIOR:

- GROUP I
- (a) Emotionality: deepening of all emotions, intense affect
  - (b) Manic tendencies: euphoria, grandiosity
  - (c) Depression: sadness and suicide
  - (d) Humourlessness: ponderous, sober, over-generalized serious concern
- GROUP II
- (a) Altered sexuality: hyposexuality, loss of libido, fetishes; transvestism; hypersexual episodes; exhibitionism
  - (b) Anger-hostility: combative, argumentative
  - (c) Aggression: bad temper, rage attacks, violent crimes, murder.
- GROUP III A
- (a) Religiosity: deep religious belief; multiple conversions, mystical states
  - (b) Nascent philosophical interest: metaphysical speculation, cosmic concerns, cosmological theories
  - (c) Augmented sense of personal destiny: events personalized, divine guidance attributed to many aspects of patient's life
  - (d) Dependence-passivity: Cosmic helplessness, "at hands of fate"
  - (e) Paranoia: suspicious, overinclusive

- GROUP III B (a) Moralism: "Law and order" excessive attention to rules; desire to punish offenders
- (b) Guilt: self recrimination, self, rebuke, litany of faults.
- GROUP III C (a) Obsessionalism: ritualistic; compulsive and orderly
- (b) Circumstantiality: loquacious, pedantic, overly detailed, peripheral
- (c) Viscosity: Cognitively representative, emotionally clinging
- (d) Hypergraphia: keeping extensive diaries, detailed notes, writing autobiography or novel.

APPENDIX: 3:B

NATIONAL INSTITUTE OF MENTAL HEALTH AND NEUROSCIENCES  
BANGALORE-560029

INFORMATION SCHEDULE

PART - I

I. PERSONAL INFORMATION:

1. Name:..... 2. Age:..... 3. Sex:.....
4. Occupation:..... 5. Annual Income:.....
6. Socio-Economic Status:.....
7. Education:.....
8. Urban / Rural
9. Religion:..... 10. Caste:.....

II. HISTORY OF TRAINING OR INDUCTION:

1. Type of religious training given:
2. Experiences associated with this religious training:
3. Experience with TM or any other type of Yogic practice or meditation technique:

III. PEAK EXPERIENCES ASSOCIATED WITH TM OR ANY OTHER TYPE OF MEDITATION TECHNIQUE:

1. Number of such experiences:
2. Nature of such experiences:
  - (a) Untrained Sensate:
  - (b) Trained Sensate :
  - (c) Trained Transcendent:
3. Duration of such experiences:
4. Frequency of such experiences:

5. Consequences of such experiences:

IV. SPONTANEOUS PEAK EXPERIENCES:

(i.e. experiences not associated with any formal religious training or induction to any meditation technique)

1. Number of such experiences:
2. Nature of such experiences:
3. Duration of such experiences:
4. Frequency of such experiences:
5. Consequences of such experiences:

V. Can you describe in your own words any such experience which you feel has had a profound impact and altered your life.

Additional Information:

VI. CRITERIA FOR EVALUATING ALTERED STATES OF CONSCIOUSNESS:

A. ALTERATIONS IN THINKING:

(Subjective disturbances in concentration, attention, memory and judgment; archaic modes of thought; reality testing impaired; distinction between cause and effect blurred, pronounced ambivalence; existence of incongruities)

B. DISTURBED TIME SENSE:

(Sense of time altered; feelings of timelessness, time coming to a standstill; acceleration; slowing of time; time of infinite or infinitesimal duration)

C. LOSS OF CONTROL:

(Fear of losing grip on reality and self control; resisting the experience or welcoming the relinquishing of volition; feelings of impotence or gaining of greater control through the loss of power)

**D. BODY IMAGE CHANGE:**

(Distortion in body image; depersonalization, a schism between body and mind; feelings of derealization, dissolution of boundaries between self, and others and world; experiences may be strange or transcendental; oceanic feelings; parts of body are distorted; also dizziness, weakness, tingling etc.)

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(Sudden displays of more primitive and intense emotion; emotional extremes from ecstacy to profound fear; detachment; uninvovement)

**F. PERCEPTUAL DISTORTIONS:**

(Hallucinations, pseudo hallucinations, increased visual imagery; hyperacuteness, illusions)

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(Increased susceptibility to uncritically accept and respond to statements; and cues from a leader; tendency to misperceive or misinterpret various stimuli based on inner fears and wishes, need to seek out certain props to allay anxiety associated with the loss of control)

## VI.2. EXPERIENTIAL CRITERIA:

- A. EXTEROCEPTION: (sensing the external world)  
(Alterations in various sensory characteristics of the perceived world)
  
- B. INTEROCEPTION: (sensing the body)  
(Alteration in perceived body image; alteration in detectable physiological parameters: respiration, heart-rate, muscle tonus, perception of special bodily feelings not normally present; feelings of energy in the body or change in the quality of energy)
  
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**J. INTERACTION WITH THE ENVIRONMENT:**

(Performance of unusual behaviours, change in anticipation of consequences of specific behaviours; change in voice quality; change in feeling of degree of orientation to the immediate environment; change in involvement; change in communication with others)

**PART - II****I. PERCEPTUAL, EMOTIONAL AND ALTERED AWARENESS ASSOCIATED WITH TEMPORAL LOBE SEIZURES:**

1. Number of such experiences:
2. Nature of such experiences:
3. Duration of such experiences:
4. Frequency of such experiences:
5. Consequences of such experiences:

**II. CAN YOU DESCRIBE IN YOUR OWN WORDS ANY SUCH EXPERIENCE WHICH YOU FEEL HAS HAD A PROFOUND IMPACT AND ALTERED YOUR LIFE?**

**ADDITIONAL INFORMATION:**

### III. CHARACTERISTICS OF TLE SEIZURES:

#### A. HALLUCINATIONS:

Hallucinations similar to dreaming states; hallucinations made up from past personal experiences; patient conscious of his surroundings and hallucinations.

#### B. PERCEPTUAL ILLUSIONS:

Feelings of being out of the world; feelings of things being silly, the situation absurd; objects appear to come near; feelings of being far away; feelings of unreality; feelings of familiarity; seems to be a spectator to some event in which he is actually playing a part; auditory illusions with sounds, body image changes; feelings of remoteness as if he is far removed from his body and environment; visual illusions; macropsia, micropsia.

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At the onset, feelings of fear, loneliness, sadness and fright.

Ictal emotions include fear, fright, terror, sadness, and loneliness.

#### D. FORCED THINKING:

Alterations in thinking; crowding of thoughts, thoughts of a stereotyped pattern; loss of control over thoughts

#### E. AUTOMATISM:

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### IV. CHARACTERISTICS OF INTERICTAL TLE BEHAVIOR:

GROUP I: (a) Emotionality: deepening of all emotions, intense effect

(b) Manic tendencies: euphoria, grandiosity

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- (a) Religiosity: deep religious belief; multiple conversions, mystical states
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- (d) Dependence-passivity: Cosmic helplessness, "at hands of fate"
- (e) Paranoia: Suspicious, overinclusive.

GROUP III B

- (a) Moralism: "Law and order"; excessive attention to rules; desire to punish offenders
- (b) Guilt: Self recrimination, self rebuke, litany of faults.

GROUP III C

- (a) Obsessionalism: ritualistic; compulsive and orderly.

- (b) Circumstantiality: loquacious, pedantic, overly detailed, peripheral
- (c) Viscosity: Cognitively representative, emotionally clinging.
- (d) Hypergraphia: Keeping extensive diaries, detailed notes, writing autobiography or novel.

PART - III ALTERATIONS IN AWARENESS PRECEDING A PSYCHIATRIC ILLNESS:

- 1. Number of such experiences:
- 2. Nature of such experiences:
- 3. Duration of such experiences:
- 4. Frequency of such experiences:
- 5. Consequences of such experiences:

II. CAN YOU DESCRIBE IN YOUR OWN WORDS ANY SUCH EXPERIENCE WHICH YOU FEEL HAS HAD A PROFOUND IMPACT AND ALTERED YOUR LIFE?

ADDITIONAL INFORMATION:

III. EXPERIENTIAL CRITERIA

I. THE DESTRUCTURING OF PERCEPTION AND AFFECT

(a) The experience of heightened awareness:

- 1. Feelings of inexpressible urgency
- 2. Insomnia
- 3. Acute visual and auditory sensations
- 4. Thoughts and perceptions come faster than they can be assimilated

5. Individual feeling that the mind has awakened, is functioning at a high level and that creative powers are enhanced
6. Emotions are experienced with singular intensity, there is a sense of benevolence or overwhelming fear.
7. Memories of childhood, long forgotten emotions and emotionally coloured events are predominant.
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9. Heightened sense of self.
10. Feeling of communion with people, the world, God.

(b) Ideas of reference and influence

(Qualitative alteration in experience)

1. Things have hidden meanings, neutral individuals are animated with strange ideas.
2. Curious connections between feelings and perception are experienced.
3. Categories of relevance, normally capable of sifting experience automatically, are broadened.
4. Overwhelming anxiety leads to hyper vigilance and increased sensory scanning.
5. Affect and perception normally interdependent tend to cross-contaminate each other and lead to affectively induced reality distortion or reality induced alterations in affect and self experience.

6. Blurring of perceptual and conceptual boundaries.

## II. THE DESTRUCTURING OF THE SENSE OF SELF:

- (a) The experience of identity dissolution
  1. Loss of immediate ongoing sense of self.

## III. SHIFT TO THE RECEPTIVE MODE

(A state organized around the intake of the environment; sensory-perceptual system is dominant; parasympathetic functions are dominant)

1. Sudden, sharp and extreme shift to the receptive mode.
2. Decreased self object differentiation.
3. Heightened sensory intake
4. Nonverbal, nonlogical thought processes.

## IV. THE FUNCTION OF DELUSIONS

1. Impasse, dread and overwhelming anxiety.
2. Altered experience of self and world.
3. Press for "making sense" of the experience.
4. Overcoming of constraints imposed by normal reality guards.
5. A certain amount of relief and comfort experienced with the delusional idea.

## PART - IV PERSONAL INFORMATION

1. Health:
  - In infancy
  - Childhood
  - Adolescence
  - Adulthood

2. Habits:
  - Food
  - Sleep
  - Work
  - Leisure time activity
  - Others.
3. Hobbies and Interests:
4. Adjustment:
  - Family
  - Social
  - Emotional
  - Occupational
5. Scholastic History:
  - Formal Education
  - Specialisation
6. Occupational History:

## II. FAMILY HISTORY OF ILLNESS

Physical

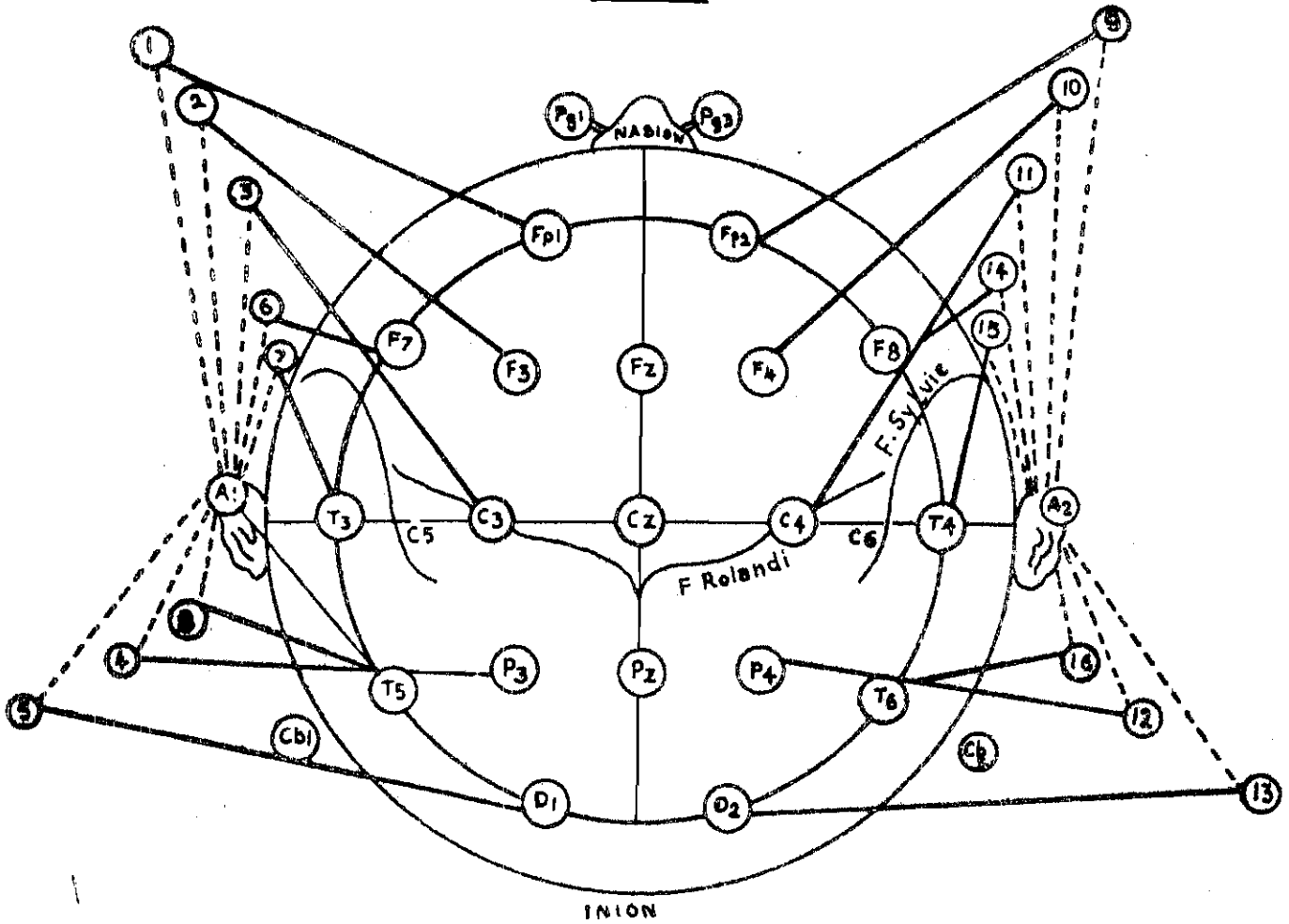
Mental - suicide, alcoholism, mental retardation, neurosis, psychosis, epilepsy

## III. RELIGIOUS AND SPIRITUAL HISTORY IN THE FAMILY

### III.A. HISTORY OF PARANORMAL ABILITY IN THE FAMILY

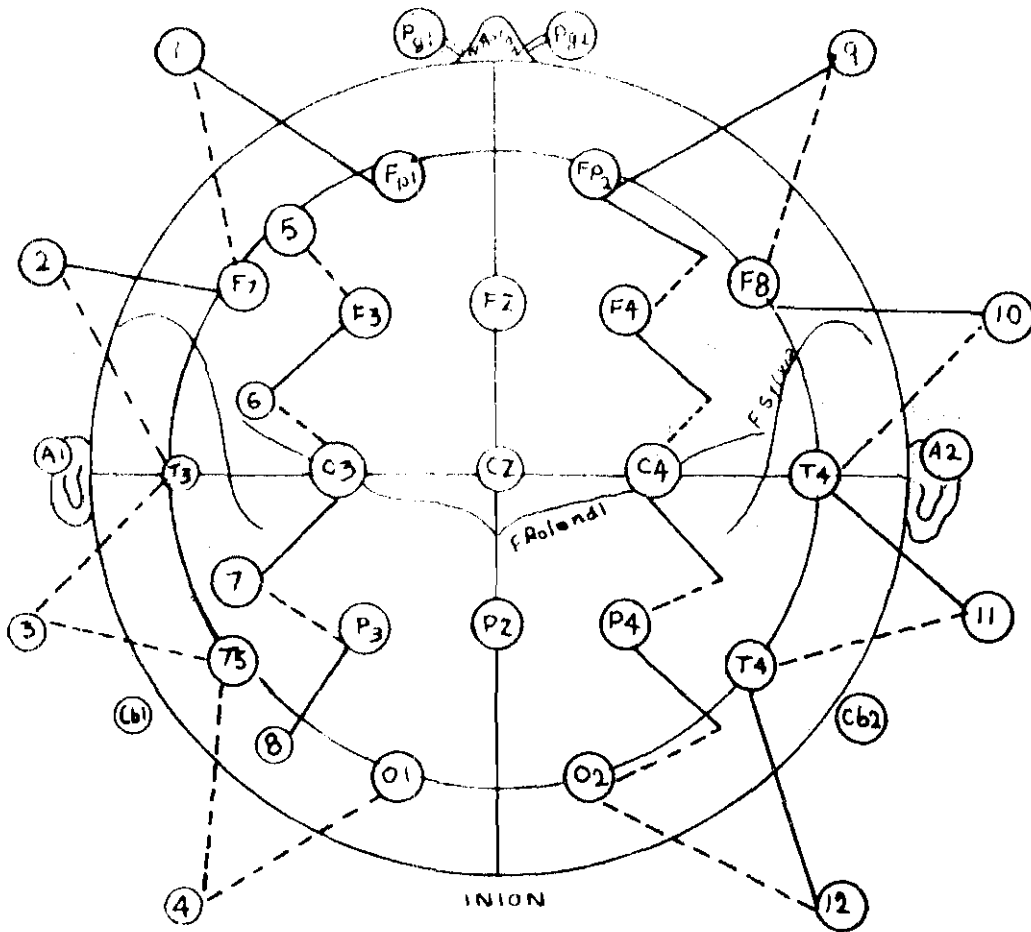
APPENDIX - 3:CMONTAGES USED IN THE STUDY

	Test	Montage A	Montage B	Montage C	Montage D	Montage VI
Cha- nnel	G1-G2	G1 -G2	G1 -G2	G1 - G2	G1 - G2	G1 - G2
1.	T4-A2	FP1-A1	FP1-F7	FP1-FP2	FP1- F7	FP2 - T4
2.	T4-A2	F3-A1	F7-T3	F7- F3	F7- T3	FP2 - C4
3.	T4-A2	C3-A1	T3-T5	F3- FZ	T3 -01	FP2 - CZ
4.	T4-A2	P3-A1	T5-01	FZ- F4	FP1- C3	FP1 - T3
5.	T4-A	O1-A1	FP1-F3	F4- F8	C3- P3	FP1 - C3
6.	T4-A2	F7-A1	F3-C3	A1- T3	P3- 01	FPI - CZ
7.	T4-A2	T3-A1	C3-P3	T3- C3	FP2- F8	T4 - 02
8.	T4-A2	T5-A1	P3-01	C3- CZ	F8- T4	C4 - 02
9.	T4-A2	FP2-A2	FP2-F8	CZ- C4	T4- 02	CZ - 02
10.	T4-A2	F4-A2	F8-T4	C4- T4	FP2- C4	T3 - 01
11.	T4-A	C4-A2	T4-T6	T4- A2	C4- P4	C3 - 01
12.	T4-A2	P4-A2	T6-02	T5- P3	P4- 02	CZ - 01
13.	T4-A2	O2-A2	FP2-F4	P3- PZ	FP1-FP2	F8 - T6
14.	T4-A2	F8-A2	F4-C4	PZ- P4	F7- F4	F4 - P4
15.	T4-A2	T4-A2	C4-P4	P4- T6	F3- F8	F7 - T5
16.	T4-A	T6-A2	P4-02	01- 02	01- 02	F3 - P3

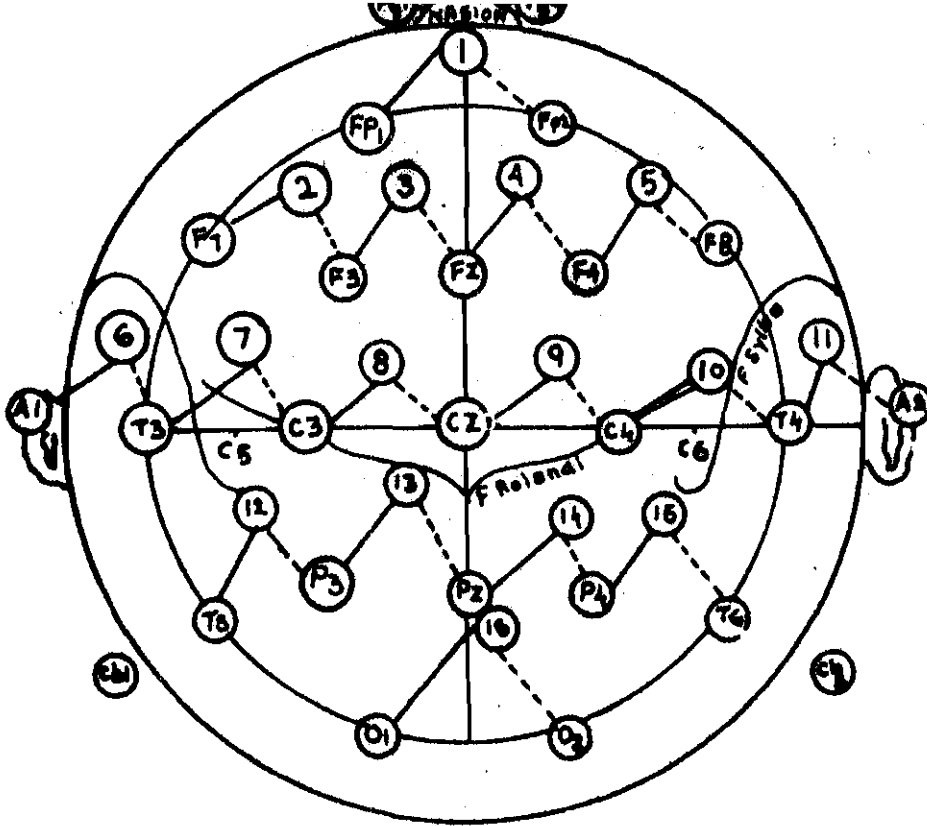


RUN A

CHANNEL	G 1	—	G 2
1>	Fp1	—	A1
2>	F3	—	A1
3>	C3	—	A1
4>	P3	—	A1
5>	O1	—	A1
6>	F7	—	A1
7>	T3	—	A1
8>	T5	—	A1
9>	Fp2	—	A2
10>	F4	—	A2
11>	C4	—	A2
12>	P4	—	A2
13>	O2	—	A2
14>	F8	—	A2
15>	T4	—	A2
16>	T6	—	A2

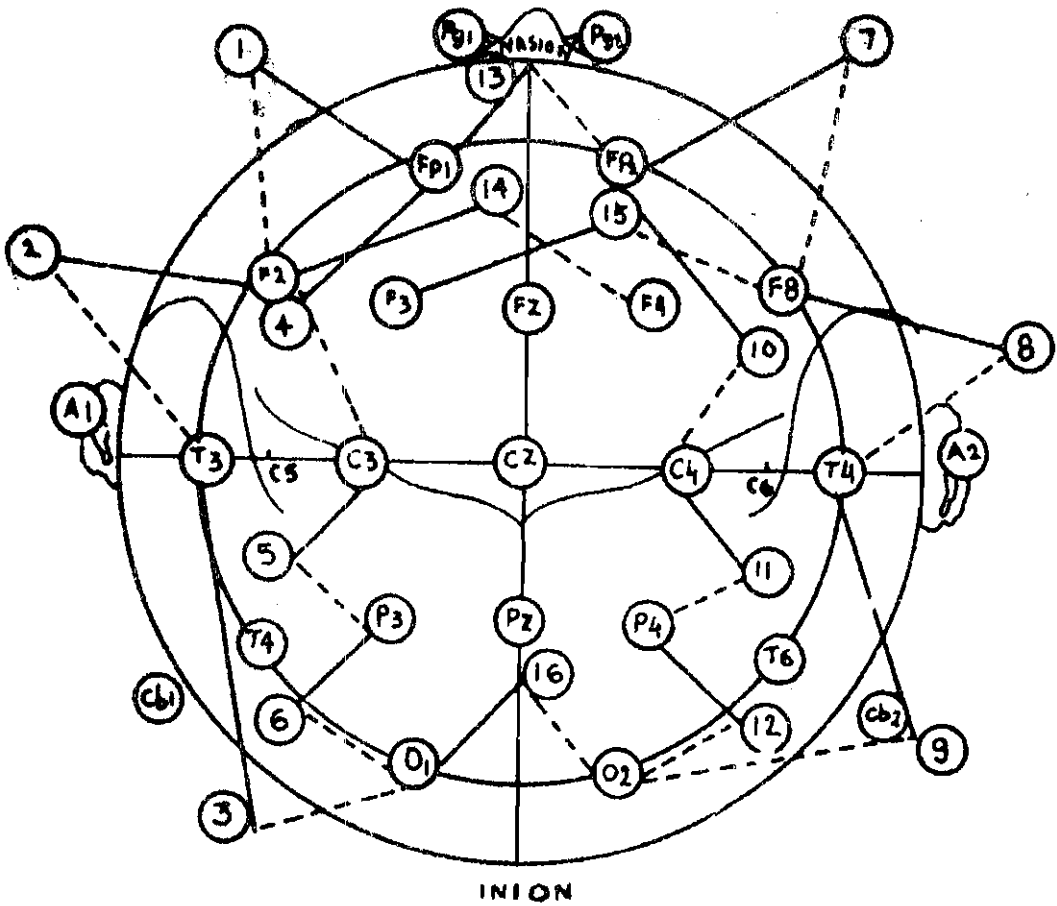


CHANNEL	RUN-B	
	G1	G2
1>	— Fp1	— F7
2>	— F7	— T3
3>	— T3	— T5
4>	— T5	— O1
5>	— Fp1	— F3
6>	— F3	— C3
7>	— C3	— P3
8>	— P3	— O1
9>	— Fp2	— F8
10>	— F8	— T4
11>	— T4	— T6
12>	— T6	— O2
13>	— Fp2	— F4
14>	— F4	— C4
15>	— C4	— P4
16>	— P4	— O2



INION  
RUN C

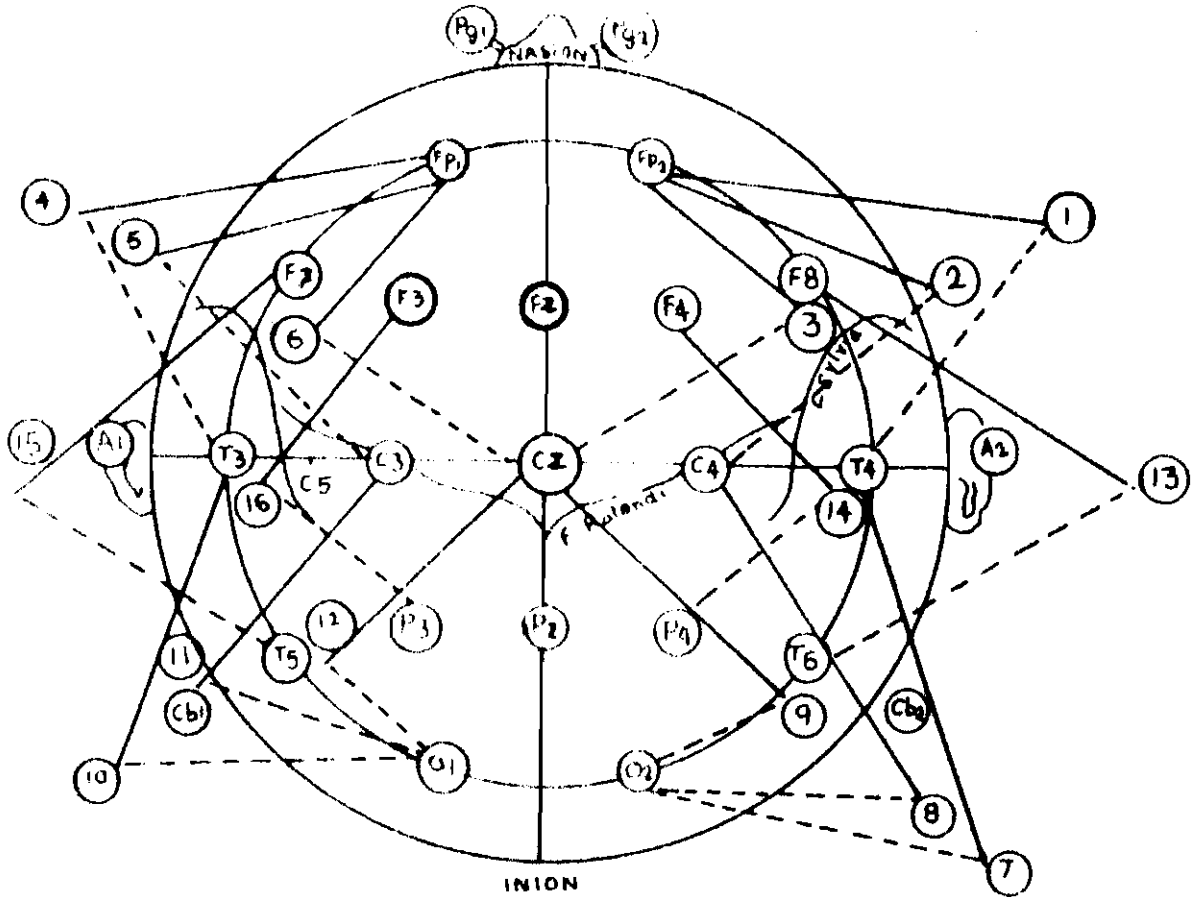
CHANNEL	G1	G2
1>	FP1	FP2
2>	F7	F3
3>	F3	FZ
4>	FZ	F4
5>	F4	F8
6>	A1	T3
7>	T3	C3
8>	C3	CZ
9>	CZ	C4
10>	C4	T4
11>	T4	A2
12>	T5	P3
13>	P3	PZ
14>	PZ	P4
15>	P4	T6
16>	O1	O2



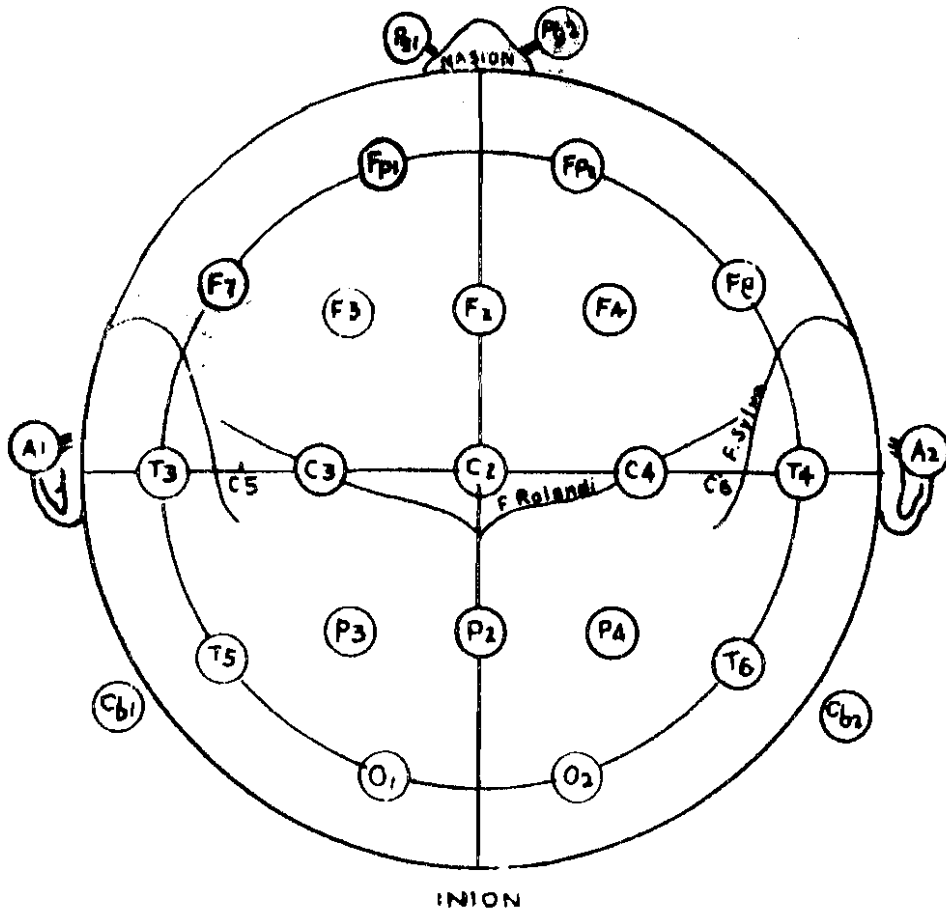
CHANNEL	RUN D			
	G1	—	G2	
1)	—	Fp1	—	F7
2)	—	F7	—	T3
3)	—	T3	—	O1
4)	—	Fp1	—	C3
5)	—	C3	—	P3
6)	—	P3	—	O1
7)	—	Fp2	—	F8
8)	—	F8	—	T4
9)	—	T4	—	O2
10)	—	Fp2	—	C4
11)	—	C4	—	P4
12)	—	P4	—	O2
13)	—	Fp1	—	Fp2
14)	—	F7	—	F4
15)	—	F3	—	F8
16)	—	O1	—	O2

APPENDIX: 3:C: 5

MONTAGE - VI



CHANNEL	RUN VI	
	G1	G2
1>	FP2	T4
2>	FP2	C4
3>	FP2	C2
4>	FP1	T3
5>	FP1	C3
6>	FP1	C2
7>	T4	O2
8>	C4	O2
9>	C2	O2
10>	T3	O1
11>	C3	O1
12>	C2	O1
13>	F8	T6
14>	F4	P4
15>	F7	T5
16>	F3	P3



A SINGLE PLANE PROJECTION OF THE HEAD SHOWING ALL STANDARD POSITIONS AND THE LOCATION OF THE ROLANDIC AND SYLVIAN FISSURES. THE OUTER CIRCLE WAS DRAWN AT THE LEVEL OF THE NASION AND INION. THE INNER CIRCLE REPRESENTS THE TEMPORAL LINE OF ELECTRODES. THIS DIAGRAM PROVIDES A USEFUL STAMP FOR THE INDICATION OF ELECTRODE PLACEMENTS IN ROUTINE RECORDING.

APPENDIX : 3:DDATA SHEET-I

EFT

Order		Time Taken
CF	EF	
1	C1	
2	D1	
3	E1	
4	A2	
5	C2	
6	G1	
7	A3	
8	H1	
9	E3	
10	C3	
11	D2	
12	E5	

Total Time in Seconds:

Mean Time in Seconds:

RFT

Trial	Frame	Rod	Error
1	28°L	28°L	
2	28°L	28°R	
3	28°R	28°R	
4	28°R	28°L	
5	28°L	28°L	
6	28°L	28°R	
7	28°R	28°R	
8	28°R	28°L	

Total Error:

Mean Error:

Spiral After Effect:

Trial	Duration	Duration of After Effect
1	Clockwise	
2	Anticlockwise	
3	Anticlockwise	
4	Clockwise	
5	Anticlockwise	
6	Clockwise	
7	Clockwise	
8	Anticlockwise	

Total AE :

Total ACW:

Total CW:

Mean AE :

Mean ACW:

Mean  $\bar{CW}$ :

## Vigilance

Serial No.	Signal Detected
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

No. of Signals

Index of Clustering

Recall Interval = 2 mins.

Serial Order	Taxonomic groups			
	Metals	Professions	Fruits	Animals
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Total				

No. of repetitions:

RR :

ARC:

Index of Clustering:

Recall Interval = 4 mins.

Serial Order	Taxonomic groups			
	Metals	Professions	Fruits	Animals
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Total				

No. of repetitions:

RR :

ARC :

Index of Clustering:

Recall Interval = 6 mins.

Serial Order	Taxonomic groups			
	Metals	Professions	Fruits	Animals
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Total				

No. of repetitions:

RR :

ARC :

REACTION TIME (SIMPLE)

xxviii

Series 1			Series 2		
Trial No.	Duration of Fore-period	RT	Trial No.	Duration of Fore-period	RT
1	300	_____	1	1250	_____
2	1000	_____	2	1950	_____
3	950	_____	3	2000	_____
4	750	_____	4	1700	_____
5	900	_____	5	1850	_____
6	350	_____	6	1300	_____
7	800	_____	7	1750	_____
8	1050	_____	8	2100	_____
9	450	_____	9	1400	_____
10	650	_____	10	1600	_____
11	700	_____	11	2050	_____
12	700	_____	12	1650	_____
13	550	_____	13	1500	_____
14	250	_____	14	1200	_____
15	500	_____	15	1800	_____
16	1150	_____	16	1450	_____
17	600	_____	17	1350	_____
18	400	_____	18	1550	_____
19	200	_____	19	1900	_____
20	850	_____	20	2150	_____

Total Simple RT in seconds (40 trials)

Total Simple RT without Warning (20 trials)

Total Simple RT with warning (20 trials)

REACTION TIME (COMPLEX)

Series 1				Series 2			
Trial No.	Duration of FP	Col-our	RT	Trial No.	Duration of FP	Col-our	RT
1	300	W	_____	1	1250	R	_____
2	1000	W	_____	2	1950	R	_____
3	950	R	_____	3	2000	W	_____
4	750	R	_____	4	1700	W	_____
5	900	W	_____	5	1850	R	_____
6	350	R	_____	6	1300	W	_____
7	800	W	_____	7	1750	R	_____
8	1050	R	_____	8	2100	W	_____
9	450	R	_____	9	1400	W	_____
10	650	W	_____	10	1600	R	_____
11	1100	R	_____	11	2050	W	_____
12	700	W	_____	12	1650	R	_____
13	550	R	_____	13	1500	W	_____
14	250	R	_____	14	1200	W	_____
15	500	W	_____	15	1800	R	_____
16	1150	W	_____	16	1450	R	_____
17	600	R	_____	17	1350	W	_____
18	400	W	_____	18	1550	R	_____
19	200	W	_____	19	1900	R	_____
20	850	R	_____	20	2150	W	_____

Total complex RT in seconds (40 trials)

Total complex RT without warning trials(20)

Total complex RT with warning trials (20)

CFF:

Trials	Fusion Threshold (Ascending)	Flicker Threshold (Descending)	Flicker Threshold (Descending)	Fusion Threshold (Ascending)
1				
2				
3				
4				
5				

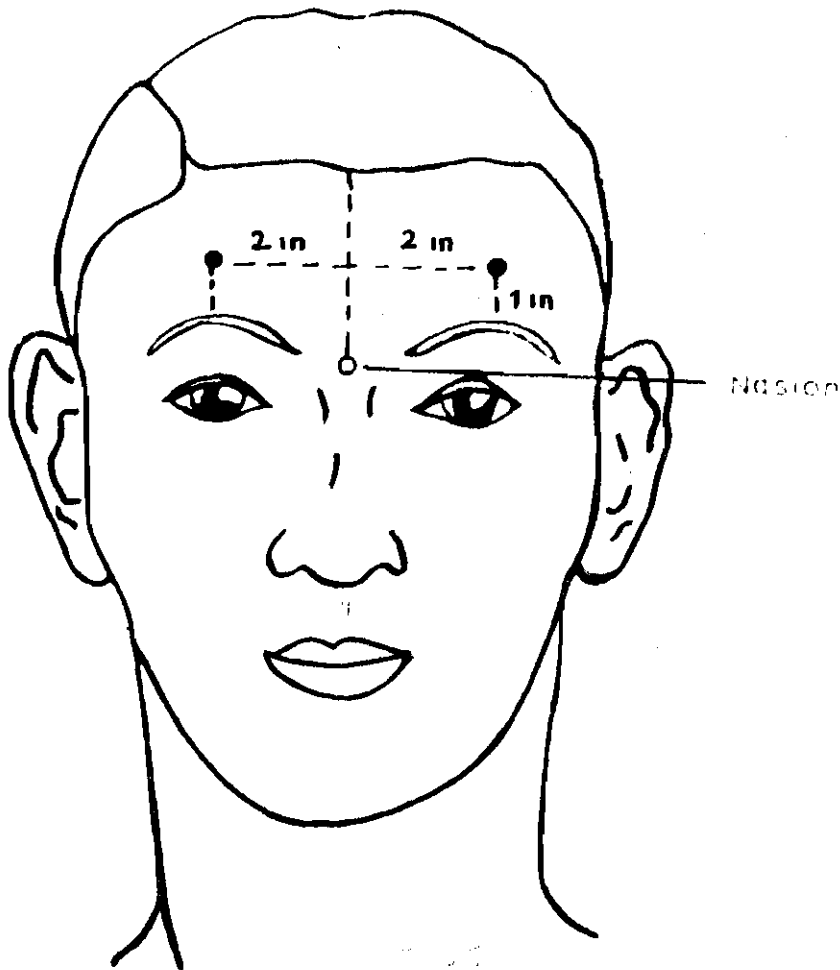
Flicker Threshold

Fusion Threshold

Flicker Fusion Threshold

R P M

No.	Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

APPENDIX: 3: EStandard Forehead Placement (Frontalis Muscle)

Standard lead placement used in the Laboratory for Psychological Studies, Allan Memorial Institute of Psychiatry, McGill University. (Lippold, 1967, in Venables and Martin, 1967.)

APPENDIX: 3:F

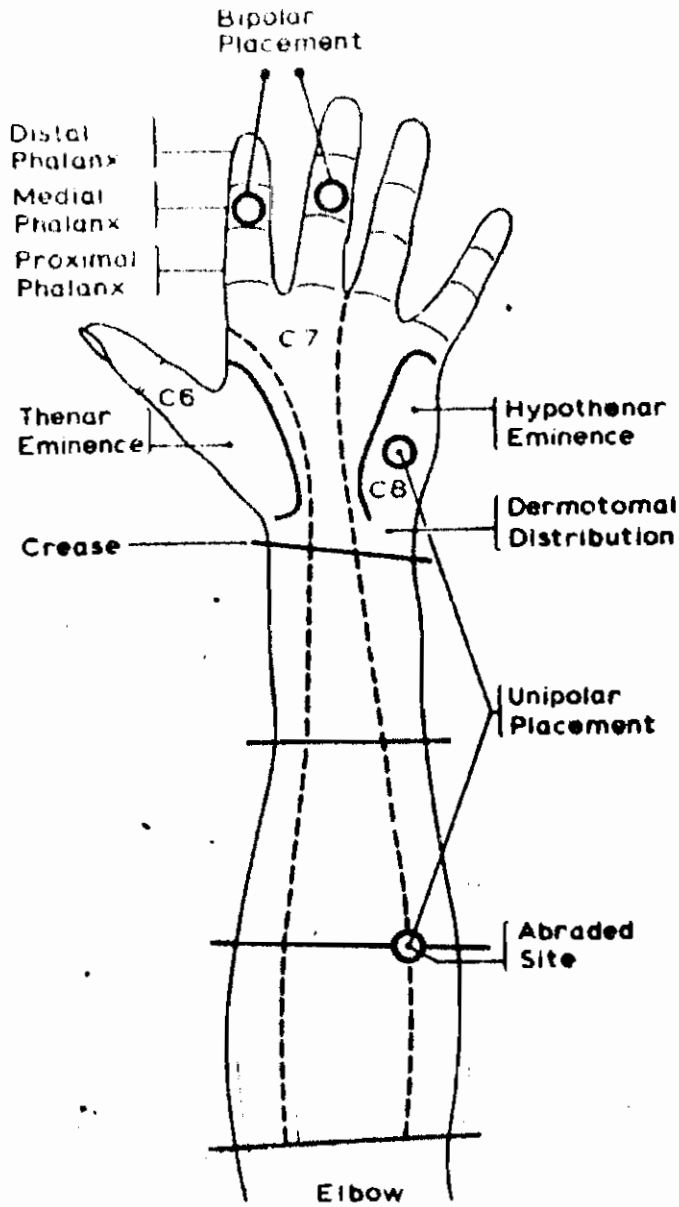


Fig. ■ Recommended placements of electrodes for measuring SC and SP. (From Venables and Christie, 1973)

APPENDIX - 3:G:1THE GENERAL HEALTH QUESTIONNAIRE

(60 ITEM VERSION)

PLEASE READ THIS CAREFULLY

We should like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer all the questions on the following pages simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past. It is important that you try to answer all the questions.

Thank you very much for your cooperation

## HAVE YOU RECENTLY:

- |   |                   |                    |                        |                       |
|---|-------------------|--------------------|------------------------|-----------------------|
| 1. -been feeling perfectly well and in good health?               | Better than usual | Same as usual      | Worse than usual       | Much worse than usual |
| 2. -been feeling in need of a good tonic?                         | Not at all        | No more than usual | Rather more than usual | Much more than usual  |
| 3. -been feeling run-down and out of sorts?                       | Not at all        | No more than usual | Rather more than usual | Much more than usual  |
| 4. -felt that you are ill?  | Not at all        | No more than usual | Rather more than usual | Much more than usual  |
| 5. -been getting any pain in your head?                           | Not at all        | No more than usual | Rather more than usual | Much more than usual  |
| 6. -been getting a feeling of tightness or pressure in your head? | Not at all        | No more than usual | Rather more than usual | Much more than usual  |
| 7. -been able to concentrate on whatever you are doing?           | Better than usual | Same as usual      | Less than usual        | Much less than usual  |

- |  |                   |                    |                        |                      |
|--|-------------------|--------------------|------------------------|----------------------|
| 8. -been afraid that you were going to collapse in a public place? | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 9. -been having hot or cold spells?                                | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 10. -been perspiring (sweating) a lot?                             | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 11. -found yourself waking early and unable to get back to sleep?  | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 12. -been getting up feeling your sleep has not refreshed you?     | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 13. -been feeling too tired and exhausted even to eat?             | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 14. -lost much sleep over worry?                                   | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 15. -been feeling mentally alert and wide awake?                   | Better than usual | Same as usual      | Less alert than usual  | Much less alert      |
| 16. -been feeling full of energy?                                  | Better than usual | Same as usual      | Less energy than usual | Much less energetic  |
| 17. -had difficulty in getting off to sleep?                       | Not at all        | No more than usual | Rather more than usual | Much more than usual |
| 18. -had difficulty in staying asleep once you are off?            | Not at all        | No more than usual | Rather more than usual | Much more than usual |

19. -been having frightening or unpleasant dreams?	Not at all	No more than usual	Rather more than usual	Much more than usual
20. -been having restless disturbed nights?	Not at all	No more than usual	Rather more than usual	Much more than usual
21. -been managing to keep yourself busy and occupied?	More than usual	Same as usual	Rather less than usual	Much less than usual
22. -been taking longer over the things you do?	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
23. -tended to lose interest in your ordinary activities?	Not at all	No more than usual	Rather more than usual	Much more than usual
24. -been losing interest in your personal appearance?	Not at all	No more than usual	Rather more than usual	Much more than usual
25. -been taking less trouble with your clothes?	More than usual	About same as usual	Less than usual	Much less trouble
26. -been getting out of the house as much as usual?	More than usual	Same as usual	Less than usual	Much less than usual
27. -been managing as well as most people would in your shoes?	Better than most	About the same	Rather less well	Much less well
28. -felt on the whole you were doing things well?	Better than usual	About the same	Less than usual	Much less well
29. -been late getting to work or getting started on your housework?	Not at all	No later than usual	Rather later than usual	Much later than usual
30. -been satisfied with the way you have carried out your task?	More satisfied	About same as usual	Less satisfied than usual	Much less satisfied

- |   |                      |                     |                        |                      |
|---|----------------------|---------------------|------------------------|----------------------|
| 31. -been able to feel warmth and affection for those near to you?                      | Better than usual    | About same as usual | Less well than usual   | Much less well       |
| 32. -been finding it easy to get on with other people?                                  | Better than usual    | About same as usual | Less well than usual   | Much less well       |
| 33. -spent much time chatting with people?  | More time than usual | About same as usual | Less than usual        | Much less than usual |
| 34. -kept feeling afraid to say anything to people in case you made a fool of yourself? | Not at all           | No more than usual  | Rather more than usual | Much more than usual |
| 35. -felt that you are playing a useful part in things?                                 | More so than usual   | Same as usual       | Less useful than usual | Much less than usual |
| 36. -felt capable of making decisions about things?                                     | More so than usual   | Same as usual       | Less so than usual     | Much less capable    |
| 37. -felt you are just not able to make a start on anything?                            | Not at all           | No more than usual  | Rather more than usual | Much more than usual |
| 38. -felt yourself dreading everything that you have to do?                             | Not at all           | No more than usual  | Rather more than usual | Much more than usual |
| 39. -felt constantly under strain?  | Not at all           | No more than usual  | Rather more than usual | Much more than usual |
| 40. -felt you could not overcome your difficulties?                                     | Not at all           | No more than usual  | Rather more than usual | Much more than usual |
| 41. -been finding life a struggle all the time?   | Not at all           | No more than usual  | Rather more than usual | Much more than usual |

- |   |                    |                     |                        |                      |
|---|--------------------|---------------------|------------------------|----------------------|
| 42. -been able to enjoy your normal day-to-day          | More so than usual | Same as usual       | Less so than usual     | Much less than usual |
| 43. -been taking things hard?                           | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 44. -been getting edgy and bad-tempered?                | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 45. -been getting scared of panicky for no good reason? | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 46. -been able to face up to your problems?             | More so than usual | Same as usual       | Less able than usual   | Much less than usual |
| 47. -found everything getting on top of you?            | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 48. -had the feeling that people were looking at you?   | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 49. -been feeling unhappy and depressed?                | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 50. -been losing confidence in yourself?                | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 51. -been thinking of yourself as a worthless person?   | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 52. -felt that life is entirely hopeless?               | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 53. -been feeling hopeful about your own future?        | More so than usual | About same as usual | Less so than usual     | Much less hopeful    |

- |   |                    |                     |                        |                      |
|---|--------------------|---------------------|------------------------|----------------------|
| 54. -been feeling reasonably happy all things considered?                       | More so than usual | About same as usual | Less so than usual     | Much less than usual |
| 55. -been feeling nervous and strung up all the time?                           | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 56. -felt that life is not worth living?  | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 57. -thought of the possibility that you might make away with yourself?         | Definitely not     | I don't think so    | Rather more on my mind | Definitely have      |
| 58. -found at times you could not do anything because your nerves were too bad? | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 59. -found yourself wishing you were dead and away from it all?                 | Not at all         | No more than usual  | Rather more than usual | Much more than usual |
| 60. -found that the idea of taking your own life kept coming to your mind?      | Definitely not     | I don't think so    | Has crossed my mind    | Definitely has       |

=====

APPENDIX - 3:G  
AUDITORY VIGILANCE

The series of digits for the practice test and the main test are given below and the signals are underlined:

PRACTICE TEST

4 7 6 8 9 1 4 2 9 8 6 4 9 8 3 2 7 2 3 5 2 2 4 4  
 2 6 3 5 2 7 4 5 2 9 2 5 8 2 6 8 4 3 1 5 2 4 6 3  
 4 8 7 4 1 2 3 6 2 4 8 7 6 5 4 2 3 7 6 1 4 5 3 8  
 3 7 6 7 8 4 3 2 5 8 2 4 8 6 1 4 8 5 8 6 8 2 9 4  
 1 7 8 4 1 2 7 6 4 7 2 4 5 2 1 2 5 4 5 9 1 8 4 7  
 9 8 6 1 3 8 2 1 6 4 7 9 6 4 4 7 3 1 2 6 3 8 3 2  
 8 5 6 2 3 7 2 4 1 5 8 6 3 5 8 2 7 8 6 7 2 5 8 4  
 3 8 5 4 3 2 9 7 2 5 4 8

MAIN TEST

3 9 6 4 3 8 9 7 2 8 2 4 1 8 5 4 2 9 6 7 5 4 7 2  
 1 2 7 7 4 8 5 6 3 9 5 4 5 9 2 4 8 2 1 4 6 4 9 7  
 8 2 1 8 3 2 3 1 4 7 6 1 5 6 3 7 8 2 2 1 5 4 7 9  
 6 8 1 5 2 7 6 1 2 4 3 7 8 6 5 4 1 4 3 5 8 6 8 2  
 4 9 8 6 8 6 3 1 4 8 7 9 2 4 3 3 2 1 4 6 2 4 8 8  
1 5 7 4 3 8 2 1 6 4 7 9 6 4 4 3 1 2 1 7 3 2 6 8  
 2 7 9 4 4 6 5 4 9 1 2 2 7 4 6 8 2 6 3 2 4 7 5 8  
 6 7 9 4 3 1 2 6 7 2 3 4 1 8 4 6 6 3 7 4 2 3 1 8  
 2 3 4 6 5 4 8 2 8 2 4 2 3 6 5 4 9 8 9 1 7 4 6 3  
 8 4 9 8 6 3 2 4 2 8 4 5 6 8 2 7 4 9 2 8 6 4 7 5  
 2 1 2 4 8 7 6 1 2 1 4 1 6 5 8 6 1 5 9 4 3 2 4 1  
 5 8 5 4 2 3 2 6 8 3 4 5 8 2 6 2 7 6 3 2 7 4 1 9  
 8 5 6 2 3 7 2 4 1 5 8 6 3 5 8 2 7 8 6 7 2 5 8 4  
 1 8 6 3 2 5 2 3 4 4 8 7 3 8 2 6 2 7 4 5 8 1 1 8  
 7 4 3 2 3 7 4 3 1 5 4 7 8 5 4 6 3 5 2 4 3 2 1 8  
 2 5 8 6 8 1 4 9 5 6 2 3 7 8 5 2 4 6 8 1 3 8 4 2  
 1 4 2 3 8 6 1 2 4 4 2 9 8 1 9 8 3 2 6 3 8 3 2 3  
 2 6 4 1 4 2 6 7 5 1 4 8 6 5 6 4 5 8 4 9 6 8 2 9

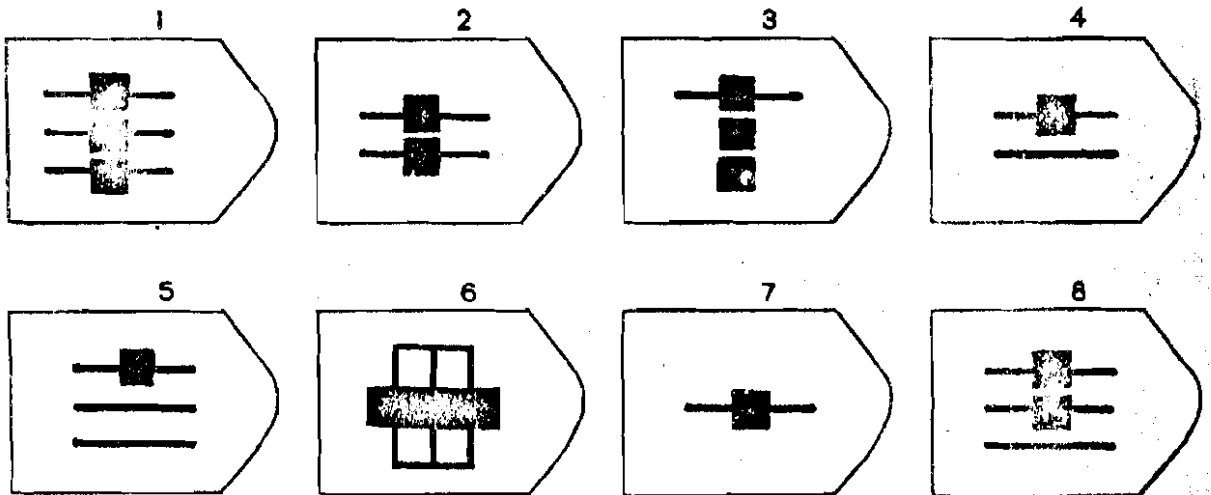
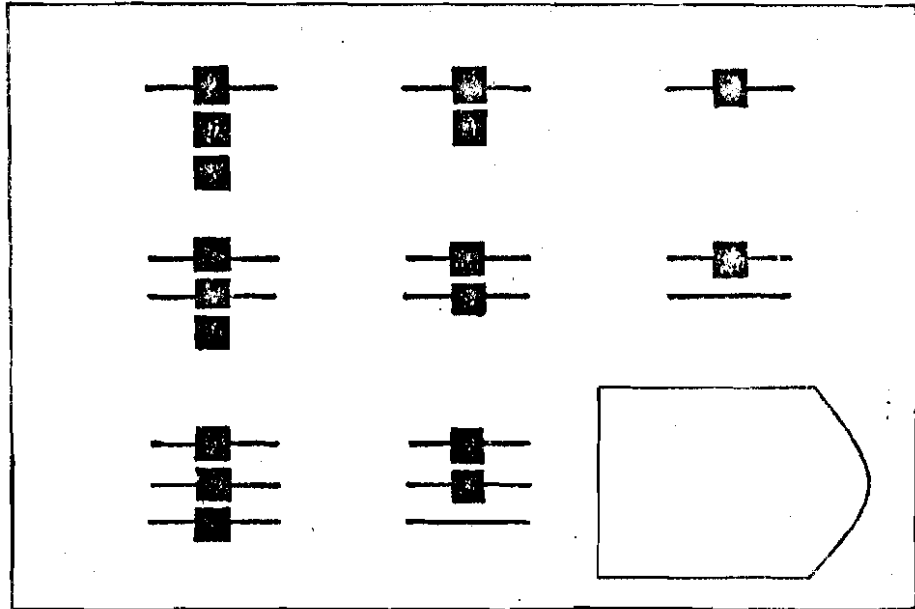
(Contd.....)

4 9 1 5 6 1 4 5 3 8 3 7 6 2 3 7 8 7 4 3 2 5 8 2  
2 9 8 2 4 8 6 4 7 3 2 6 5 4 7 9 4 3 2 1 8 4 5 6  
9 2 4 6 9 4 5 1 2 3 4 2 6 5 4 3 9 8 2 1 3 4 5 4  
4 7 6 8 2 4 8 9 4 8 3 6 2 3 8 2 6 1 3 7 2 4 3 8  
8 7 2 5 8 9 6 4 3 1 2 5 4 9 7 8 2 4 3 7 8 6 5 2  
1 4 8 2 5 9 1 4 9 1 8 7 4 1 2 7 6 8 6 2 8 4 7 2  
4 5 2 1 2 5 4 8 9 7 6 8 5 7 4 2 3 6 4 2 3 1 2 3

SAMPLE FIGURE: ADVANCED

PROGRESSIVE MATRICES

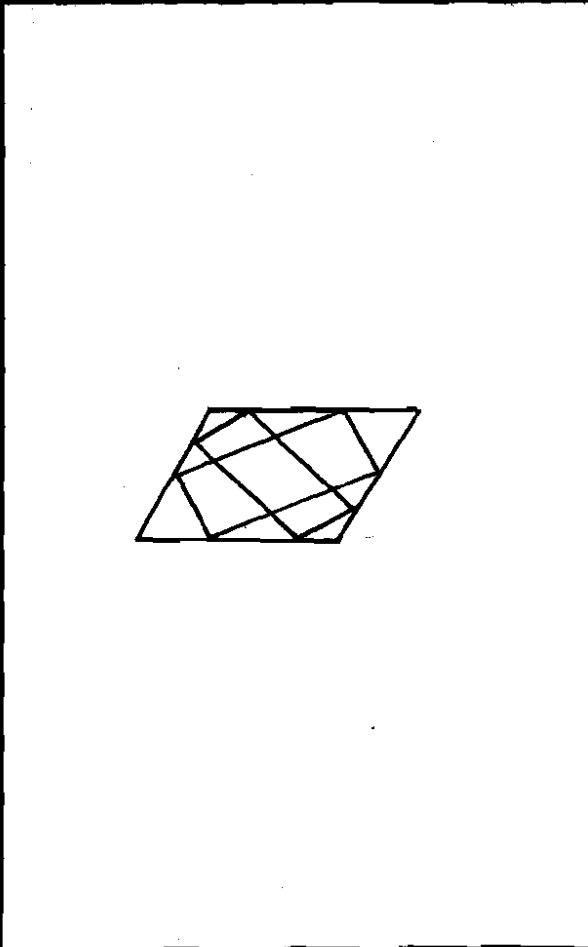
SET I



APPENDIX I

EMBEDDED FIGURES TEST  
(SAMPLE FIGURE)

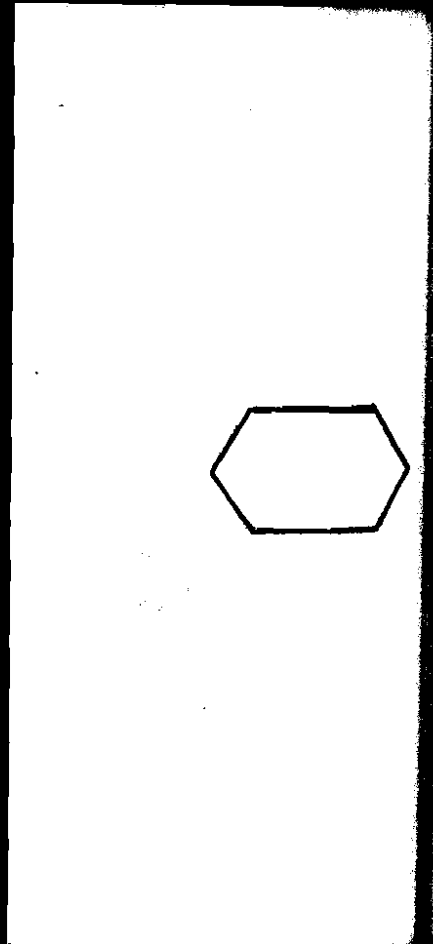
A-2



↑ COMPLEX FIGURE

SIMPLE FIGURE →

A



APPENDIX - 3:JINDEX OF CLUSTERING IN RECALL

Taxonomic groups and in parentheses their order of presentation

Metals	Professions	Fruits	Animals
M1. Iron (38)	P1. Architect (31)	F1. Fig (12)	A1. Giraffe (28)
M2. Bronze (21)	P2. Baker (39)	F2. Strawberry (22)	A2. Bear (25)
M3. Steel (36)	P3. Scientist (13)	F3. Apple (9)	A3. Squirrel (1)
M4. Zinc (6)	P4. Carpenter (3)	F4. Nectarine (2)	A4. Turtle (40)
M5. Chromium (29)	P5. Executive (23)	F5. Apricot (24)	A5. Leopard (10)
M6. Nickel (16)	P6. Doctor (7)	F6. Cherry (30)	A6. Dog (14)
M7. Tungsten (4)	P7. Sailor (32)	F7. Water- melon (15)	A7. Cheetah (5)
M8. Mercury (20)	P8. Chemist (17)	F8. Banana (35)	A8. Lion (18)
M9. Silver (27)	P9. Judge (26)	F9. Mango (19)	A9. Camel (8)
M10. Uranium (11)	P10. Writer (37)	F10. Grape (34)	A10. Moose (33)

3)

SAMPLE FIGURES FROM ACTIVITY II  
(NON-VERBAL TEST  
OF CREATIVITY)



Title:

4)



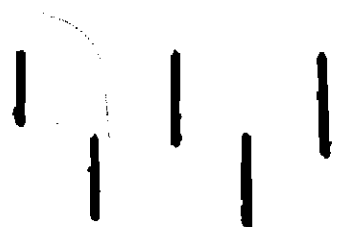
Title:

5)



Title:

6)



Title:

## बाकर मेहदी

विन्मय का असादिक परीक्षण

NON-VERBAL TEST OF CREATIVITY

S. No.

## Activity I

	Elaboration (N)	Elaboration (V)	Originality (N)	Originality (V)
Item 1.	---	---	---	---
Item 2.	---	---	---	---
Total				

## Activity II

	Elaboration (N)	Elaboration (V)	Originality (N)	Originality (V)
Item 1.	---	---	---	---
Item 2.	---	---	---	---
Item 3.	---	---	---	---
Item 4.	---	---	---	---
Item 5.	---	---	---	---
Item 6.	---	---	---	---
Item 7.	---	---	---	---
Item 8.	---	---	---	---
Item 9.	---	---	---	---
Item 10.	---	---	---	---
Total				

## Activity III

	Elaboration (N)	Elaboration (V)	Originality (N)	Originality (V)
Triangles	---	---	---	---
Ellipses	---	---	---	---
Total				

## Score Summary

	Elaboration (N)	Elaboration (V)	Originality (N)	Originality (V)
Activity I	---	---	---	---
Activity II	---	---	---	---
Activity III	---	---	---	---
Grand Total				

SEE BACK PAGE FOR INSTRUCTIONS REGARDING ORIGINALITY SCORING.

## Originality Scoring for Responses not mentioned on the Response list

For any novel response not mentioned in the response list given in the manual, first of all, briefly note it in space provided below giving the number of the activity and the item to which it belongs. Then, you have scored all the test scripts, give it all score according to the scheme given in the Manual and mark score in the appropriate column in the scoring sheet. In all probability, there will be very few such cases.

Activity	Item	Response	Originality score

Sole Distributor

**नेशनल साइकलॉजिकल कारपोरेशन**

होस्टल चंद्रमोक चिडबग

रावार्जडी, भावरा-282002