

Paper VIII

Unit 2 : Psychophysics

- 2.1 Meaning
- 2.2 Problems in Psycho-physics
- 2.3 Methods in Psycho-physics
 - 2.3.1 Method in Limits.
 - 2.3.2 Method of Constant Stimuli
 - 2.3.3 Method of average error
- 2.4 Types of errors introduced in Psychophysical expts. and measures of minimising them.

Unit 3 : Sensations

- 3.1 General Study of physiology of different sense organs.
- 3.2 Psychological study of sense organs.
 - 3.2.1 Vision : Types : scotopic and photopic
 - Fixation of light and dark adaptation
 - Blind spot
 - Characteristics of chromatic and achromatic vision.
 - Colour theories - Young Helmholtz's and Hering's
 - 3.2.2 Audition acuity
Theories of hearing - Resonance, frequency and volley.
 - 3.2.3 Experimental study of chemical sensation. Olfactory and gustatory.
 - 3.2.4 Cutaneous sensation . heat, cold, pain and pressure spots.

Unit 4 : Perception and Language Development

- 4.1 Perception of form, space, time and movement
- 4.2 Illusion
- 4.3 Experimental study of concept formation and language development in a child.

Unit 5 : Learning

- 5.1 Measurement, learning curve and its characteristics
- 5.2 Types - Motor, Verbal and problem solving
- 5.3 Experimental study of conditioning
- 5.4 Experimental design for the study of transfer of learning.

Unit 6 : Retention and Forgetting

- 6.1 Measurement of retention
- 6.2 Experimental study of determinants of retention
- 6.3 Experimental study of Interference and forgetting

Unit 7 : Work and Fatigue

- 7.1 Measurement of fatigue, work curve and its characteristics.
- 7.2 Experimental study of determinants of fatigue, ergogenicity.

Unit 8 : Reaction time and association

- 8.1 Types and measures of reaction time
- 8.2 Experimental study of determinants of reaction time.
- 8.3 Experimental study of speed and variations in association formation.

Unit 9 : Human Behaviour

- 9.1 Experimental study of thinking, reasoning and problem solving
- 9.2 Experimental study of emotional behaviour.
- 9.3 Experimental study of Social behaviour.

Reference Books :

1. Mary Collins & James Brewer : Experimental Psychology
Layall Book Depot., Lucknow
2. Postman Leo & Egan James : Experimental Psychology
Kalvaid Publishers, New Delhi
3. Sugaeski E.R. : Experimental Psychology
Holt, Rinehart, Winston, New York
4. Young E.G. : A History of Experimental Psychology
The Times of India Press, Bombay
5. Andrea E. C. : Experimental Psychology
Wiley Eastern Pvt. Ltd., New Delhi
6. Underwood B.J. : Experimental Psychology
The Times of India Press, Bombay.
7. Valentine C.W. : An Introduction to Experimental Psychology
University Tutorial Press Ltd., New Oxford.
8. Kothurkar V. K. & Vanarase S.J. : Experimental Psychology - A Systematic
Introduction : Wiley Eastern Ltd., New Delhi.
9. Yehsin S.M. : Experiments in Psychology
Orient Longman, Ltd. Bombay
10. Parameashwaran S.G. & Rao C.T. : A Manual of Experimental Psychology
Lalwani Publishing House, Bombay
11. Kuppu Swami B. : Elementary Experiments in Psychology
Geoffrey, Madras.
12. Mann N.L. : A Laboratory Manual in General Experimental
Psychology : Houghton Mifflin Company, Cambridge

Paper VIII

Unit	Topic	Object of the experiment
1. Psychophysical methods.	Method of limits	i) To calculate the threshold using the method of limits.
	Method of right & wrong cases	ii) To determine the differential threshold by using the method of right & wrong cases.
	Method of Mean error.	iii) To calculate the space error by using the method of mean error.
2. Sensation	Vision : Mapping the Blind spot	iv) To map the area of the blind spot.
	Vision : Contrast effect	v) To study the phenomenon of successive colour contrast.
	" " " " " "	vi) To study the phenomenon of simultaneous colour contrast
	Field of vision	vii) To map the retinal fields of vision for different colours.
	Vision - Colour mixing	viii) To verify the laws of colour mixing.
	Vision - order of colour preference.	ix) To determine the subjects order of colour preference.
	Vision-Colour blindness	x) To detect the presence of colour blindness
	Auditory sensation	xi) To determine the absolute threshold for sound intensity
	" " " " " "	xii) To determine the accuracy of localisation of sounds at different position in the horizontal, coronal, and sagittal planes.
	3. Sensations	Cutaneous sensation
xiv) To map the pain & touch spots on the limited area of the skin of the subject.		
xv) To determine the special threshold or the aesthesiometric index.		
	Kinaesthetic sensation perception of movement	xvi) To estimate the successive simultaneous movements of the individual.
Perception Concept formation	Perception of form Concept formation	xvii) To study the factors affecting Gestalt figures.
		xviii) To study the process of concept formation.
Learning	Bilateral Transfer	xix) To study the effect of bilateral Transfer.
	Interference	xx) To study the effect of interference in learning.
	Maze learning	xxi) To measure the process of learning in unseen stylus mazes & to discover & compare the method employed.

Paper VIII

Attention and forgetting	Retention	xxiii) To compare the efficiency of attention by the measures recall and recognition.
Work and fatigue	Fatigue	xxiiii) To prepare and study the stages of work curve.
Reaction time & time	Reaction Time	xxiv) To measure the simple reaction time, discriminatory time for visual & auditory stimuli
Association	Association	xxv) To study the individual differences in association formation.
Human Behaviour	Thinking	xxvi) To measure the individual capacity at the time of the test, for abstract & clear thinking.
	Intelligence	xxvii) To judge intelligence from photographs. xxviii) To study a performance test of intelligence.
	Emotional Behaviour	xxix) To judge emotions from photographs.
	Problem solving in group situation	xxx) To compare the problem solving behaviour of subjects working alone & in a group situation.