



SYMBIOSIS

# Symbiosis College of Arts and Commerce

(An Autonomous College Affiliated to University of Pune)

Subject code

Semester

I

II

III

IV

V

VI

M.A.

I

II

III

IV

Title of Subject

(For M.A. Part- I as per the approval of BOS)

## APPLIED COGNITIVE PSYCHOLOGY

Objectives

1. To acquaint the students with the processes involved in sensation and perception
2. To develop insight into one's own and others' behaviour and underlying mental processes
3. To enrich students' understanding of major concepts, theoretical perspectives, and empirical findings in cognitive psychology

### Detailed syllabus

Unit

Contents of the syllabus

Number of Lectures

1

#### NATURE AND IMPORTANCE OF COGNITIVE PSYCHOLOGY

1. Cognitive Psychology: Definition and domains
2. History, Methods in Cognitive Neuroscience
3. Individual Differences in Cognition –(a) Cognitive Development: Piaget's Stages of Development Cognition and Aging , Vygotsky's theory(b) Psychometric Studies of Cognition (Intelligence Tests , Factor Analysis , Reasoning Ability Verbal Ability , Spatial , Conclusions ) (c) Guilford's SOI model of intelligence
4. Current paradigms of cognitive psychology – Information processing approach, ecological approach
5. Application: Cognitive style and cognitive map, **Cognitive biases**

10

2

#### SENSATION, ATTENTION AND PERCEPTION

1. Sensation – Sense organs, Theories of color vision, Theories of Pitch
2. Attention and Performance- (a)Serial Bottlenecks (b) Auditory Attention (c) Visual Attention (d) Central Attention: Implications, The Stroop Effect (e) Signal Detection Theory and vigilance.
3. Visual Pattern Recognition (Template-Matching Models, Feature Analysis, Object Recognition, Face Recognition), Context and Pattern Recognition
4. Perception: Cross-cultural studies
5. Application: Subliminal perception, perceptual defense, and extra-sensory perception.

10

3

#### LANGUAGE STRUCTURE

1. Language and the Brain
2. Language acquisition: A Critical Period for Language Acquisition, Language Universals, **Chomsky's language acquisition theory**
3. (a)The Field of Linguistics: Productivity and Regularity (b)Syntactic Formalisms: Speech Errors, Transformations.
4. The Relation Between Language and Thought: The Behaviorist Proposal, The Whorfian Hypothesis of Linguistic Determinism

10



	5. Application: Multilingualism.	
4	<b>PROBLEM SOLVING, CREATIVITY AND DECISION MAKING</b> 1. Problem: Definition, problem solving cycle, types, obstacles and aids 2. Problem solving approaches – Algorithm; heuristics: means-end analysis computer simulation, and analogy 3. Definition of creativity, measurement creativity 4. Reasoning and decision-making: Types of reasoning – Syllogistic and Conditional; factors influencing decision-making. 5. Application: Artificial intelligence	10
	Total Number of Lectures	40
<b>Suggested Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Anderson, J. R. (2015). <i>Cognitive psychology and its implications</i>. New York: Worth Publishers.</li> <li>2. Myers, David G. (2011) <i>Exploring psychology :eighth edition in modules</i> New York, NY : Worth Publishers</li> <li>3. Matlin, M. (1994). <i>Cognition</i>. Bangalore: Harcourt Brace Pub.</li> <li>4. Galloti, K. M. (2004). <i>Cognitive psychology in and out of the laboratory</i>. USA:Thomson</li> <li>5. Wadsworth.</li> <li>6. Sternberg, R.J. (2007). <i>Cognitive Psychology</i>. Australia: Thomson Wadsworth.</li> <li>7. Kellogg, R.T.(2007). <i>Fundamentals of Cognitive Psychology</i>. N.D. Sage Publications.</li> <li>8. Solso, R. L. (2004). <i>Cognitive Psychology (6th ed)</i>. Delhi: Pearson Education.</li> <li>9. Wade, C. and Tavris, C. (2007). <i>Psychology</i>. ND: Pearson Education.</li> <li>10. Jahnke, J. C. &amp; Nowaczyk, R. H. (1998). <i>Cognition</i>. Upper Saddle NJ: Prentice Hall.</li> <li>11. Burne, L.E., Dominowski, R.L. &amp; Loftus, E.E. (1979). <i>Cognitive processes</i>. NJ: Prentice-Hall.</li> <li>12. Gavin, H. (1998). <i>The essence of cognitive psychology</i>. London: Prentice-Hall.</li> <li>13. Corens, S., Ward, L.M., &amp; Enns, J. (1994). <i>Sensation and perception</i>. NY: Harcourt Brace &amp; Co.</li> <li>14. Messer, D. &amp; Miller, S. (1999). <i>Exploring developmental psychology</i>. London:Arnold.</li> <li>15. Flavell, J.H. (1985). <i>Cognitive development (2nd ed)</i> NJ: Prentice Hall.</li> <li>16. Reed, S.K. (1988). <i>Cognition: Theory and applications (3rd ed)</i>. California: Brooks/</li> <li>17. Best, J. B. (1999). <i>Cognitive Psychology</i>. USA: Wadsworth Publishing Co.</li> <li>18. Guenther R. K. (1998). <i>Human Cognition</i>. New Jersey: Prentice-Hall.</li> <li>19. Kaplan, S. &amp; Kaplan, R. (1982). <i>Cognition and environment</i>. N.Y.: Praeger Publishers.</li> <li>20. Reed S. K. (1998). <i>Cognition: Theory and application (3rd ed)</i>. California: Brooks/Cole Pub. Company</li> <li>21. Cohen G. (1983). <i>Psychology of cognition (2nd ed)</i>. London: Academic Press</li> <li>22. Desai, B. and Abhyankar, S. C. (2007). <i>Prayogik Manasashastra ani Sanshodhan Paddhati</i>. Pune: Narendra Prakashan.</li> <li>23. Pune: Narendra Prakashan.</li> <li>24. Borude, R.R. (2005). <i>Bodhanik manasashastra</i>. Chhaya Prakashan.</li> <li>25. Think, Fast &amp; Slow' by Daniel Kahneman</li> </ol>		
<b>Suggested Journals</b>		
<ol style="list-style-type: none"> <li>1. Journal of Cognitive Psychology</li> <li>2. Applied Cogitive Psychology</li> </ol>		
<b>Web sites :</b>		
<ol style="list-style-type: none"> <li>1. www.apa.org</li> </ol>		

