

**JYOTI NIVAS COLLEGE AUTONOMOUS
SYLLABUS FOR 2020 -2021 BATCH AND THEREAFTER**

Programme: INT BSc. MSc

Semester: IV

**PAPER II
COGNITIVE PSYCHOLOGY**

Course Code: 18IV IS401

No. of Hours: 60

COURSE OBJECTIVES:

- Get an overview of cognitive psychology, its findings, theories and approach.
- Develop a core competency in the area of cognitive psychology, focusing on topics such as knowledge, language, problem solving, reasoning and decision making.
- Communicate how the human brain interprets and manipulates information.
- Understand human psychology from cognitive perspective and participate as an active recipient of cognitive phenomena around them.

LEARNING OUTCOMES:

- Think critically and analyze various cognitive phenomena of everyday experience often taken for granted.
- Describe, evaluate, and communicate the impact of researches done in the area of cognition.
- Understand the general principles and approaches used by cognitive psychologists.

UNIT I:

CHAPTER 1-- KNOWLEDGE

11 HRS

Declarative versus procedural knowledge; Organization of declarative knowledge: concepts and categories, semantic-network models, schematic representations, determining categories by similarity – the prototype approach, the exemplar approach; Organization of procedural knowledge: the production of procedural knowledge, nondeclarative knowledge; Integrative models: combining representations, domain general cognition or domain specific cognition.

Self-study: Parallel processing.

UNIT II:

CHAPTER 2 - LANGUAGE

13 HRS

Language acquisition: stages of language acquisition, nature and nurture, beyond the first years, animal language; Reading: perceptual issues in reading, lexical processes in reading; Language and thought: differences among languages, bilingualism and dialects, slips of the tongue, metaphorical language; Language in a social context: speech acts, conversational postulates, gender and language, discourse and reading comprehension; Neuropsychology of language: brain structure involved in language, aphasia, autism, lesion studies and event-related potentials research.

Self-study: Processes of language comprehension: speech perception, semantics and syntax.

UNIT III:

CHAPTER 3-- PROBLEM SOLVING AND CREATIVITY

11 HRS

Meaning of problem solving; The problem-solving cycle; Types of problems: well-structured problems, ill-structured problems and the role of insight; Obstacles and aids to problem solving: mental sets, entrenchment and fixation, negative and positive transfer, incubation; Knowledge and problem solving: organization of knowledge, innate talent and acquired skill.

Self-study: The Gestalt approach: representation, restructuring.

UNIT IV:

CHAPTER 4 - REASONING AND DECISION MAKING

13 HRS

Deductive reasoning: conditional reasoning, syllogistic reasoning, linear syllogisms, aids and obstacles to deductive reasoning, mental models in deductive reasoning; Inductive reasoning: reaching causal inferences, categorical inferences, reasoning by analogy, development of inductive reasoning; Neuroscience of reasoning;

Judgment and decision making: classical decision theory, satisficing, elimination by aspects, naturalistic decision making, group decision making, heuristics and biases; Neuroscience of decision making.

Self-study: Role of emotions in decision making.

UNIT V: COGNITIVE NEUROSCIENCE

12 HRS

Viewing the structures and functions of the brain: post-mortem studies, studying live nonhuman animals, studying live humans; Brain disorders: stroke, brain tumor; Intelligence and neuroscience: intelligence and brain size, intelligence and neurons, intelligence and brain metabolism, the P-FIT theory of intelligence.

Self-study: Biological basis of intelligence testing.

REFERENCES:

1. Sternberg, R.J. (2009). *Cognitive Psychology*. (5thEdn.). Belmont, CA: Wadsworth, Cengage Learning.
2. Sternberg, R.J. & Sternberg, K. (2012). *Cognitive Psychology*. (6thEdn.). Belmont, CA: Wadsworth, Cengage Learning.
3. Goldstein, E.B. (2011). *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience*. (3rdEdn.). Belmont, CA: Wadsworth, Cengage Learning.
4. Anderson, J.R. (2015). *Cognitive Psychology and Its Implications*. (8thEdn.). New York: Worth Publishers.
5. Groome, D. (2014). *An Introduction to Cognitive Psychology*. (3rdEdn.). New York: Psychology Press.
