

## **DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES**

### **Programme: B. Tech (Minor in Psychology)**

### **Course Title: Thinking Process & Decision Making**

**Course Category: Minor**

**Course Code: HSMP 303**

**Credits: 3 (L-3)**

**Semester: 5<sup>th</sup>**

#### **Course Objectives**

To enable the student to understand and explain thinking processes and to explain the psychological aspects of various methods of problem solving and decision-making processes

**Internal: 50 Marks**

**Theory: 50 Marks**

**Total: 100 Marks**

**Time: 3 hrs**

#### **Instructions for Examiner**

The number of questions to be set will be five, one from each unit. The examinees will be required to attempt all five questions. All questions shall carry equal marks.

#### **UNIT I**

Thinking: definition. Basic elements of thought: Logical and natural concepts, propositions, images. How psychologist study cognitive process. Reasoning: definition. Sources of errors in reasoning: Role of mood state, Role of Belief, Confirmation bias, Hindsight bias. Physical reasoning. Brain and thinking process.

#### **UNIT II**

Decision making: Definition, Nature. Heuristics: availability, Representativeness, Anchoring and adjustments. Escalation of commitment: Getting trapped in bad decision. Emotion and Decision making. Naturalistic decision making. Brain and decision making.

#### **UNIT III**

Problem Solving: definition, Nature. Steps for problem solving. Methods for solving problems: Trial and Error, Algorithms, Analogy. Facilitating effective problem solving: The role of metacognitive process. Factors that interfere with effective problem solving: Functional fixedness, Mental set. Artificial intelligence: can machines really think?

#### **UNIT IV**

Language: Nature. Development of Language. Theories of language development. Basic components of language development: phonological, semantic. Language and thought: Do we think what we say or say what we think? Bi/multilingualism.

#### **Course Outcomes**

At the end of the course, student will be able to develop understanding of the cognitive processes involved in thinking and decision making and they will also learn about common cognitive biases and heuristics that can affect decision making.

#### **References**

1. Baron, R.A. (2020). Psychology, 5th ed. New Delhi: Pearson education.
2. Commer, R. & Gould, E. (2020). Psychology around Us. New Delhi: John Wiley & Sons Inc.
3. Coon,D.& Mitterer, J.O.(2013). Introduction to Psychology: Gateways to Mind and Behavior, 13th ed.Wadsworth, Cengage Learning
4. Feldman, R. (2011). Understanding Psychology,10th edition. New Delhi: Tata McGraw Hill.
5. Weiten, W. (2002). Psychology: Themes and Variations, 5th ed. New York: Brooks/Cole Publishing co.