

PSYCHOLOGY (855)

Aims:

- (i) To develop an understanding of human behaviour: the nature of individuals and of members of social groups.
- (ii) To develop an understanding of the methods of research and study employed in Psychology.
- (iii) To develop an appreciation of the practical value of Psychology and its applications in daily life.

CLASS XI

There will be **two** papers in the subject.

Paper I - Theory: 3 hours70 marks

Paper II- Practical Work:30 marks

PAPER - I (THEORY) – 70 Marks

Part I (20 marks) will consist of **compulsory** short answer questions relating to the fundamental aspects of the entire syllabus.

Part II (50 marks) will consist of **two** sections, A and B.

Candidates will be required to answer **two** out of **three** questions from Section A and **three** out of **five** questions from Section B. Each question in this part shall carry 10 marks.

SECTION A

1. The Subject Psychology

- (i) Definition of Psychology; Nature – bio science, social science or pure science; schools of thought – Structuralism, Functionalism, Behaviourism, Psychoanalysis, Gestalt psychology.

Definition of Psychology, subject matter / nature of Psychology as a bio science, social science or pure science. The eclectic approach of modern Psychology. Emergence of Psychology as an independent discipline - different views regarding the nature of this new subject. Approaches of James Watson and Freud. Main features of the schools of Structuralism, Functionalism and Behaviourism, Psychoanalysis, Gestalt psychology.

- (ii) Fields of Psychology – clinical, counselling, developmental, educational, organizational and social.

The general importance and aims of studying Psychology and its special benefits. Applications - different branches and the kind of work done in special fields - clinical, counselling, developmental, educational, organizational and social (in brief).

- (iii) Heredity and Environment – meaning of the term ‘heredity’; basic principles and mechanism of heredity. Meaning of the term environment; importance of both heredity and environment in behaviour.

The role of chromosomes; the laws of heredity: uniformity and variability. Significance of environment: physical and social. How both heredity and environment interact to produce behaviour.

2 Methods of Psychology

- (i) Scientific Methods in Psychology - observation, case study, surveys, psychological tests, experimentation – steps. Psychological tests and their uses.

The application of scientific methods in the study of behaviour. What is meant by scientific observation? Field study; controlled and uncontrolled observation; longitudinal and cross-sectional studies; the case history method; the experimental method - variables and controls - steps in an experiment; surveys and use of questionnaires/self reports. Meaning of samples - random, biased, representative – population. Psychological tests - definition, uses.

- (ii) Interpretation of research results – use of statistics in interpretation of data - understanding of why statistics is used (descriptive & inferential). Basic statistical concepts – statistics, sample, population.

Why statistics is used in Psychology - interpretation of findings: describing and summarizing data, comparing individuals/groups, investigating relationships between variables, predicting. Descriptive statistics - for summarizing scores. Inferential statistics - to determine whether observed differences between groups are likely/unlikely to have occurred by chance.

How scores are grouped into frequency distributions; central tendency of a frequency distribution - mean, median, mode and when each measure is used; dispersion: the extent to which scores are spread out - range, variance, standard deviation; why both central tendency and variability are important.

3. Attention and Perception

- (i) Nature of attention - its inner and outer determinants.

The importance of attention in perception - how both physical factors such as size, colour, movement, change, intensity, contrast and psychological factors such as need, interest and emotion determine attention and perception.

- (ii) Perceptual processes - difference between sensation and perception. Organizational principles of perception - laws, constancies, depth and colour perception.

Process involved in transforming sensation to perception. Important factors in perceptual process - figure and ground, laws of grouping: similarity, proximity, continuation, simplicity, good figure; constancy of size, shape and colour; factors involved in depth perception - monocular and binocular cues; how colour is perceived - biological and psychological factors attributes of colour - hue, brightness and saturation; laws of colour mixture; colour blindness, adaptation and after-images.

- (iii) Errors in perception - illusions of size and shape; what is meant by extra-sensory perception (ESP).

False interpretations - illusions: Muller-Lyer, Height -Width, Ponzo, Zoellner, Poggendorf; ESP - perceptions not based on any of the known senses (general understanding of ESP).

SECTION B

4. Emotions and Motivation

- (i) What is meant by emotion; the basic emotions.

Subjective and cognitive experience, physiological reactions and overt expression. Primary emotions - fear, anger, joy, sorrow, affection.

- (ii) Theories of emotion dealing with physiological, subjective and cognitive aspects.

James Lange, Cannon Bard, Schachter - Singer theories.

- (iii) What is meant by motives, needs and instincts; unconscious motives.

Motivation as an internal force generating certain behaviour - biological needs and homeostasis; instincts as unlearned and physiological desires; evidence indicating the existence of unconscious motives. Intrinsic - the desire to perform activities for their own sake.

- (iv) Theories of Motivation.

Pull and push theories, Optimum Arousal theory and Expectancy theory - Graphic representation of Maslow's Needs Hierarchy.

- (v) Social motives.

Three distinctively human motives: Achievement - accomplishing difficult tasks; Power - exerting influence over others; Aggression - learning and control of human aggression.

- (vi) Frustration - blocking of motives; conflict among motives.

Frustration as a result of motives not finding free or adequate expression. Different types of conflict among motives: approach-approach, avoidance-avoidance, multiple approach-avoidance.

5. Learning

- (i) What is meant by learning; how learning takes place - Classical and Operant conditioning; Insight learning, observational learning and learning styles.

Definition of learning - Pavlov and classical conditioning; Thorndike and Trial and Error; Skinner and Operant Conditioning; experiments, findings and principles established. Insight and observational learning - Kohler and Bandura's studies. Learning styles – auditory, visual and kinesthetic

- (ii) Learning disabilities: definition and types.

Characteristics of the disabilities - Dyslexia, dyscalculia, dysgraphia, dyspraxia. Adjustment problems and coping with academics.

6. Remembering and Forgetting

- (i) The memory system - how it works - different models.

Sensory memory, Short and Long term memory - encoding, storage, retrieval. Semantic and Procedural memory. Processing memory - the Atkinson Shiffrin Model and Parallel Distributed processing.

- (ii) Why and how forgetting occurs.

Trace decay, retro and pro active interference, amnesia - retrograde and anterograde; Alzheimer's disease. Dementia.

- (iii) How memory can be improved.

Attention, use of imagery, Mnemonic devices, application of principles of learning.

7. Thinking, Problem Solving and Creativity

- (i) What is meant by thinking.

Nature and elements of thinking: images, concepts and language - interdependence of language and thought; different kinds of thinking: convergent, divergent, creative, goal-oriented and aimless thinking.

- (ii) Concepts and how they are formed.

Definition - importance of concepts in thinking - artificial, natural, simple and complex concepts.

- (iii) Reasoning - how it is carried out; common errors in reasoning, how reasoning can be

made more effective. Decision making and problem solving - heuristics and algorithms.

Reaching specific conclusions from available information - deductive and inductive reasoning; common errors - faulty premises, biases, fallacy of single case, rationalization, hindsight. Improving reasoning - avoiding errors, examining premises and ambiguities, guarding against emotion. Decision making and problem solving - steps involved, optimum expected utility, means-end-analysis, analogy.

- (iv) Creative thinking - what is meant by convergent and divergent thinking; stages in creative thinking, how creativity can be fostered.

Use of divergent thinking in creativity - stages in creative thinking, preparation, incubation, illumination, verification/validation. How creativity may be encouraged: enrich knowledge and experience, encourage independence, curiosity and promote positive mood.

PAPER - II (PRACTICAL WORK) – 30 Marks

Candidates will be expected to have completed **two** studies / experiments from any chapter covered in Theory. Assessment will be based on a written report which should cover –

- (I) Aim
 (II) Basic concept : Definition of concepts used and related theory. Identification of variables – independent and dependent.
 (III) Method - (i) Sample of the Study
 (ii) Procedure followed (data-collection, nature of raw data)
 (iii) Treatment of Data
 (iv) Results & Discussion
 (v) Conclusion
 (IV) Bibliography

Mark allocation **per study** [15 marks]:

Basic Concept	3 marks
Method (correctness of procedure)	4 marks
Results and discussion	4 marks
Viva	4 marks