

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

CLASS XII

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

Paper I - Theory: 3 hours ...70 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. Intelligence and Ability

- (i) Intelligence: what is meant by intelligence - theories regarding the nature of intelligence; how intelligence is measured - the concept of IQ, intelligence tests – Individual Tests, Group Tests, Culture Fair Tests. Levels of intelligence and associated characteristics (from gifted through average to below average).

Different views regarding the nature of intelligence: general or multifaceted; quality or process; modern emphasis on social context; Intelligence: what is meant by intelligence - theories regarding the nature of intelligence; Theories of Intelligence: Two Factor Theory – Charles Spearman; Primary Mental Abilities – Thurstone; Raymond Cattell – Fluid and Crystallised Intelligence; Guilford's Structure of Intellect Model. Modern Theories: Information Processing; Triarchic Theory – Sternberg; Theory of Multiple Intelligence – Howard Gardner. How intelligence is measured - the concept of IQ; Intelligence Tests – Individual Tests - Stanford Binet, Wechsler, Group Tests – Raven's Progressive Matrices, Culture Fair Tests – Cattell's Culture Fair Test. Levels of

intelligence and associated characteristics (from gifted through average to below average).

- (ii) Aptitude, Achievement and Interest: meaning of these terms. Reason for their assessment and means of assessment (different tools/ tests) used.

What is meant by Aptitude - when aptitude needs to be assessed - the GATB (General Aptitude Test Battery); meaning and usefulness of Achievement tests; why and how Interest is measured - the SCII (Strong Campbell Interest Inventory).

2. Personality

- (i) What is meant by Personality.

Definitions of personality – Allport, Cattell, Eysenck.

- (ii) Theories of Personality: Type Theories, Psychoanalytic Theory - Freud's structure of personality; psycho-sexual stages of development; Post Freudians (in brief); Humanistic - Rogers and Maslow; Traits - Allport, Cattell; Social/Behavioural Learning - Bandura and Rotter.

Type Theory: Sheldon, Kreshtmer, Hippocrates, Friedman, Charak Samhita of Ayurveda. Types and stereotypes - the usefulness and dangers of categorizing personalities, e.g. introverts and extroverts. Psychoanalytic Theory of Personality: Freud's levels of consciousness, structure of personality - Id, Ego and Superego; principles on which they function; Psychosexual stages of development and fixation; Post Freudians: Erik Erikson, Horney; Humanistic theories of Rogers (concept of fully functioning persons) and Maslow (self actualization). Traits: Allport (central, secondary and cardinal traits), Cattell (source and surface traits). The five factor model of Costa and McCrae. Social Cognition and Social Learning theories of Bandura and Rotter.

- (iii) How personality is assessed: reports, inventories (MMPI), projective techniques - Rorschach Inkblot Test and Thematic Apperception Test.

The use of Self Reports - inventories/questionnaires in assessing Personality - an understanding of the MMPI (Minnesota Multiphasic Personality Inventory); what is meant by Projective Techniques - how the Rorschach Inkblot and TAT (Thematic Apperception Test) are used.

SECTION B

3. Lifespan Development

- (i) Meaning of Development, growth and maturation.

Why is the study of lifespan development important? Determinants – interaction of heredity and environment, context of development.

- (ii) Infancy - motor, cognitive development, socio-emotional development.

Motor – milestones; cognitive – Piaget's Sensory Motor Stage; socio-emotional development – emergence of attachment.

- (iii) Childhood - motor, cognitive development, socio-emotional development.

Motor development; cognitive development – Piaget's Theory (Preoperational, Concrete and Formal Operation); emergence of self – gender, emergence of peer relationships; moral development – Kohlberg's perspective – pre-conventional morality.

- (iv) Adolescence - physical changes, cognitive development, socio-emotional development; some major concerns.

Physical changes at puberty; Cognitive development – Piaget's Formal Operations Stage; Socio-emotional development - forming an identity, dealing with sexuality and gender; some major concerns – delinquency, substance abuse (drugs and alcohol) and eating disorders - bulimia, anorexia.

4. Stress and Stress Management

- (i) Meaning of stress - its basic nature.

Stress as a process - stressors (negative and positive events); results of overload; the stages of GAS or the General Adaptation Syndrome (Selye's model). Cognitive appraisal of stress – primary and secondary.

- (ii) Common causes of stress.

External/situational: major life events, minor hassles of everyday life, work-related causes, the physical environment.

Internal/dispositional: Personality variables-traits/types.

- (iii) Effects of stress on health and performance.

Upsets the internal mechanism and balance - immune system affected, hypertension, heart problems, ulcers, diabetes, asthma. Relation between stress and performance - burnout.

- (iv) Stress management - ineffective and effective strategies of handling stress.

Coping with stress: Ineffective strategies - defense mechanisms - rationalization, projection, reaction formation, regression, repression, displacement, sublimation; Effective strategies - relaxation training and yoga. Effective lifestyles – stress cycles – wellness and distress.

5. Psychological Disorders and Psychotherapy

- (i) Meaning of “Abnormal behaviour” - biological, psychological and socio - cultural perspectives. Principles of classification of psychological disorders with reference to DSM IV.

Different views of "abnormal" behaviour - the statistical stand - the biological/medical approach - the psychodynamic perspective - the sociocultural dimension; why classification of disorders is necessary - an understanding of the Diagnostic and Statistical Manual of Mental Disorders - IV.

- (ii) Characteristics of some psychological disorders: Anxiety - generalised, phobic, obsessive-compulsive; Mood - bi-polar, depression; personality - anti-social, histrionic, avoidant, dependent, passive-aggressive.

What is meant by anxiety - different forms of anxiety disorders: phobias, obsession - compulsive disorders; Mood disorders - characteristics of severe depression, manic-depressive or bipolar disorder; personality - anti-social, histrionic, avoidant, dependent, passive-aggressive.

- (iii) Schizophrenia - meaning; main types; characteristics.

Basic nature of Schizophrenia - characteristics of Disorganized Catatonic and Paranoid Schizophrenia.

- (iv) Psychotherapy - Psychoanalysis; Client-centred; Behavioural. Rehabilitation.

What is meant by Psychotherapy - central features of psychodynamic therapies - free association, dream analysis, transference and counter transference; the principles on which client centred therapy has been developed. Behavioural therapies based on classical and operant conditioning or modelling. Rehabilitation.

6. Social Thought and Social Behaviour

- (i) Social Perception - attribution or the process through which people try to understand the reasons for others' behaviour.

How people determine whether others' behaviour is a result of internal causes or external factors - biases in forming judgments (attribution).

- (ii) Social Influence- how people try to change others' behaviour; social norms; conformity and obedience - factors affecting them.

What is meant by social norms - why people conform to social norms and why they digress - Asch's study on conformity; why and when people obey others - Milgram's experiment.

7. Attitudes

- (i) Meaning of "Attitude" - the relationship between attitude, perception, belief and behaviour; how attitudes are formed and changed.

What are attitudes - the components of attitude; how far attitudes determine behaviours: the process of forming attitudes - how attitudes change: persuasion and cognitive dissonance.

- (ii) Prejudice - meaning of "prejudice" and discrimination; the origins of prejudice; how to combat prejudice. The Indian context.

An understanding of the meaning of prejudice and how it works in the form of discrimination - causes of prejudice: social learning, realistic competition, social categorization and stereotyping; ways in which prejudice can be resisted. Caste, community and gender stereotypes in the Indian context.

8. Applications of Psychology

with reference to:

- (i) Clinical and Counselling Psychology.

Role of a counsellor and a clinical psychologist in dealing with individuals, couples, families and groups.

- (ii) Educational (School) Psychology.

How Psychology helps to facilitate learning in school - students and teachers; individual problems: learning differences, teaching and evaluation techniques, school environment. Career counselling - how Psychology helps in the choice of a career - requirements of a field or job, testing individuals, matching individual and field/job.

- (iii) Organisational Psychology.

How Psychology helps to promote efficiency, well-being and profitability - study of factors involved. Recruitment, motivation, team building and leadership skills, marketing and consumer behaviour.

- (iv) Crime.

How Psychology helps towards: understanding criminals, rehabilitating them, preventing crime.

PAPER II (PRACTICAL WORK) – 30 Marks

Candidates will be expected to have completed **two** studies from those given below. 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 -
- Sample of the Study
 - Procedure followed (data-collection, nature of raw data)
 - Statistical Treatment of Data
 - Results & Discussion
 - Conclusion

The practical work will be assessed by the teacher and a Visiting Examiner appointed locally and approved by the Council.

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

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

A. Statistics

To study group differences in Examination results.

Groups: Any two classes or two sections of the same class with same subjects.

Raw Data: Summated scores on all subjects in the annual examination for each student.

Analysis: (i) Group analysis – Calculate mean scores (central tendency) and standard deviations (variability) for each group and make inter-group comparisons.

(ii) Individual analysis – Calculate Z (standard) scores for any two students from each class – one whose examination score is above the class mean and one whose examination score is below the class mean. Interpret the Z score in standard deviation units and indicate the percentage of scores that lie above/below the subject's score (use a table that gives the areas under the Normal curve corresponding to given values of Z).

(iii) Graphic Representation – bar diagram to depict the mean scores of both groups.

B. Attitudes

To study attitudinal differences regarding any one of the following – Fashion, Work/Lifestyle, Marriage.

Groups: Two generations (parents and children)

Or

Gender differences (boys and girls) of the same age-group (preferably from Class XI or XII).

Tools: to construct a simple 5-point scale (10-15 items) with positively and negatively worded statements.

Raw Data: Summated scores on all the statements for each respondent.

Analysis: (i) Calculate mean attitudinal scores for each group and make inter-group comparisons.

(ii) Short, structured interview schedule constructed and administered to 8-10 students in each group. The responses elicited can be used to draw inferences to explain the inter-group differences, if any.

C. Stress

To study the causes and effects of stress among school students.

Group: Class X or Class XI students

Tools: To construct two checklists - one indicating the potential stressors along with a 5-point rating scale indicating their frequency of occurrence (very often, often, sometimes, rarely, very rarely). The stressors should include dispositional/internal variables (personality attributes, cognitive appraisal) and situational/external variables (life events, environmental pressures – physical, social, cultural and academic stressors).

The second checklist should indicate the effects of stress (strain) – physical, psychological and behavioural along with their frequency of occurrence (on a 5-point rating scale).

Analysis : To determine the stressors and the effects that occur with the most to the least frequency and understand/explain each.

NOTE: No question paper for Practical work will be set by the Council.