

# UNIVERSITY GRANTS COMMISSION

## NET BUREAU

Code No. : 04

**Subject : PSYCHOLOGY**

### SYLLABUS AND SAMPLE QUESTIONS

Note :

There will be two question papers, paper-II and paper-III (Part-A & B). Paper-II will cover 50 objective Type Questions (Multiple choice, Matching type, True/False, Assertion-Reasoning type) carrying 100 marks. Paper-III will have two Parts-A and B; Paper III (A) will have 10 short essay type questions (300 words) carrying 16 marks each. In it there will be one question with internal choice from each unit (i.e., 10 questions from 10 units; Total marks will be 160). Paper-III (B) will be compulsory and there will be one question from each of the Electives. The candidate will attempt only one question (one elective only in 800 words) carrying 40 marks. Total marks of Paper-III will be 200.

#### PAPER - II

1. **Perceptual Processes**

Approaches to the Study of Perception : Gestalt and physiological approaches

Perceptual Organization : Gestalt, Figure and Ground, Laws of Organization

Perceptual Constancy : Size, Shape and Brightness, Illusion; Perception of Depth and Movements.

Role of motivation and learning in perception

2. **Learning Process**

Classical conditioning : Procedure, Phenomena and related issues

Instrumental learning : Phenomena, Paradigms and theoretical issues

Reinforcement : Basic variables and schedules

Verbal learning : Methods and materials, organizational processes

3. **Memory and forgetting**

Memory processes : Encoding, Storage, Retrieval

Stages of memory : Sensory memory, Short-term Memory (STM) and Long-term Memory (LTM)

Episodic and Semantic memory

Theories of Forgetting : Interference, decay, retrieval

4. **Thinking and Problem Solving**

Theories of thought processes : Associationism, Gestalt, Information processing

Concept formation : Rules and strategies

Reasoning : Deductive and inductive

Problem-solving : Type and strategies

Role of concepts in thinking

5. **Motivation and Emotion**

Basic motivational concepts : Instincts, needs, drives, incentives, motivational cycle

Approaches to the study of motivation : Psychoanalytical, ethological, S-R Cognitive, humanistic

Biological Motives : Hunger, thirst, sleep and sex

Social Motives : Achievement, affiliation, approval

Exploratory behaviour and curiosity

Physiological correlates of emotions

Theories of emotions : James-Lange, Canon-Bard, Schachter and Singer

Conflicts : Sources and types

6. **Human Abilities**

Intelligence : Biological, Social, Eco-cultural determinants

Theories of intelligence : Spearman, Thurston, Guilford

Individual and group differences : Extent and causes

Measurement of human abilities

7. **Personality**

Determinants of personality : Biological and socio-cultural

Approaches to the study of personality : Psychoanalytic, neo-freudian, social learning, trait and type, cognitive

Personality assessment : Psychometric and projective tests

Self-concept : Origin and development

8. **Research Methodology**

Research problems, hypothesis, variables and their operationalization

Types of psychological research

Methods of psychological research : Experimental, Quasi-experimental, case studies, field studies and cross-cultural studies.

Methods of data collection : Observation, interview, questionnaire, tests and scales.

Non-parametric tests

9. **Measurement and testing**

Test construction : Item writing, item analysis

test standardization : Reliability, validity and norms

Types of tests : Intelligence, aptitude, personality - characteristics and important examples

Attitude scales and interest inventories

Educational measurement and evaluation

10. **Biological Basis of Behaviour**

Receptors, effectors and adjuster mechanisms

Neural impulse : Origin, conduction and measurement

Sensory system : Vision and Audition

Human nervous system : Structure and functions

**PAPER - III (A)**

**[CORE GROUP]**

**Unit-I**

Signal detection theory, subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles. Ecological perspective on perception.

**Unit-II**

Learning theories : Hull, Tolman, Skinner

Cognitive approaches in learning : Latent learning, observational learning

Experimental analysis of behaviour : Behaviour modification, shaping Discrimination learning

Neurophysiology of learning

**Unit - II**

Models of memory : Atkinson and Shiffrin, Craik and Lockhart, Tulving

Semantic memory : Episodic, trace model and network model

Long-term memory : Retrieval cues, flashbulb memory, constructive processes in memory, eyewitness testimony, autobiographical memory

Biological basis of memory : The search for the engram, PET scan, and biochemical factors in memory

Improving memory : Strategies

#### Unit - IV

Cognitive strategies : Algorithms and heuristics  
Convergent and divergent thinking  
Decision-making; impediments to problem - solving  
Creative thinking and problem-solving  
Language and thought

#### Unit-V

Historical antecedents of motivation from Mechanism to Cognition  
Cognitive bases of motivation : Intrinsic motivation, Attribution, Competence  
Measurement of motives : Issues and techniques  
Cross-cultural perspectives of motivation : Achievement, Aggression  
Components of emotion : Physiological, expressive and cognitive  
Neural mechanism of emotion : Central and peripheral  
Measurement of emotions : Physiological, expressive and cognitive measures  
Current theories of emotions and facial feedback hypothesis  
Stress and coping : Reactions to stress, outcomes of stress

#### Unit-VI

Theories of intelligence : Cattell, Jensen, Sternberg, Goleman  
Creativity : Views of Torrance, Getzels, Guilford  
Intelligence and creativity : Relationship  
Abilities and achievement : Concept and role of emotional intelligence

#### Unit - VII

Clinical and growth approaches to personality  
Existential and humanistic theories of personality : Frankl, Rollo May, Maslow, Rogers  
Personality assessment : Projective, psychometric and behavioural measures  
Psychology of self : Western and Eastern perspectives, measurement of self

#### Unit-VIII

Research designs : Correlational, factorial, randomized block, matched group, quasi-experimental, time series design  
ANOVA : Randomized and repeated  
Correlational analysis : Partial, multiple and regression analysis  
Factor analysis : Assumptions, methods, rotation and interpretation

## **Unit-IX**

Psychological scaling : Purpose and methods  
Sources of bias in psychological testing  
Ethical issues in psychological testing  
Application of factor analysis in standardization of tests-with important illustrations

## **Unit-X**

Methods of Physiological psychology : Lesion and Brain Stimulation  
Sleep and waking : Stages of sleep, Disorders of sleep and Physiological mechanisms of sleep and waking  
Ingestive Behaviour : Drinking and its neural mechanism; hunger and its neural mechanism  
Endocrine system : Chemical and glandular

### **PAPER - III (B)** **[ELECTIVE/OPTIONAL]**

#### **Elective-I**

Current trends in Social Psychology  
Social cognition  
Social influence  
Prosocial behaviour  
Applied social psychology : Health, Environment and Law

#### **Elective-II**

Development processes : Nature, Principles and related concepts - maturity, experience factors in development : Biogenic, Psychogenic and Sociogenic  
Stages of Development : Theories of Development : Psychoanalytic, Behaviouristic and cognitive  
Various aspects of development : Sensory-motor, cognitive, language, emotional, social and moral

#### **Elective-III**

Human development and individual differences  
Motivation and learning  
Factors in educational achievement  
Social psychology of education  
Teacher effectiveness  
Guidance in schools : Needs, organizational set up and techniques  
Counselling : Process and areas

#### Elective-IV

Development of industrial and organizational psychology  
Selection processes in organization  
Organizational training  
Performance appraisal  
Motivation and work  
Leadership  
Work environment  
Organizational behaviour : Theories, socialization, effectiveness

#### Elective-V

Psychopathology : Concepts, classification and causes : clinical diagnostics  
Common clinical disorders  
Mental retardation  
Mental Health : Intervention models and psychotherapies

### SAMPLE QUESTIONS

#### PAPER-II

1. Delayed conditioning is known as  
(A) CS begins far before the US is presented  
(B) CR gets established but it changes  
(C) CS elicits the CR  
(D) CS is more powerful than CR

2. Match the items of *List-I* with *List-II*

<i>List-I</i>				<i>List-II</i>
A.	Needs			1. McDougall
B.	Instincts			2. Allport
C.	Sentiments			3. Murray
D.	Traits			4. Freud
(A)	A	B	C	D
	4	1	2	3
(B)	A	B	C	D
	3	4	1	2
(C)	A	B	C	D
	2	1	3	4
(D)	A	B	C	D
	1	3	4	2

3. Mohit is a young man who strives for excellence and feels satisfied when he can master a new task. Mohit has a need for
- (A) Competence
  - (B) Power
  - (C) Approval
  - (D) Achievement

**PAPER-III (A)**

1. How would you measure job satisfaction ?

Or

Explain the concept of time and motion study.

**PAPER-III (B)**

11. Define short-term memory and indicate its processes and functions.

Or

Discuss the causes, symptoms and treatment of general anxiety disorder.

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