

Junior Research Fellowship in Psychology

2017

Test Codes: SCA and SCB (both *short-answer* type)

The candidates for Junior Research Fellowship in Psychology are required to take short-answer type test on both Research Methodology (in the forenoon session) and Psychology (in the afternoon session). Calculator is not allowed. The syllabi for both the tests are given below.

Syllabus for Research Methodology

Test Code: SCA

- 1. Introduction:** Types of research, criteria of good research, exploring research problems, defining research problems, steps in research, and Principles of Theory Construction.
- 2. Research Design:** Features of good research design, Randomized Group, Randomized Block, Latin Squares, and Factorial Designs.
- 3. Methods in Psychological Research:** Cross sectional and longitudinal methods, Applied Behavioural Analysis, Experimental and Quasi- experimental methods, Case Study, Survey Research, Interview, Content Analysis, Projective Techniques, Ethnographic Method, and Discourse Analysis.
- 4. Sampling:** Population and Sample, Sampling and Non-sampling Errors, Simple Random Sampling and other sampling methods, sample size determination, probability and non-probability sampling methods.
- 5. Psychological Assessment:** Characteristics and classification of psychological tests, Item Writing, Item Analysis, Methods of Reliability and Validity, and Norms.
- 6. Statistical Analysis:** Types of data, Scrutiny of data, Graphical and Tabular representations of data, Normal probability curve, Testing of Hypothesis: parametric and non-parametric tests, Analysis of Variance, Analysis of Covariance, Simple, Multiple and Partial Correlations, Simple and Multiple Regressions, Principal Component Analysis, Factor Analysis, and Cluster Analysis.

Syllabus for Psychology

Test Code: SCB

1. Cognitive processes: Human Information Processing models, Theories of Attention, Principles of perception, Perceptual motor skills, Thinking and reasoning, Learning methods, Working memory, Human and Artificial Intelligence, Meta cognition, and contemporary theories of emotion.
2. Neuropsychological and Geriatric assessment: History and Assumptions of neuropsychology, Structure and functions of brain, Neuropsychological bases of cognitive process (attention, language, memory) and executive functions (fluency, working memory, planning, response inhibition, & set shifting).
3. Developmental psychology: Piaget's cognitive development, Vygotsky's socio-cultural theory, Language development, Moral reasoning of young children, Personality and Social Development.
4. Industrial and Organizational psychology: Taxonomic approach of job analysis, selection, methods of training, supervision and leadership, organizational climate, group morale, job satisfaction, structure of organization, organizational health and techniques of organizational development.
5. Educational psychology: School climate assessment, Teacher-pupil interaction, programmed learning, reading and writing motivation, and school counseling.