

PET PSYCHOLOGY SYLLABUS 2020

**1) Social scientific research:**

A). Meaning & characteristics of social scientific research.

B). Types of research:

(i). Experimental research.

a). Laboratory experiments. b). Field experiments.

(ii). Non-Experimental research.

a). Field studies. b). Ex-post facto. c). Survey research. d). Case study.

**2) Problem, Hypothesis, & Variables :**

(i). Meaning and characteristics of a problem.

(ii). Sources of stating a problem.

(iii). Important consideration in selecting a problem.

(iv). Types of problem.

(v). Meaning and characteristics of good hypothesis.

(vi). Formulating hypothesis.

(vii). Ways of stating a hypothesis.

(viii). Meaning and types of variables.

(ix). Important considerations in selecting variables.

(x). Techniques of controlling extraneous variables.

(xi). Techniques of experimental manipulation of variables.

**3) Sampling:**

(i). Population and sample.

(ii). Meaning and types of sampling.

(iii). Factors influencing decision to sample.

(iv). Probability sampling methods.

(a). Simple random sampling. (b). Stratified random sampling. (c). Area/Cluster sampling.

(v). Non-probability sampling.

(a). Quota sampling. (b). Accidental sampling. (c). Purposive sampling. (d). Systematic sampling.

(e). Saturation sampling. (f). Dense sampling.

**4) Techniques of data collection :**

(A). Questionnaire

(i). Various forms of questionnaire. (ii). Characteristics of good questionnaire.

(B). Interview

(i). Steps in conducting interview. (ii). Conducting the interview. (iii). Types of interview.

(a). Diagnostic interview. (b). Clinical interview. (c). Research interview. (d). Individual and group interview.

(iv). Advantages of interview.

(C). Observation

- (i) Types of observation.
- (a). Structured and unstructured observation. (b). Covert and overt observation.
- (ii). Advantages of observation.
- (iii). Conducting observational research.

**5) Research Designs:**

- (a). Meaning and purpose of research design.
- (b). Characteristics of good and research design.
- (c). Basic principles of experimental design.
- (i). Replication. (ii). Randomization (iii). Local Control.
- (d). Variance:
- (i).Types of variance: (ii). Experimental control of variances.

**6) Types of research design.**

- (i). Between groups design.
- (a). Randomized groups design.(b). Matched groups design. (c). Factorial design.
- (ii). Within-Groups design.
- (a). Single subject design. (b). Repeated measures design.

**7) Quasi-Experimental design.**

- (i). Meaning and Types of quasi experimental design.
- (ii). Time series design.
- (iii). Equivalent time series design.
- (iv). Non-equivalent control group design.

**8) Writing research proposal and research report.**

- (i). Structure and format of research report.
- (ii).Preparing a research proposal.

**9) The Science of Psychology: -**

- i. What is Psychology? -
  - a. Definition & goals b. Types of psychological professionals
- ii. Historical Perspectives in Psychology
  - a. Structuralism ;b. Functionalism c. Gestalt d. Psychoanalysis
- iii. Modern Perspectives in Psychology
  - a. Behavioural b. Humanistic c. Biopsychosocial d. Cognitive
- iv. Scientific Methods
  - a. Steps in scientific methods
  - b. Descriptive methods: Naturalistic, Observation, Case Studies
  - c. Experimental method: Laboratory experiment and field experiment
- v. Application: How to enhance your academic performance

**10) Biological Foundation of Behaviour: -**

- i. Neuron: Structure and function, synapse, neurotransmitters
- ii. Central Nervous System
  - a. The Brain- Structure and function of the brain
  - Cerebral hemispheres- The Spinal Cord: Structure and function
  - a. Autonomous Nervous System
  - b. Somatic Nervous System
- iii. Glandular system: Pituitary, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads.

- iv. Application: Peeking inside the brain – Clinical studies; EEG, CT, MRI, and PET.

**11) Sensation and Perception: -**

- i. Sensation
  - a. Definition, Sensory receptors, Sensory threshold, Subliminal perception, Habituation, Sensory adaptation
- ii. Definition of perception
- iii. Perceptual constancies: Size, shape and brightness
- iv. Gestalt principles of perception
- v. Perceptual illusion
  - a. Geometrical, movement
- vi. Application: Thinking about extra-sensory perception

**12) Motivation and Emotion: -**

- i. Definition of motivation
  - a. Concept of homeostasis, Maslow's hierarchy of needs
- ii. Types of motives
  - a. Physiological– Hunger, thirst, sleep, sex
  - b. Social – Achievement, affiliation, power, and aggression & hostility
- iii. Frustration and Conflict
- iv. Emotion
  - A. Definition
  - B. Elements of emotion
    - a. Physiology of emotion
    - b. Behavioural expression of emotion
    - c. Subjective experience
  - v. Application: Being happy

**13) Personality: -**

- i. Definition of Personality
- ii. Theories of Personality
  - a. Freud's Psychoanalytic Theory
  - b. Allport's Theory
  - c. Cattell's Theory
  - d. The Big Five Model
- iii. Assessment of Personality (I)
  - A. Personality Inventories
    - a. 16 PF
    - b. MMPI
    - c. NEO-PI
- iv. Assessment of Personality (II)
  - A. Behavioural assessment
    - a. Observation
    - b. Rating
  - B. Projective techniques
    - a. TAT
    - b. Rorschach's Ink Blot Test
    - c. Sentence Completion Test

- v. Application: Increasing self-efficacy through goal setting

**14) Learning: -**

- i. Definition of learning
- ii. Classical conditioning  
Pavlov's experiment, Extinction, Spontaneous recovery, Generalization, Discrimination, Higher-order conditioning
- iii. Operant conditioning  
Thorndike's laws of learning, Skinner's experiment, Positive reinforce, Negative reinforce, Schedules of reinforcement, Shaping
- iv. Cognitive learning theories  
Tolman, Kolher, Observational learning theory (Bandura)
- v. Application of Classical and Operant Conditioning

**15) Memory: -**

- i. Definition and process
- ii. Types of memory  
Sensory memory , Short term memory ,Long term memory
- iii. Types of long term memory  
Procedural , Declarative (Episodic, Semantic), Explicit and Implicit
- iv. Forgetting:  
Course of forgetting (Ebbinghaus' forgetting curve),Cause of forgetting, Encoding failure,Decay of memory traces, Interference, Motivated forgetting
- v. Application  
Improving memory, Keyword techniques, Method of loci, Encoding specificity, Organization of test material, Organization of lecture notes, Practice and rehearsal

**16) Intelligence: -**

- i. Definition of intelligence
- ii. Measurement of intelligence  
Concept in Measurement of intelligence (C.A., M.A., IQ)  
Test of Intelligence-Binet, Stanford Binet, Wechsler
- iii. Individual difference in intelligence  
Mental retardation: Meaning, causes and classification, Giftedness
- iv. Theories of intelligence - Spearman, Gardner, Sternberg
- v. Application  
Early childhood intervention – a means for boosting intelligence

**Source Books: -**

1. Ciccarelli, S. & Meyer, G. E. (2006). *Psychology*. New Delhi: Pearson Education.
2. Feldman, R. S. (8<sup>th</sup>ed.) (2008). *Understanding Psychology*. TMH.
3. Passer, M. W. & Smith, R. E. (2007). *Psychology: The Science of Mind and Behaviour*. New Delhi: Tata McGraw-Hill.
4. Coon, D. & Mitterer, J. O. (2007). *Introduction to Psychology: Gateways to Mind and Behaviour*. Singapore: Thomson Wadsworth.
5. Singh A.K. (2006). *Tests measurements and research methods in behavioural sciences* (Vth edition). Patna : Bharti bhavan.

6. McBurny D.H. (2002). Research methods U.S.A. Words Worth Thompson.
7. Kerlinger F.N. (1994) Fundamentals of behavioural research (IIIrd edition).
8. G.N. Prakash srivastava. : Advanced research methodology (1994). Radha publication New Delhi.
9. Borude .R. .R. (2005) : Sanshodhan Paddhatishastra. Pune: Pune Vidyarthi gruah.
10. Desai, B. & Abhyankar, S.C. (2007). Prayogic Manashastra and Sanshodhan Paddhati.

**Reference Books: -**

1. Lahye, B. B. (2003). *Psychology: An Introduction*. New Delhi: Tata McGraw-Hill.
2. Smith, D. B. (1908). *Psychology: Science and Understanding*. Boston: McGraw-Hill.
3. Smith, E. E., Hocksema, S. N., Fredrickson, B. & Loftus, G. R. (2003). *Atkinson and Hilgard's Introduction to Psychology*. Singapore: Thompson Wadsworth.
4. Zimbardo, P.G. and Weber, A. L. (1997). *Psychology*. N. Y.: Longman.
5. Baran, R. A. (2001). *Psychology*. New Delhi: Pearson Education Pvt. Ltd.
6. Morgan, C. T., King, R. A., Weisz, J. R. & Schopler, J. (1986). *Introduction to Psychology*. McGraw-Hill Book Co.
7. Benjamin, L. T. (1997). *History Of Psychology: Original Sources and Contemporary Research*. New Delhi: McGraw-Hill Companies.
8. Bernstein, D. A., Roy, E. J., Wickens, C. D. and Srull, T. K. (1988). *Psychology*. Boston: Houghton Mifflin co.
9. Pandit, Kulkarni and Gore (1999). *SamanyaManasashastra*. Nagpur: Pimpalpure Pub.
10. Bacchav, Badgujar&Shinde (2001). *SamanyManasashastra*. Nashik: SwayambhuPrakashan.
11. Inamdar, M. K., Gadekar, K. N. & Patil, A. M. (2005). *AdhunikManasashastra*. Pune: Diamond Publication.
12. Padhye, V. S. (2004). *Manasashastra-EkParichay*. Aurangabad: RenukaPrakashan.
13. Pandit, R. V., Borude, R. R. Abhnyakar, S. & Golvilkar, V. (2006). *Manasashastra*. Pune: Continental Publishing.