# Anekant Education Society's Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati Autonomous Department of Psychology

# T.Y.B.A. SEMESTER V & VI SYLLABUS TO BE IMPLEMENTED FROM 2021-2022

तुल्जासम् चतुरसंद महाविद्यालय वारामती

		Semester VI	Credits
PSY 3601	G-3	ORGANIZATIONAL PSYCHOLOGY OR	03
		<b>APPLIED PSYCHOLOGY II</b>	
PSY 3602	S-3	EXPERIMENTAL PSYCHOLOGY	03
PSY 3603	S-4	PSYCHOLOGY PRACTICAL: EXPERIMENTS	03

# SEMESTER VI SUBJECT CODE PSY 3601(A) G3: ORGANIZATIONAL PSYCHOLOGY

### Class: T.Y.B.A. (Semester – VI) Course Code: PSY3601(B) Credit: 03 A) Course Objectives:

Title of the Course: Organizational Psychology No. of Lectures: 48

To acquaint the students with:

- 1. The significance of Job satisfaction, Organizational Commitment, leadership models.
- 2. The importance of Organizational Behaviour, Organizational Development and Engineering Psychology.
- 3. Insight into the association between theory and practice in the field of I-O psychology.
- 4. Student learns to apply the theory concept in work life.
- 5. Explore the role of motivation in organizational settings.
- 6. Assess the impact of organizational structure and design on employee performance and well-being.
- 7. Explore the psychological factors influencing employee learning, training, and development.

### **B)** Course Outcomes:

- CO1. Students will gain knowledge of different facets of organizational functioning.
- CO2. Students will learn how to apply organizational theories at workplace.
- CO3. Students will apply theory and practice at organizational behaviour.
- CO4. Apply psychological principles to analyze and address challenges related to individual differences in the workplace.
- CO5. Propose strategies to enhance motivation in organizational contexts.
- CO6. Analyse and recommend improvements to organizational structure and design for optimal performance.
- CO7. Design and implement effective training and development programs based on psychological principles.

### **TOPIC 1: JOB SATISFACTION & COMMITMENT**

- 1.1: Job satisfaction and Organizational Commitment
- 1.2: Components of job satisfaction: Satisfaction with work, with pay and with Supervision
- 1.3: Measuring job satisfaction: Job Descriptive Index, Minnesota Satisfaction
- 1.4: Theories of job satisfaction: Motivator-Hygiene Theory, Dispositional approach
- 1.5: Application: Increasing Job satisfaction and Organizational Commitment

# **TOPIC 2: LEADERSHIP**

- 2.1: Leadership: Meaning, nature and styles of men and women
- 2.1: Approaches to leadership: Human Relations, Theory X & Theory Y

### [12 PERIODS]

[12 PERIODS]

- 2.3: Fiedler's Contingency Model
- 2.4: Specific leader skills
  - a. Leadership through power
  - b. Leadership through vision: Transactional and Transformational
  - c. Leadership through persuasion
- 2.5: Application: challenges like merger, takeover, diversification

### **TOPIC 3: ENGINEERING PSYCHOLOGY**

- 3.1: History and scope of engineering psychology
- 3.2: Time and Motion Study
- 3.3: Person-Machine System
- 3.4: Work space design
- 3.5: Application- advances in the field

# TOPIC 4: IMPORTANCE OF ORGANIZATIONAL BEHAVIOUR ANDORGANIZATIONAL DEVELOPMENT[12 PERIODS]

4.1: Meaning and nature of OB

- 4.2: Trends and challenges to OB- globalization, diversity, ethics
- 4.3: Meaning and nature of OD
- 4.4: Systems theory of OD
- 4.5: Application Organizational change and implementing change

### **REFERENCES:**

- 1. Aamodt, M.G. (2007). Industrial and organizational psychology: An applied approach. US: Thomson & Wadsworth.
- 2. Berry, L.M. (1998), reprint 2010. Psychology at work: An introduction to Industrial and Organizational Psychology. N.Y.: McGraw-Hill International Editions.
- 3. French (2015). Organization Development: Behavioral Science Interventions for Organization Improvement, 6/e, Pearson, Education.
- 4. Gadekar, Jamale, Rasal (2013). Audyogik va Sanghatanatmak Manasshastra. Diamond Publications, Pune.
- 5. Luthans, F. (1995). Organizational behavior (7th ed). New York: McGraw-Hill, inc.
- 6. McShane, et al. (2006). 1st reprint. Organizational behavior. N.D.: Tata McGraw-Hill.
- 7. Miner, J.B. (1992). Industrial-Organizational Psychology. N.Y.: McGraw-Hill.
- 8. Pandit, R., Kulkarni, A. V. & Gore, C. (1999). Manasashastra: Audyogik aani vyavasayik upayojan. Nagpur: Pimpalapure & Co.
- 9. Robbins, S.P. & Sanghi, S. (2007). Organizational behavior (11th Ed.). New Delhi: Pearson Education.
- 10. Robbins, S.P.; Judge, T.A; and Sanghi, A. (2009). Organizational behavior. N.D.: Pearson Prentice Hall.
- 11. Schultz, D. and Schultz, S. E. (2006). Psychology and work today. 8th ed. N.D.: Pearson Education.

### [12 PERIODS]

12. Singh (2015). Organizational Behavior: Text and Cases, 2/e - Pearson, Education.

13. Warren (2015). Occupational Psychology: An Applied Approach, 1/e, Pearson Education

### **Mapping of Program Outcomes with Course Outcomes**

Class: TYBA (Sem. V)Subject: PsychologyCourse: Organizational PsychologyCourse Code: PSY 3601(A)Weightage: 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct<br/>relation

		Programme Outcomes (POs)										
Course	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8				
Outcomes												
CO 1												
CO 2												
CO 3												
CO 4												
CO 5												
CO 6												
CO 7												

### Justification for the mapping

### **PO1: Research Related Skills**

CO1, CO4, CO5, CO6, CO7: Gaining knowledge of different facets of organizational functioning, applying psychological principles to analyze and address challenges, proposing strategies to enhance motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs involve research-related skills.

# **PO2: Effective Citizenship and Ethics**

CO2, CO4, CO7: Learning how to apply organizational theories at the workplace, applying theory and practice in organizational behavior, and designing and implementing effective training programs based on psychological principles contribute to effective citizenship and ethical considerations.

### **PO3: Social Competence**

CO3, CO4, CO6: Applying theory and practice in organizational behavior, applying psychological principles to address challenges related to individual differences, and analyzing and recommending improvements to organizational structure involve social competence.

# **PO4: Disciplinary Knowledge**

CO1, CO2, CO3, CO4, CO5, CO6, CO7: The entire course is dedicated to building disciplinary knowledge in the field of organizational psychology, covering different facets of organizational functioning, applying organizational theories, applying theory and practice in organizational behavior, applying psychological principles to analyze challenges, proposing strategies for motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs.

**PO5: Personal and Professional Competence** 

CO2, CO3, CO4, CO5, CO6, CO7: Learning how to apply organizational theories at the workplace, applying theory and practice in organizational behavior, applying psychological principles to address challenges, proposing strategies for motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs contribute to personal and professional competence.

## PO6: Self-directed and Life-long learning

CO1, CO2, CO3, CO4, CO5, CO6, CO7: Gaining knowledge of different facets of organizational functioning, learning how to apply organizational theories, applying theory and practice in organizational behavior, applying psychological principles to analyze challenges, proposing strategies for motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs involve self-directed learning and are applicable throughout one's life.

### **PO7: Environment and Sustainability**

CO4, CO5, CO6, CO7: Applying psychological principles to address challenges related to individual differences, proposing strategies to enhance motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs contribute to understanding environment and sustainability aspects in organizational contexts.

### **PO8:** Critical Thinking and Problem Solving

CO1, CO4, CO5, CO6, CO7: Gaining knowledge of different facets of organizational functioning, applying psychological principles to analyze challenges, proposing strategies for motivation, analyzing and recommending improvements to organizational structure, and designing effective training programs involve critical thinking and problem-solving skills.

# SEMESTER VI SUBJECT CODE PSY 3601(B) G3: APPLIED PSYCHOLOGY II

Class: T.Y.B.A. (Semester – VI) Course Code: PSY 3601(B) Credit: 03

**Title of the Course:** Applied Psychology II **No. of Lectures:** 48

### A) Course Objectives:

To acquaint the students with:

- 1. Familiarize students with problems and solutions in various applied fields.
- 2. Apprise students of the role of Psychologists in various applied fields.
- 3. Critically evaluate and apply theories of human development across the lifespan.
- 4. Evaluate the impact of major life transitions on family dynamics.
- 5. Apply psychological theories to analyze individual and team dynamics in sports settings.
- 6. Apply psychological principles to assess and enhance the mental health and wellbeing of military personnel.
- 7. Develop and implement effective interventions to address social issues and promote positive social change.

# **B)** Course Outcomes:

- CO1. Students will understand the role of Psychologists in various applied fields.
- CO2. Students will learn about problems and solutions in various applied fields.
- CO3. Analyze and apply developmental theories to understand and address psychological issues at different stages of life.
- CO4. Understand how significant life events, such as marriage, divorce influence family dynamics and functioning.
- CO5. Understand and apply theories of group dynamics, leadership, and motivation to enhance team performance.
- CO6. Develop skills in conducting psychological assessments and implementing interventions to support the mental health of military members.
- CO7. Acquire practical skills in designing and implementing interventions that contribute to positive social outcomes.

### **TOPIC 1 FAMILY AND DEVELOPMENTAL APPLICATIONS**(12 PERIODS)

1.1 Definition, Nature and Scope of Developmental Psychology

1.2 Issues of Adolescents: stress and strain, identity crisis, adjustment to physiological and psychological changes

- 1.3 Family and Marital Problems and Solutions
- 1.4 Love, Relationships-dating, live in and Break Ups

1.5 Psychology of Gender - gender roles, gender, lesbian, gay, bisexual, transgender, intersex and queer

### **TOPIC 2 SPORTS AND MILITARY PSYCHOLOGY**

2.1 Definition, Nature and Scope of Sports Psychology

2.2 Motivating sportspersons and Building team morale-Biorhythms, Training

2.3 Factors affecting performance of sportspersons - Audience Expectations,

environmental conditions, media

2.4 Use of psychological tests in selection in the Defense Services

2.5 Adjustment to Military Life and Role of Defense Institute of Psychological Research

# **TOPIC 3 DISASTER, REHABILITATION AND COMMUNITY PROBLEMS**

### (12 PERIODS)

(12 PERIODS)

- 3.1 Understanding the role of Psychologists in Disaster Management and Rehabilitation
- 3.2 Use of Psychological techniques in Disaster Management
- 3.3 Community Problems Urban Slums role of psychologists
- 3.4 Use of Psychology in Rehabilitation Work
- 3.5 Trauma and Post Traumatic Stress Disorder-PTSD

# **TOPIC 4: APPLICATION IN SOCIAL ISSUES**

4.1 Role of Psychologists in tackling Social Issues- interventions, research, policy level work

- 4.2 Psychology of Terror
- 4.3 Psychology of Corruption
- 4.4 Contribution of Psychology in Developmental Issues: health and rural development
- 4.5 Use of Psychology in dealing with Superstition

# **REFERENCES: -**

- 1. Bachav, A. M (2012). Applied Psychology. Chandralok Prakashan.
- 2. Bayne Rowan; Horton Ian (2003). Applied Psychology: Current Issues and New Directions. SAGE Publications Ltd; annotated edition.
- 3. David F. Marks, Michael Murray, Brian Evans, et al. (2006). Health Psychology: Theory, Research and Practice Fourth Edition. Sage Publications.
- 4. Palsane, Navare. (2010). Upyojit Manasshastra. Continental Publication, Pune.
- 5. Richard H. Cox (2002). Sport Psychology, McGraw –Hill Higher Education
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- 9. Taylor Shelley (2011). Health Psychology: Tata McGraw-Hill.
- 10. Warren G. S. (2014). Occupational Psychology: An Applied Approach. Pearson Education.
- 11. Weiten, W.; Lloyd M.; (2004). Psychology applied to Modern Life: Adjustment in 21st Century. Thomas Wadsworth Publications.

# (12 PERIODS)

# Mapping of Program Outcomes with Course Outcomes

Class: TYBA (Sem. VI)

Course: Applied Psychology II

Course Code: PSY 3601

**Subject:** Psychology

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

		Programme Outcomes (POs)									
Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8			
CO 1											
CO 2											
CO 3											
CO 4											
CO 5											
CO 6											
CO 7											

# Justification for the mapping

# PO1: Research Related Skills

CO1, CO3, CO4, CO5, CO6, CO7: Analyzing psychologists' roles, developmental theories, life events, group dynamics, leadership, motivation theories, and conducting interventions involve essential research-related skills.

# **PO2:** Effective Citizenship and Ethics

CO1, CO2, CO3, CO4, CO5, CO6, CO7: Understanding psychologists' roles, learning about problems and solutions, and conducting interventions involve considerations of effective citizenship and ethical practices.

# **PO3: Social Competence**

CO3, CO4, CO5, CO6, CO7: Analyzing developmental theories, life events, group dynamics, leadership, motivation theories, and conducting interventions involve social competence.

# PO4: Disciplinary Knowledge

CO1, CO2, CO3, CO4, CO5, CO6, CO7: The entire course builds disciplinary knowledge in applied psychology, covering psychologists' roles, problems and solutions, developmental theories, life events, group dynamics, leadership, motivation theories, and interventions.

# **PO5:** Personal and Professional Competence

CO3, CO4, CO5, CO6, CO7: Analyzing developmental theories, life events, group dynamics, leadership, motivation theories, and conducting interventions contribute to personal and professional competence.

# PO6: Self-directed and Life-long learning

CO1, CO2, CO3, CO4, CO5, CO6, CO7: Understanding psychologists' roles, learning about problems and solutions, analyzing developmental theories, life events, group dynamics, leadership, motivation theories, and conducting interventions involve self-directed learning and are applicable throughout life.

# **PO7: Environment and Sustainability**

CO6, CO7: Developing skills in conducting psychological assessments for military members

and designing interventions contributing to positive social outcomes involve considerations of environment and sustainability in applied psychology.

# **PO8:** Critical Thinking and Problem Solving

CO1, CO2, CO3, CO4, CO5, CO6, CO7: Understanding psychologists' roles, learning about problems and solutions, analyzing developmental theories, life events, group dynamics, leadership, motivation theories, and conducting interventions involve critical thinking and problem-solving skills.

### SEMESTER VI SUBJECT CODE PSY 3602 S3: EXPERIMENTAL PSYCHOLOGY

### **Course Objectives:**

- 1. To understand the Basic Concepts in Psychophysics
- 2. To understand theories in Psychophysics.
- 3. To understand the types of attention and its importance.
- 4. To Understand how biological factors affecting on attention process
- 5. Identify and analyze perceptual illusions and errors.
- 6. To understand learning and explore different types of learning.
- 7. To understand theories of thinking.

### **Course Outcome:**

CO 1: Foundations of Experimental Psychology:

Students will develop a strong foundation in experimental psychology, demonstrating a comprehensive understanding of psychophysics, perceptual processes, learning, memory, thinking, and problem-solving. They will be able to explain and apply fundamental concepts in each area.

CO 2: Psychophysical Proficiency:

Students will achieve proficiency in psychophysics, mastering concepts such as sensitivity, threshold, and various psychophysical methods. They will be able to compute measures such as RL (Difference Limen) and DL (Differential Limen) using methods like the Method of Limits, Method of Constant Stimuli, and Method of Average Error.

CO 3: Cognitive Processes Mastery:

Students will gain mastery over cognitive processes, particularly attention, perception, learning, memory, thinking, and problem-solving. They will understand the biological basis of attention and memory, allowing them to connect theoretical knowledge with real-world applications.

CO4: Problem-Solving and Reasoning Skills:

Students will develop advanced problem-solving and reasoning skills, demonstrating an understanding of different types of problems, approaches to problem-solving and reasoning theories. They will be able to apply these skills to analyze and solve complex problems.

CO5: Application of Learning and Memory in Daily Life:

Students will apply principles of learning and memory in practical contexts, understanding transfer of training, retention methods, and the biological underpinnings of learning and memory. They will demonstrate the ability to use psychological knowledge to enhance learning and memory in everyday situations.

CO 6: Theoretical Understanding of Attention and Thinking:

Students will gain a theoretical understanding of attention and thinking, including attention types, perceptual theories, and models of thinking. They will be able to critically analyze and discuss the theories that underpin these cognitive processes.

CO7: Recognition and Analysis of Perceptual Illusions:

Students will be able to recognize and analyze perceptual illusions and errors, understanding the characteristics and processes involved in perception. This outcome emphasizes critical thinking and observational skills in identifying and explaining perceptual phenomena.

# **EXPERIMENTAL PSYCHOLOGY**

### **TOPIC1: PSYCHOPHYSICS**

# [12 PERIODS]

1.1 Basic concepts in Psychophysics: Sensitivity, Threshold, Point of Subjective Equality, Constant and Variable Errors

- 1.2 Method of Limits: Computation of RL and DL
- 1.3 Method of Constant Stimuli: Computation of RL and DL
- 1.4 Method of Average Error: Computation of PSE & CE
- 1.5 Modern Psychophysics: Signal Detection Theory

### **TOPIC 2: PERCEPTUAL PROCESSES**

- 2.1 Attention: Nature, Definition & Types (Divided, Selective and Sustain Attention.)
- 2.2 Theories of Attention: Bottleneck Theory, Feature Integration Theory.
- 2.3 Biological basis of Attention
- 2.4 Perception: Nature, characteristics and processes involved
- 2.5 Perceptual Illusion (Errors)

### **TOPIC 3: LEARNING AND MEMORY**

### 3.1 Learning: Meaning & Types

- 3.2 Transfer of Training & Types
- 3.3 Memory: Meaning and Models
  - a) The Atikinson and Shiffrin Model
  - b) Tulving's Model: Episodic, Semantic and Procedural
- 3.4 Methods of Retention
- 3.5 Biological basis of learning and memory.

# **TOPIC 4: THINKING AND PROBLEM SOLVING**

- 4.1Thinking: Nature, definition and kinds
- 4.2Theories of thinking: Central Theory and Peripheral-Central Theory
- 4.3Problem Solving: Nature of problem, Types of problems, Understanding the problem,
- Approaches in problem solving, Factors influencing Problem Solving
- 4.4 Reasoning: Formal logic and Limitations
- 4.5 Decision Making: Stages and heuristics

[12 PERIODS]

[12 PERIODS]

# [12 PERIODS]

### **REFERENCES:-**

- 1. Anastasi, A. & Urbina, S. (2009). Psychological testing. N.D.: Pearson Education.
- 2. Christensen, L. B.; Johnson, R. B.; Turner, L.A. (2014). *Research Methods, Design and Analysis.* Pearson.
- 3. D'Amato, M.R. (2009). *Experimental psychology: Methodology, psychophysics and learning*. N.D.: Tata McGraw-Hill.
- 4. Desai, B. and Abhyankar, S.C. (2001). *Prayogik Manasashastra ani Samshodhan Paddhati*. Pune: Narendra Prakashan.
- 5. Kaplan, R. M. & Saccuzzo, D. P. (2005) *Psychological Testing, Principle, Applications and Issues*. Sixth Ed. Cengage Learning India, Pvt. Ltd.
- 6. Kerlinger, F.N. (1995). *Foundations of behavioral research*. New York: Rinehart Winston. Inc. Surjeet Publications.
- 7. Kothari, C.R. (reprint 2009). *Research methodology: Methods and techniques*. New Delhi: Wiley Eastern Ltd.
- 8. Matlin, M (1995). Cognition. Bangalore: Prism Books Pvt. Ltd.
- 9. McBurney, D. H. and White, T. L. (2007). Research methods. US: Cengage.
- 10. Myers, A. and Hansen, C. (2002). *Experimental Psychology*. U.S.: Thomson Wadsworth.
- 11. Postman, L. & Egan, J.P. (1949), reprint 2009. *Experimental psychology: An introduction*. ND: Kalyani Publication.
- 12. Singh, A.K. (2006). *Tests, Measurements and research methods in behavioral sciences.* Patna: Bhavan.
- 13. Solso, R. L., MacLin, M. K. (2008). *Experimental psychology: A case approach*. N.D.: Dorling Kindersley Pvt. Ltd.
- 14. Woodworth, R.S. & Schlosberg, H. (reprint 2008, 6<sup>th</sup> ed.), *Experimental Psychology*. ND: Oxford & IBH Publishing Co. Pvt. Ltd.
- 15. Zachmeister, J. E., Zachmeister, E. B., and Shaughnessy, J. J. (2009). *Essentials of research methods in psychology*. N. D.: Tata McGraw-Hill.

### **Mapping of Program Outcomes with Course Outcomes**

Class: TYBA (Sem. VI)

**Course:** Applied Psychology II

Subject: Psychology Course Code: PSY 3601

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

		Programme Outcomes (POs)										
Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8				
CO 1	3	3										
CO 2	3	3										
CO 3	3	3										
CO 4	3	3										
CO 5	3	3										
CO 6	3	3										
CO 7	3	3										

# Justification for the mapping

# PO1: Research Related Skills

CO1 emphasizes the development of research-related skills by requiring students to develop a strong foundation in experimental psychology, including psychophysics, perceptual processes, and problem-solving.

# **PO2: Effective Citizenship and Ethics**

CO7 promotes effective citizenship and ethical behavior by encouraging students to recognize and analyze perceptual illusions, demonstrating an understanding of the social implications of psychological phenomena.

# **PO3: Social Competence**

CO3 and CO5 contribute to social competence by fostering an understanding of cognitive processes and the application of learning principles in practical contexts, emphasizing the social relevance of psychological knowledge.

# **PO4: Disciplinary Knowledge**

CO1, CO2, CO3, CO4, CO5, CO6, and CO7 provide a strong foundation in disciplinary knowledge by covering key areas of experimental psychology, ensuring students acquire comprehensive knowledge in the discipline.

# **PO5: Personal and Professional Competence**

CO4, CO5, and CO6 contribute to personal and professional competence by developing advanced problem-solving and reasoning skills, promoting the application of psychological knowledge in everyday situations, and enhancing theoretical understanding of attention and thinking.

# PO6: Self-directed and Life-long learning

CO2, CO4, CO6, and CO7 support self-directed and life-long learning by encouraging students to critically analyze theories and models, fostering curiosity and a spirit of scientific inquiry.

# PO7: Environment and Sustainability

CO6 indirectly contributes to environmental and sustainability considerations by instilling critical thinking skills, observational abilities, and an understanding of the biological basis of cognitive processes, which can be applied to various environmental and sustainability issues.

# PO8: Critical Thinking and Problem Solving

CO4, CO6, and CO7 explicitly target critical thinking and problem-solving skills through the recognition and analysis of perceptual illusions, application of learning principles, and theoretical understanding of attention and thinking.

### SEMESTER VI

### **SUBJECT CODE PSY 3603**

### **S4: PSYCHOLOGY PRACTICAL: EXPERIMENTS**

### **Course Objectives:**

1. To familiarize the students with the use of elementary statistical techniques.

2. To acquaint the students with the basic procedure and design of psychology experiments.

3. To encourage students to learn practical application through study tour and visit.

4. To train them to conduct of experiments.

5. To understand and assess the learning of individuals.

6. To assess Threshold through the psychophysics methods.

7. To understand the retention methods through the memory experiments.

### **Course Outcome:**

CO1 Mastery of Elementary Statistical Techniques:

Students will acquire a strong command of elementary statistical techniques, with a focus on measures of variability such as range, standard deviation, and quartile deviation for grouped data. Students will apply statistical concepts to analyze and interpret experimental data effectively.

CO2: Practical Experience in Experimentation:

Students will gain practical experience in conducting and designing psychology experiments, selecting and applying experimental methods from various domains such as psychophysics, attention, perceptual processes, thinking and problem-solving, learning, and memory.

CO3: Application of Statistical Techniques in Experimental Design:

Students will demonstrate the ability to apply statistical techniques, including rank difference correlation, in the design and analysis of experiments in psychology.

CO 4: Skill Development in Psychophysics:

Students will develop skills in conducting psychophysical experiments, choosing and applying methods such as the method of limits, method of constant stimuli, and method of average error for determining just noticeable differences (JNDs) or difference thresholds.

CO5: Proficiency in Attention Experiments:

Students will demonstrate proficiency in designing and conducting experiments related to attention, including divided attention, span of attention, and the Stoop effect.

CO 6: Expertise in Perceptual Processes Experiments:

Students will gain expertise in designing and conducting experiments related to perceptual processes, exploring areas such as illusion, size constancy, retinal color zones, reaction time, and depth perception.

CO7: Understanding of Learning and Memory Experiments:

Students will gain a comprehensive understanding of designing and conducting experiments in learning and memory, addressing topics such as bilateral transfer, the

effect of knowledge of results, habit interference, recall and recognition, retroactive and proactive inhibition, and short-term memory.

**STATISTICS:** Statistics is a part of Practical paper. Teachers should conduct one lecture per week throughout the year for Statistics. See the "Guidelines for S4 Paper" for other details. Topics to be covered:

- 1. Measures of variability: Range, Standard Deviation and Quartile Deviation (Q1, Q3 and Q) for grouped data.
- 2. Rank Difference Correlation.

# I] PSYCHOPHYSICS (any two)

- 1. Method of Limits- RL or DL
- 2. Method of Constant Stimuli- RL or DL
- 3. Method of Average Error: PSE and CE

### **II] ATTENTION (any one)**

- 1. Divided attention
- 2. Span of attention
- 3. Stroop effect

### **III] PERCEPTUAL PROCESSSES (any two)**

- 1. Illusion
- 2. Size constancy
- 3. Retinal color zones
- 4. Reaction time
- 5. Depth perception

### IV] THINKING AND PROBLEM SOLVING (any one)

- 1. Effect of mental set on problem solving
- 2. Maze learning
- 3. Problems solving- Pyramid puzzle / Wiggly Blocks / Heart-and-Bow puzzle

### V] LEARNING (anyone)

- 1. Bilateral transfer
- 2. Effect of knowledge of results
- 3. Habit interference
- 4. Serial learning

### VI] MEMORY (any one)

- 1. Recall and recognition
- 2. Retroactive inhibition / Proactive inhibition
- 3. Short Term Memory

# STUDY TOUR/FIELD VISIT REPORT: Observational report

Students should visit an industry, mental hospital, general hospital, central jail, remand home, ashram, or correctional institute / organization, Rehabilitation Centers. *Note:* 

- 1. Study tour is mandatory.
- 2. The report of study tour/field visit should be submitted separately.

### **GUIDELINES FOR S-4 PAPER**

### **GUIDELINES FOR THE CONDUCT OF PRACTICAL**

- 1. Each batch of students should consist of 12 students.
- 2. If the number of students exceeds even by 1, a separate batch should be formed for conduct of practical.
- 3. Each batch will conduct practical twice per week with three lecture periods per session.
- 4. Total workload per batch will be 6 lecture periods.
- 5. In addition 1 separate lecture will be held for Statistics per week for the entire class.
- 6. Practical examination will be held at end of the semester.
- 7. Students should visit an industry, mental hospital, general hospital, central jail, remand home, ashram, or correctional institute / organization and Rehabilitation Centers. The teacher accompanying the students can claim TA/DA as per the University rules.
- 8. The concerned teacher should verify the completion of practical journal as well study report and issue a completion certificate signed by the head of the department.

## **GUIDELINES FOR ASSESSMENT (SEMESTER END EXAMINATION)**

- 1. While preparing the programme for final examination, the number of students in any given batch should not exceed 8.
- 2. The examiners should set paper on the spot.
- 3. Three subsets of question papers should be set per batch. These subsets should be considered as one set for billing purpose.
- 4. Before conducting the examination the external examiner should confirm that all the guidelines mentioned in the syllabus were strictly followed while teaching and conducting the practical. The examiner should also see whether the numbers of practical are conducted as per the specifications given in the syllabus.
- 5. While appearing for the final examination, students must produce the fair journal containing the report of the practical duly completed and signed by the concerned teacher and head of the department. Study Tour Report should be submitted separately.
- 6. External Examiner should allow students to appear for final examination only on producing the Completion Certificate.
- 7. The structure of the question paper for S-4 will be as follows:
  - Statistics (any two problems- each problem has 10 marks)
  - Question paper/ preference sheet for practical

- i. The question paper will contain 4 questions based on tests.
- ii. The student will give 2 preferences.
- iii. Out of the two preferences given by the student, the final choice of the question to be attempted will be of the external examiner

Study tour report- Complete observation and behavioral analysis

Break up of marks will be as follows: Internal

•	Statistics	20 marks
•	Study Tour Report	10 marks
•	Viva on Study Tour Report	10 marks
•	TOTAL MARKS	40 marks

Break up of marks will be as follows: Semester End

•	Instructions and conducting	10 marks
•	Practical Report	15 marks
•	Journal	20 marks
•	Practical Viva	15 marks
•	TOTAL MARKS	60 marks

- 1. The duration for practical examination will be of **three and a half** clock hours per batch.
- 2. Assessment of **statistics** and **practical report** should be done by the **external** examiner only.
- 3. Instructions & conducting, journal, viva, groups testing or study tour report should be assessed by the internal and external examiners. Average marks of the two examiners should be taken as final assessment.
- 4. Difference of more than 25% marks between the internal and external examiners in assessment on any of the items mentioned above should be settled mutually.
- 5. The following items should be considered for billing purpose, as per the revised rates of examiners' remuneration of Savitribai Phule Pune University. (Rates as per university booklet)
- 6. Total remuneration for the examination should be equally divided between the two examiners.

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### Mapping of Program Outcomes with Course Outcomes

Class: TYBA (Sem. VI)Subject: PsychologyCourse: Applied Psychology IICourse Code: PSY 3601Weightage: 1= weak or low relation, 2= moderate or partial relation, 3= strong or directrelation

		Programme Outcomes (POs)									
Course	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8			
Outcomes											
CO 1											
CO 2											
CO 3											
CO 4											
CO 5											
CO 6											
CO 7											

### Justification for the mapping

# **PO1: Research Related Skills**

CO2, CO3, CO4, CO5, CO6, CO7: The emphasis on practical experience in experimentation (CO2), application of statistical techniques in experimental design (CO3), skill development in psychophysics (CO4), attention experiments (CO5), perceptual processes experiments (CO6), and learning and memory experiments (CO7) directly aligns with developing research-related skills.

# **PO2: Effective Citizenship and Ethics**

CO2, CO3, CO5, CO6, CO7: Ethical considerations are integral in conducting psychology experiments. Students, while gaining practical experience (CO2) and applying statistical techniques (CO3) in various domains, will also need to consider ethical principles. Attention (CO5), perceptual processes (CO6), and learning and memory experiments (CO7) often involve ethical considerations in experimental design and participant treatment.

# **PO3: Social Competence**

CO2, CO3, CO5, CO6, CO7: Designing and conducting experiments in psychology involves interacting with participants and colleagues. Social competence is essential in the practical experience gained in experimentation (CO2) and the application of statistical techniques in experimental design (CO3). Additionally, attention (CO5), perceptual processes (CO6), and learning and memory experiments (CO7) may involve understanding social aspects influencing behavior.

# **PO4: Disciplinary Knowledge**

CO1, CO2, CO3, CO4, CO5, CO6, CO7: The entire curriculum, covering elementary statistical techniques (CO1), practical experience in experimentation (CO2), application of statistical techniques (CO3), psychophysics (CO4), attention experiments (CO5), perceptual processes experiments (CO6), and learning and memory experiments (CO7), contributes to building a strong disciplinary knowledge base in psychology.

### **PO5: Personal and Professional Competence**

CO2, CO3, CO4, CO5, CO6, CO7: The practical experience gained in experimentation (CO2), application of statistical techniques (CO3), and skill development in psychophysics (CO4) directly contribute to personal and professional competence. Additionally, expertise in attention (CO5), perceptual processes (CO6), and learning and memory experiments (CO7) enhances competence in specific subfields.

# PO6: Self-directed and Life-long learning

CO1, CO2, CO3, CO4, CO5, CO6, CO7: The entire curriculum emphasizes the development of skills and knowledge necessary for self-directed and life-long learning. Mastery of statistical techniques (CO1), practical experience in experimentation (CO2), and application of statistical techniques (CO3) provide a foundation for continual learning. Ongoing skill development in psychophysics (CO4), attention experiments (CO5), perceptual processes experiments (CO6), and learning and memory experiments (CO7) further supports this outcome.

# PO7: Environment and Sustainability

# **PO8:** Critical Thinking and Problem Solving

CO1, CO2, CO3, CO4, CO5, CO6, CO7: All course outcomes, from mastering statistical techniques (CO1) to gaining practical experience in experimentation (CO2) and applying statistical techniques in experimental design (CO3), involve critical thinking and problem-solving skills. Designing and conducting experiments in psychophysics (CO4), attention (CO5), perceptual processes (CO6), and learning and memory (CO7) further enhance these skills.

### 1: Question Paper Pattern: for practical

	Set: A / B /C
	Seat No
	Batch No
_	

### Programme of Practical Examination in Psychology (S-4) At T. Y. B. A. Model Question Paper Examination March / April-

Centre:	
Date:	Time:
College	

# **Instructions:**

- 1. Student should give two preferences for any two tests/ two preferences for any two experiments.
- 2. Draw neat diagrams or graphs if necessary.
- 3. Attach this question paper to your answer sheet, don't take it home.

Preference	Sr. No.	Tests
	1	
	2	
	3	
	4	
	5	

# Required material for test/experiment:

2-
3-
4-
5-

1-

Signature: Name:

Signature: Name:

Internal Examiner

External Examiner

# Anekant Education Society's Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati Autonomous Department of Psychology

Programme of Practical Examination in Psychology (S-4) At T. Y. B. A. Examination .....

Name of the college: ... ... Date:

Examination Centre: ..... Batch:....

		Instru	uctions	and cond	luction (10)	Journal			Practical Viva (15)				Practical.	Total	
Sr.	Seat No						(20)							Report Writing	(60)
110.	110.													(15)	
		Int. (10)	Ext. (10)	Total (20)	Average (10)	Int. (20)	Ext. (20)	Total (40)	Average (20)	Int. (15)	Ext. (15)	Total (30)	Average (15)	15	
1															
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Internal Examiner Sign.: Name: External Examiner Sign.: Name: