New Syllabus as per NEP-2020 for 4 years Major and 3 years MDC Programme of University of Calcutta

Psychological Foundation of Education

University of Calcutta (2nd Semester)

Major: EDC/H/CC/2/2 Minor: EDC/M/1/1 MDC: EDC/MD/CC/1/2 or CC/2/2

Prof (Dr.) Mita Banerjee

MA (Education), BEd, PhD Former First Vice Chancellor, Kanyashree University, Nadia Former First Vice Chancellor, Murshidabad University (Add'l Charge) Former Pro-Vice Chancellor, Adamas University, Barasat, West Bengal Former Dean, School of Education and Professor Emeritus, Adamas University Former First Vice Chancellor, WBUTTEPA, West Bengal, India Former Professor, Department of Education, University of Calcutta

Dr. Pragyan Mohanty

MA (Education), MEd, MPhil (Education), PhD (Education) Principal, Seth Soorajmull Jalan Girls' College, Kolkata



25B, Beniatola Lane; Kolkata-700 009 www.ritapublication.com/www.ritapublication.in

SYLLABUS

UNIVERSITY OF CALCUTTA

Major: EDC/H/CC/2/2 Minor: EDC/M/1/1 MDC: EDC/MD/CC/1/2 or CC/2/2

PSYCHOLOGICAL FOUNDATION OF EDUCATION

Unit-1: Relation between Psychology and Education

- Meaning and definition of Education and Psychology and their relationship.
- Learning: Concept and characteristics.
- Memorization and Forgetting: Process of memorization, causes of forgetting and economical ways of improving memorization.
- Personality: Concept, definition, Personality traits.

Unit-2: Stages and Types of Human Development and their Educational Significance

- Piaget's cognitive development theory.
- Erikson's psycho-social development theory.
- Kohlberg's moral development theory.
- Vygotsky's social development theory.

Unit-3: Intelligence

- Concept of intelligence.
- Theories of Intelligence by Spearman, Thorndike and Guilford.
- Types and uses of intelligence tests.
- Concept of Emotional Intelligence and EQ.

CONTENTS

1. Relation between Psychology and Education

1-187

1.1. Meaning and Definition of Psychology 2

- 1.1.1. Meaning of Education 2
- 1.1.2. Definition of Psychology 3
- 1.1.3. Nature of Psychology 4
- 1.1.4. Scope of Psychology 5
- 1.1.5. Basic Psychological Process 6
- 1.1.6. Fields of Psychology 7
- 1.1.7. Schools of Psychology 8
- 1.1.7.1. Structuralism 9
- 1.1.7.2. Functionalism 10
- 1.1.7.3. Behaviourism 11
- 1.1.7.4. Gestalt Psychology 12
- 1.1.7.5. Hormic Psychology 13
- 1.1.7.6. Psychoanalysis 14
- 1.1.7.7. Field Theory 15
- 1.1.7.8. Holistic Psychology 17
- 1.1.7.9. Purposivism 18
- 1.1.8. Relationship of Psychology with Other Disciplines 19
- 1.1.8.1. Psychology and Economics 19
- 1.1.8.2. Psychology and Political Science 19
- 1.1.8.3. Psychology and Education 20
- 1.1.8.4. Psychology and Biological Sciences 20
- 1.1.8.5. Psychology and Physical Sciences 21
- 1.1.8.6. Psychology and Medical Sciences 21
- 1.1.8.7. Psychology and Engineering 22
- 1.1.8.8. Psychology and Cognitive Sciences 23
- 1.1.8.9. Psychology and Environmental Sciences 23
 - 1.1.9. Current Trends: Changing Face of Psychology 24

1.2. Meaning and Definition of Education 24

- 1.2.1. Concept of Education 25
- 1.2.1.1. Philosophical Concept of Education 25
- 1.2.1.2. Sociological Concept of Education 26
- 1.2.1.3. Political Concept of Education 26
- 1.2.1.4. Economical Concept of Education 26
- 1.2.1.5. Psychological Concept of Education 27
- 1.2.1.6. Scientific Concept of Education 27
- 1.2.1.7. Modern Concept of Education 27
 - 1.2.2. Meaning of Education 28
- 1.2.2.1. Wider or Broader Meaning of Education 29
- 1.2.2.2. Narrow Meaning of Education 31
 - 1.2.3. Definition of Education 33

1.3. Relationship between Education and Psychology 35

1.4. Educational Psychology 36

- 1.4.1. Meaning of Educational Psychology 37
- 1.4.2. Definition of Educational Psychology 38
- 1.4.3. Historical Background of Educational Psychology 39
- 1.4.4. Characteristics of Educational Psychology 40
- 1.4.5. Nature of Educational Psychology 41
- 1.4.6. Scope of Educational Psychology 42
- 1.4.7. Objectives of Educational Psychology 44
- 1.4.8. Functions of Educational Psychology 45
- 1.4.9. Implications of Educational Psychology to Classroom Situations 46
- 1.4.10. Methods of Educational Psychology 47
- 1.4.10.1. Introspection Method 47
- 1.4.10.2. Observation Method 49
- 1.4.10.3. Experimental Method 54
- 1.4.10.4. Interview 57
- 1.4.10.5. Case Study Method 65
- 1.4.10.6. Questionnaire 72
- 1.4.10.7. Survey Method 76

1.5. Learning: Concept and Characteristics 79

- 1.5.1. Meaning of Learning 80
- 1.5.2. Definition of Learning 81
- 1.5.3. Nature of Learning 82
- 1.5.4. Characteristics of Learning 84
- 1.5.5. Domains of Learning 87
- 1.5.6. Levels of Learning 88
- 1.5.7. Principles of Learning 88
- 1.5.8. Learning as an Active Process 90
- 1.5.9. Learning is a Result of Experience or an Outcome 90
- 1.5.10. Types of Learning 91
- 1.5.10.1. Factual Learning 91
- 1.5.10.2. Associative Learning 92
- 1.5.10.3. Conceptual Learning 92
- 1.5.10.4. Procedural Learning 92
- 1.5.10.5. Generalization based Learning 93
- 1.5.10.6. Principles and Rule Learning 93
 - 1.5.11. Importance of Learning 93
 - 1.5.12. Theories of Learning 95
- 1.5.12.1. Thorndike's S-R Theory or Trial and Error Theory 95
- 1.5.12.2. Classical Conditioning Theory of Pavlov 102
- 1.5.12.3. Operant Conditioning Theory of Skinner 111
- 1.5.12.4. Insightful Learning Theory 119

1.6. Memorization 122

- 1.6.1. Meaning of Memory 122
- 1.6.2. Types of Memory 123
- 1.6.3. Phenomenon of Memory 124
- 1.6.3.1. Registration or Learning 124
- 1.6.3.2. Retention 126
- 1.6.3.3. Recall 126
- 1.6.3.4. Recognition 127
 - 1.6.4. Factors affecting Memory 127
 - 1.6.5. Information Processing Approach 127
- 1.6.5.1. Sensory Memory Stage 128
- 1.6.5.2. Short-term Memory (Immediate Memory) Stage 128
- 1.6.5.3. Long-term Memory (Permanent Memory) Stage 129
 - 1.6.6. Strategies for Effective Memorization 131
 - 1.6.7. Role of Teacher regarding Memory Training 132

1.7. Forgetting 133

- 1.7.1. Meaning and Definition of Forgetting 134
- 1.7.2. Characteristics of Forgetting 134
- 1.7.3. Nature of Forgetting 135
- 1.7.4. Theories of Forgetting 136
- 1.7.5. Causes of Forgetting 136

1.8. Personality 138

- 1.8.1. Meaning of Personality 138
- 1.8.2. Definition of Personality 140
- 1.8.3. Nature of Personality 141
- 1.8.4. Determinants of Personality 141
- 1.8.4.1. Biological Determinants 141
- 1.8.4.2. Social Determinants 143
- 1.8.4.3. Culture Determinants 144
 - 1.8.5. Different Views about Personality 144
 - 1.8.6. Characteristics of Personality 146
 - 1.8.7. Types of Personality 146
- 1.8.7.1. Hippocrate's Typology 147
- 1.8.7.2. Kretschmer's Typology 147
- 1.8.7.3. Sheldon's Typology 148
- 1.8.7.4. Jung's Typology 149
- 1.8.7.5. Spranger's Typology 149
 - 1.8.8. Traits of Personality 150
 - 1.8.9. Approaches of Personality 151
- 1.8.10. Measurement of Personality 152
- 1.8.10.1. Self-Reporting Methods 153
- 1.8.10.2. Observational Methods 156
- 1.8.10.3. Projective Techniques 157
 - Exercise 160

2.	Stages an	d Types o	of Human	Development	and
	their Edu	cational S	bignificanc	e)	

188-263

2.1. Growth and Development 189

- 2.1.1. Meaning of Growth 189
- 2.1.2. Meaning of Development 190
- 2.1.3. Characteristics of Growth 191
- 2.1.4. Characteristics of Development 192
- 2.1.5. Influence of Nature and Nurture on Growth and Development 192
- 2.1.6. Approaches to Study Growth and Development 193
- 2.1.7. Factors influencing Growth and Development of Child 193
- 2.1.8. Principles of Development 196
- 2.1.9. Relationship between Growth and Development 198
- 2.1.10. Differences between Growth and Development 199

2.2. Stages and Sequence of Growth and Development 200

2.3. Piaget's Cognitive Development Theory 203

- 2.3.1. Meaning of Cognitive Development 203
- 2.3.2. Characteristics of Cognitive Development 204
- 2.3.3. Factors Affecting Cognitive Development 205
- 2.3.3.1. Biological Factors 205
- 2.3.3.2. Environment Factors 205
 - 2.3.4. Cognitive Development: Piaget's Theory 206
 - 2.3.5. Basic Cognitive Concepts 206
 - 2.3.6. Piaget's Stages to Cognitive Development 207
- 2.3.6.1. Sensorimotor Stage (Birth to 18-24 Months) 207
- 2.3.6.2. Pre-operational Stage (2-7 Years) 208
- 2.3.6.3. Concrete Operational Stage (7-11 Years) 209
- 2.3.6.4. Formal Operational Stage (11 Years onwards) 211
 - 2.3.7. Educational Implications of Different Stages of Cognitive Development Theory 213
 - 2.3.8. Criticisms of Cognitive Development Theory 214

2.4. Erikson's Psychosocial Development Theory 215

- 2.4.1. Meaning of Psychosocial Development 215
- 2.4.2. Characteristics of Psychosocial Development 216
- 2.4.3. Psychosocial Development: Erikson's Theory 217
- 2.4.4. Erikson's Major Role in developing Psychosocial Development Theory 221
- 2.4.5. Approaches of Psychosocial Development Theory 222
- 2.4.6. Educational Implications of Erikson's Theory of Psychosocial Development 222
- 2.4.7. Criticism of Erikson's Theory of Psychosocial Development 224

2.5. Kohlberg's Moral Development Theory 225

- 2.5.1. Meaning of Moral Development 226
- 2.5.2. Characteristics of Moral Development 227
- 2.5.3. Aspects of Moral Development 227
- 2.5.4. Factors affecting Moral Development 228
- 2.5.5. Role of Teachers in Moral Development 229
- 2.5.6. Moral Development: Kohlberg's Theory 230
- 2.5.7. Observations made by Kohlberg Explaining Human Development 233
- 2.5.8. Educational Implications of Moral Development Theory 234
- 2.5.9. Criticism of Moral Development Theory 235

2.6. Vygotsky's Social Development Theory 236

- 2.6.1. Meaning of Social Development 236
- 2.6.2. Characteristics of Social Development 237
- 2.6.3. Factors Affecting Social Development 238
- 2.6.4. Role of Teachers in Social Development 239
- 2.6.5. Social Development during different Stages of Life 239
- 2.6.5.1. During Early Childhood 239
- 2.6.5.2. During Late Childhood 240
- 2.6.5.3. During Adolescence 241
- 2.6.5.4. During Adulthood 242
- 2.6.5.5. During Middle Age 242
- 2.6.5.6. During Old Age 243
 - 2.6.6. Social Development: Vygotsky's Theory 243
 - 2.6.7. Key Concepts of Social Development 244
 - 2.6.8. Scaffolding 245
 - 2.6.9. Applications of the Theory 246
- 2.6.10. Importance of Social Development 246
 - Exercise 247

3. Intelligence

3.1. Concept of Intelligence 264

- 3.1.1. Meaning of Intelligence 264
- 3.1.2. Theoretical Background of Intelligence 266
- 3.1.3. Definition of Intelligence 267
- 3.1.4. Nature of Intelligence 267
- 3.1.5. Features or Characteristics of Intelligence 268
- 3.1.6. Types of intelligence 269
- 3.1.7. Role of Heredity and Environment as determinants of Intelligence 269
- 3.1.7.1. Role of Heredity 270
- 3.1.7.2. Role of Environment 270
 - 3.1.8. Development of Intelligence 271

264-344

3.2. Theories of Intelligence 271

- 3.2.1. Unitary or Monarchy Theory of Intelligence 271
- 3.2.2. Spearman's Two-Factor Theory of Intelligence 271
- 3.2.3. Thorndike's Multi-Factor Theory of Intelligence 273
- 3.2.4. Thurstone's Group-Factor Theory of Intelligence 273
- 3.2.5. Howard Gardner's Theory of Multiple Intelligence 275
- 3.2.6. Sternberg's Triarchic Theory of Intelligence 279
- 3.2.7. Guilford's Structure of Intellects Theory of Intelligence 280

3.3. Types and Uses of Intelligence Tests 282

- 3.3.1. Meaning of Intelligence Test 282
- 3.3.2. Purposes of Intelligence Test 283
- 3.3.3. Classification of Intelligence Tests 284
- 3.3.4. Uses of Intelligence Test 296
- 3.3.5. Advantages of Intelligence Tests 297
- 3.3.6. Limitations of Intelligence Test 298
- 3.3.7. Difference between Verbal Test and Non-verbal Test of Intelligence 299
- 3.3.8. Difference between Individual and Group Tests of Intelligence 300
- 3.3.9. Intelligence Quotient (IQ) 300
- 3.3.10. Education and its Effect on Intelligence Quotient (IQ) 304

3.4. Emotional Intelligence 305

- 3.4.1. Meaning of Emotional Intelligence 306
- 3.4.2. History of Emotional Intelligence 309
- 3.4.3. Definition of Emotional Intelligence 310
- 3.4.4. Nature of Emotional Intelligence 312
- 3.4.5. Bases of Emotional Intelligence 313
- 3.4.6. Factors affecting Emotional Intelligence 314
- 3.4.7. Various Model of Emotional Intelligence 315
- 3.4.7.1. Ability Model of Emotional Intelligence 315
- 3.4.7.2. Bar-On Mixed Model of Emotional Intelligence 317
- 3.4.7.3. Goleman Mixed Model of Emotional Intelligence 318
 - 3.4.8. Applications of Emotional Intelligence 318
 - 3.4.9. Emotional Intelligence in Indian Context 319
- 3.4.10. Components of Emotional Intelligence 322
- 3.4.10.1. Personal Competence 322
- 3.4.10.2. Social Competence 323
 - 3.4.11. Advantages of Emotional Intelligence 325
 - 3.4.12. Educational Implication of Emotional Intelligence 325
 - 3.4.13. Emotional Quotient (EQ) 326
 - 3.4.14. Differentiating among Intelligence Quotient (IQ), Emotional Quotient (EQ) and Spiritual Quotient (SQ) 328
 - Exercise 329