# University of Pune Department of Adult, Continuing Education & Extension

# Syllabus for Ph.D. Entrance Test

Subject:Adult, Continuing Education & Extension (Interdisciplinary)Maximum Marks: 100Times Allowed: 2 hrs

#### Pattern for the Subject-Paper -2<sup>nd</sup>

Q 1: Attempt all 20 objective type sub-questions with multiple choices: 1 mark each. Total Marks 20.

Q 2: Attempt any 2 questions out of 4. Short-note type 10 marks each, Total marks: 20

Q 3: Attempt any 2 questions out of 4. Critical note type 15 marks each, Total marks: 30

Q 4: Attempt any 1 question out of 2. Essay type 30 mark

#### **Unit 1 : Concepts and Terminologies**

- i. Andragogy and pedagogy
- ii. Literacy and its types traditional, functional, mass, legal, technological
- iii. Adult education, adult learning, continuing education
- iv. Lifelong learning
- v. Development concept, meaning and its indicators, population education, social justice with respect to quality of life
- vi. Extension education, field outreach, community participation: Meaning and Importance, approaches to enlist Community participation, organizational base for community participation.
- vii. Formal education, non-formal education, informal education, incidental learning

# Unit 2 :( A) Theory of Lifelong Learning

- i. Social Learning
- ii. Action Learning
- iii. Cognitive Learning
- iv. Experiential Learning
- v. Non formal, formal education and Informal education
  (B) Methods, Tools, techniques and learning material for lifelong learning
- i. Skills, values, attitudes and knowledge in the curriculum
- ii. Different instructional models/ methods
- iii. learning materials for adults
- iv. Teaching aids conventional, non-conventional, modern
- v. Socialization and popular education as learning tools / strategies
- vi. The skill based curriculum

## **Unit 3 : Higher education and lifelong learning**

- i. Strategies for bringing extension, as the third dimension of higher education system.
- ii. Models for extension work monitoring, evaluation and the award of an academic credit for the extension work in the postgraduate departments and in the colleges.
- iii. Design, type, methods and implementation of extension projects.
- iv. Impact of globalization and liberalization on lifelong learning, characteristics/ indicator of LLL.
- v. Open learning systems Open University, extension and lifelong learning.

# **Unit 4:Research Design**

- i. Descriptive research
- ii. Exploratory research
- iii. Experimental research
- iv. Field research
- v. Evaluation research
- vi. Archival research

# **Unit 5: Methods, Tools and Techniques**

- i. Action research concept and methods
- ii. Methods of research; qualitative & quantitative
- iii. Participatory research techniques
- iv. Preparation of research proposal/outline
- v. Methods of data collection, interpretation
- vi. Programme evaluation techniques concurrent, summative formative
- vii. The research report

## Unit 6: Sampling and sampling methods

- i. Sample and population, parameters and statistics.
- ii. Variables and attributes; sampling and non-sampling errors;
- iii. Types of sampling

# **Unit7: Measurement and Statistical Techniques**

- i. Measurement: nominal, ordinal, interval and ratio.
- ii. Collection, organization and presentation of data.
- iii. Measures of central tendency and dispersion- mean median, mode, standard deviation, variance, covariance and correlation coefficients.
- iv. Correlation and regression analysis.
- v. Probability, distribution, events spaces.
- vi. Joint, marginal and conditional probability under conditions of certainty and uncertainty.
- vii. Random variable: expectation and distribution.
- viii. Addition and multiplication theorems.
- ix. Probability distribution, discrete and continuous and expected values.
- x. Normal t-test, chi-square, t-test.
- xi. Types of estimators and their properties.
- xii. Sampling distribution for sample mean and proportion.
- xiii. Point and Interval estimation.
- xiv. Null and alternate hypothesis.
- xv. Level of significance and level of confidence, confidence limits and critical region;
- xvi. Tests of significance- Type I and II errors.
- xvii. Statistical package for social sciences (SPSS), Computing Tools & Techniques