## MPS COURSE UNIT STRUCTURE (Syllabus)

#### MPS - 01: STATISTICAL METHODS FOR POPULATION STUDIES

#### **Block 1: Some Basic Mathematical Tools**

Unit 1: Elementary Mathematical Tools in the Field of Population

Unit 2: Interpolation and Graduation Unit 3: Elementary Matrix Algebra

Unit 4: Concepts of Differentiation and Integration

## Block 2: Basic Measures of Statistics, Elements of Probability Theory & Probability Distributions

Unit 5: Basic Measures of Statistics

Unit 6: Elements of Probability Theory

Unit 7: Probability Distributions

### **Block 3: Statistical Methods Used in Population Data Analysis**

Unit 8: Correlation and Regression

Unit 9: Multivariate Techniques-I

Unit 10: Multivariate Techniques-II

## **Block- 4: Sampling Design and Statistical Inference**

Unit 11: Sampling Designs

Unit 12: Statistical Inference

Unit 13: Tests of Significance

# MPS-02: CONCEPTS IN SOCIAL SCIENCES AND SOME IMPORTANT ISSUES IN INDIAN SOCIETY, CULTURE AND ECONOMY

# Block1: Anthropology, Sociology, Psychology and Some Issues in Indian Society and Culture

Unit 1: Basic Concepts and Forces of Social Change and Caste System in India

Unit 2: Marriage and Family in India

Unit 3: Scheduled Tribes in India: Situation, Problems and Policies

Unit 4 Social Psychological Concepts and Issues in Population Sciences

## Block 2: Economics and Some Issues in Indian economy

Unit 5: Basic Concepts in Economics

Unit 6: Economic Development Strategies through Five Year Plans

Unit 7: Indian Economy: Issues and Policies

#### MPS-03: INTRODUCTION TO POPULATION STUDIES

Block 01: Introduction to Population Studies and Sources of Population Data.

Unit 1: Introduction to Population Studies

Unit 2: Sources of Population Data

## Block 02: Age-Sex Structure and Evaluation and Adjustment

Unit 3: Age-Sex Structure and Population Composition

Unit 4: Appraisal of the Quality of Age Sex-Data

Unit 5: Evaluation and Adjustment of Errors in Age-Sex Data

#### MPS-04: NUPTIALITY AND FERTILITY

## **Block 01: Nuptiality: Concepts & Measures**

- Unit 1: Concepts and Basic Measures of Nuptiality
- Unit 2: Estimation of Age at Marriage
- Unit 3: Age at Marriage in India

## Block 02: Basic Concepts and Measures of Fertility and Reproduction

- Unit 4: Fertility Studies: Concepts and Sources of Data
- Unit 5: Measures of Fertility and Reproduction
- Unit 6: Indirect Methods of Estimation of Fertility

## Block- 03: Framework for and Synthesis of Fertility Analysis

- Unit 7: Age Pattern of Fertility: Empirical Pattern and Mathematical Modelling
- Unit 8: Framework for and Synthesis of Fertility Analysis
- Unit 9: Reproductive Motivations

## Block- 04: Fertility Transition in Some Developed and Developing Countries

- Unit 10: Fertility Transition
- Unit 11: Large Scale Surveys: Substantive Findings

## MPS-05: MORBIDITY, MORTALITY AND PUBLIC HEALTH

#### **Block-01: Basic Concepts and Measures of Morbidity**

- Unit 1: Basic Concepts and Analysis of Health and Morbidity Statistics
- Unit 2: International Classification of Diseases and Causes of Death
- Unit 3: Epidemiology and Public Health, Burden of Disease

#### **BlocI-02: Basic Concepts and Measures of Mortality**

- Unit 4: Importance of Mortality Studies: Concepts, Definitions and Differentials
- Unit 5: Health Transition, Mortality Concepts and Patterns
- Unit 6: Measures of Mortality

#### Blocl-03: Life Table and Indirect Methods of Mortality Estimation

- Unit 7: Life Table Techniques
- Unit 8: Model Life Table Systems, Multiple Decrement Life Tables
- Unit 9: Indirect Methods of Mortality Estimation

#### MPS-06: SPATIAL DISTRIBUTION, MIGRATION AND URBANIZATION

## **Block-01: Spatial Distribution: Measures and Patterns**

Unit 1: Spatial Distribution of Population

Unit 2: Population Redistribution

### Block-02: Migration: Concepts, Measures, Determinants and Consequences

Unit 3: Internal Migration: Concepts, Determinants and Consequences

Unit 4: Direct Methods of Estimating Migration

Unit 5: Indirect Measures of Net Internal Migration

Unit 6: Migration Models

Unit 7: International Migration: Trends, Types, Determinants and Consequence

## Block-03: Urbanization: Concepts, Measures, Patterns and Consequences

Unit 8: Urbanization: Concepts and Definitions

Unit 9: Measurements of Urbanization and Urban Structure

Unit 10: Urbanization process in Developed and Developing Countries Unit 11: Recent Trends and Prospects of the Process of Urbanization

Unit 12: Urban Problems and Planning

## MPS-07: DYNAMICS OF AGE-SEX STRUCTURE AND POPULATION PROJECTIONS

#### **Block-01: Dynamics of Age-Sex Structure**

Unit 1: Dynamics of Age Structure Unit 2: Dynamics of Sex Structure

## **Block 2: Population Estimates and Projections**

Unit 3: Population Estimates and Projections Unit 4: Sub-National Population Projections

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#### **MPS-08: POPULATION AND DEVELOPMENT**

### Block-01: Population and Development: Linkages and Theories

- Unit 1 (a): Concepts and Indicators of Development
- Unit 1 (b): Population Growth and Development: Interrelationship
- Unit 2: Population Theories
- Unit 3: Theories of Population and Development

#### Block - 02: Population and Development: Resources and Planning Perspectives

- Unit 4: Natural and Capital Resources
- Unit 5: Human Resources: Qualitative Aspects
- Unit 6: Human Resources: Quantitative Aspects

## Block – 03: Social Development and Environment: Concepts & Implications

- Unit 7: Concepts of Social Change and Development
- Unit 8: Link Between Population Growth, Environment and Social Imbalances
- Unit 9: Environmental Degradation: Policy and Programme for Better Environment
- Unit10: Sustainable Development and Resources, Effect of Population Growth and Industrialization

## MPS-09: POPULATION POLICY, PROGRAMME MANAGEMENT AND EVALUATION

#### **Block-1: Population Policies & Programmes**

- Unit 1: Population Policy: Concepts and Issues
- Unit 2: Fertility Influencing Policies
- Unit 3: Mortality Influencing Policies
- Unit 4: Migration Influencing Policies
- Unit 5: Population Policies and Programmes in Some Selected Countries

## **Block-2: Population Programme Management**

- Unit 6: Management: A Brief Introduction
- Unit 7: Features of Population Programme Management
- Unit 8: Quality of Care in Family Planning Programme

#### **Block-3: Evaluation of Family Planning Programme**

- Unit 9: Evaluation of Family Planning Programme: Concept, Definitions and Data Requirements
- Unit 10: Evaluation of Family Planning Programme Execution
- Unit 11: Economic Evaluation of Family Planning Programmes
- Unit 12: Evaluation of Intermediate Impact Objective
  - Unit 13: Evaluation of Fertility Impact of Family Planning Programmes

#### MPS-10: RESEARCH METHODOLOGY

## Block – 01: Basic Concepts and Sampling Techniques

- Unit 1: Introduction to Research Methodology
- Unit 2: Measurement
- Unit 3: Some Elementary Ideas about Sampling Techniques and their Applications
- Unit 4: Qualitative Research Methods

#### Block - 02: Research Methods

- Unit 5: Research Design
- Unit 6: Methods of Data Collection
- Unit 7: Data Processing, Analysis and Report Writing

#### MPS-11: COMPUTER APPLICATIONS TO POPULATION DATA

#### **Block-01: Computer Applications: Concepts and Demographic Packages**

- Unit 1: Introduction to Computer
- Unit 2: Introduction to Micro-Soft Office (MS-Office)
- Unit 3: Demographic Software Packages
- Unit 4: Introduction to Internet and Info-POPLINE

#### MPS-12: GENDER ISSUES IN POPULATION STUDIES

- Block-01: Gender Issues in Population Studies
- Unit 1: Gender Issues in Population Studies
- Unit 2: Autonomy, Empowerment and Status of Women
- Unit 3: Gender Issues in Population: Evidence from India

#### **MPS-13: REPRODUCTIVE HEALTH**

## Block-01: Reproductive Health: Concepts, Theories and Issues

- Unit 1: Introduction to Reproductive Health and Physiology of Human Reproduction
- Unit 2: Maternal Mortality, Morbidity and Menopause
- Unit 3: Infertility: Causes, Consequences and Measurements
- Unit 4: Reproductive Health Issues and Sexually Transmitted Infections
- Unit 5: Theories on Reproductive Health Behaviour and Reproductive Rights

## MPS-14: BIO-STATISTICS (Optional)

#### Block-01: Bio-statistical Concepts and Methods

- Unit 1: Introduction to Biostatistics
- Unit 2: Study Designs used in Medical Statistics
- Unit 3: Survival Analysis

## MPS-14: URBAN AND REGIONAL PLANNING (Optional)

## Block-01: Concepts, Theories & Issues

Unit 1: Human Settlements

Unit 2: Concepts and Theories of Urban Development

Unit 3: Urban Planning: Concepts and Elements

Unit 4: Regional Planning: Theories

Unit 5: Regional Development: Concepts and Needs

Unit 6: Planning for Metropolitan City and Region: A Case of Mumbai

#### **MPS-15: HISTORICAL DEMOGRAPHY**

## **Block-01: Historical Demography**

Unit 1: Introduction to Historical Demography

Unit 2: Sources of Historical Data

Unit 3: Methods of Historical Demographic Research

Unit 4: Biological and Historical Migration

Unit 5: Census Administration in British India

Unit 6: History of Indian Population