PhD Entrance Test Syllabus for Ph.D. in Public Health

The PET (Ph.D. Entrance Test) for Ph.D. in Public Health consists of two parts:

- Part I: Research Methodology (50 marks) and
- Part II: Subject Specific (Related to Public Health for 50 marks)

Total Marks for Ph.D. Entrance Test: 100 Marks

SYLLABUS

Part I: Research Methodology (50 Marks)

1) **Introduction to Research and Research Problem:** Meaning of research, types of research, Objectives of research, Research and Scientific Method, Sources of research problem, Criteria / Characteristics of a good research problem, Errors in selecting a research problem, Scope and objectives of research problem, defining a research problem (Real life example or case study), formulation of research hypotheses, Qualities of a good Hypothesis.

2) **Research Design and Literature Review: Research Design**- Concept and Importance in Research, Features of a good research design, research designs – Experimental & Analytical research designs (informal and formal), Literature survey- Definition of literature and survey, need of literature survey, objectives of literature survey, sources of literature review. Critical literature review– Identifying gap areas from literature review and strategies of literature survey, Errors in research.

3) **Data Collection, Measuring, Sampling and Scaling:** Classification of data, benefits and drawbacks of data, evaluation of data, qualitative methods of data collection, types of data analysis, Sampling, sample size, sample design- concept of probability sampling and non- probability sampling, attitude measurement and scaling, types of measurements, criteria of good measurements, classification of scales.

4) **Data Analysis:** Testing of hypothesis and Goodness of Fit: Definition of null and alternative hypothesis, students 't' distribution, Chi-square distribution, F-test, analysis of variance techniques, introduction to non-parametric tests. Regression Analysis – Simple Linear Regression, Multiple linear Regression, Correlation and Regression Analysis. Introduction to factor analysis, discriminant analysis, cluster analysis, multidimensional scaling, Multidimensional measurement, and factor analysis.

5) **Report, Research Proposal and Funding Agency:** Need of effective documentation, types of reports and their format. Essentials of a research proposal. Different funding agencies for research. Research briefing, presentation styles, elements of effective presentation, writing of research paper, presenting, and publishing paper, patent procedure, ethical issues.

Reference Books:

a. Dr. C. R. Kothari, Research Methodology: Methods and Trends, New Age International Publishers, 3rd Edition, 2014.
b. Ranjit Kumar, Research Methodology: A Step by Step Guide for Beginners, SAGE Publications Ltd., 2014.
c. Wayne Goddard and Stuart Melvill, Research Methodology: An Introduction, Juta and Company Ltd. 2004.

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Part II: Subject Specific Paper - Public Health (50 Marks)

No.	Subject	Syllabus (Select 5)	Weightage out of 50 marks
		Introduction to Public Health	5 marks (10%)
		Universal health coverage and universal access	5 marks (10%)
		What are the core functions of Public Health?	5 marks (10%)
		Sustainable Development Goals related to Health	5 marks (10%)
		Social Determinants of Health	5 marks (10%)
		Burden of Disease	5 marks (10%)
1	Public Health	Role of Gender, Equity, and Rights in Public Health	5 marks (10%)

References

1) Introduction to Public Health

   MJ Schneider - 2016 - books.google.com

2) Intersectionality and Health: An Introduction.

   L Mullings, AJ Schulz - 2006 - psycnet.apa.org

3) Structural Determinants of Aboriginal Peoples' Health

   C Reading, M Greenwood - Determinants of Indigenous Peoples' ..., 2015 - books.google.com

4) Social Determinants of Health

   M Marmot, R Wilkinson - 2005 - books.google.com

5) An Introduction to Epidemiology

   TC Timmreck - 2002 - books.google.com