

INDIAN INSTITUTE OF PUBLIC HEALTH GANDHINAGAR
(A University established under IIPHG Act, 2015 of Gujarat)

Syllabus for Entrance Exam of PhD Programme in Public Health

Overview

The entrance examination shall focus on research methodology (section I) and second portion shall focus on public health (Section II).

Section I: Research Methodology

| Topics | Weightage |
|---|------------------|
| Introduction to Research Meaning of research, research paradigm, types of research, research problem, formulating problem statement, aim, objectives and research questions | 10% |
| Literature review Types of literature review, literature search, identifying research gaps, writing literature review, conceptual framework, theoretical framework, analytical framework | 10% |
| Research Design Research design, types of research designs, population, sample, variables, hypothesis, determination sample size, sampling techniques, selection of appropriate research design | 20% |
| Data Collection Classification of data, benefits and drawbacks of data, evaluation and management of data, qualitative methods of data collection, types of measurements, criteria of good measurements, classification of scales. | 20% |
| Data Analysis & Report writing Data cleaning, Descriptive and inferential statistics, qualitative data analysis, steps of report writing | 20% |
| Ethics in research General principles on ethical considerations involving human/animal subjects, ethical review procedures, Institutional ethics committee, its organization and functions, general ethical issues. | 20% |

Suggested books:

- 1) Research Design: Qualitative, Quantitative and Mixed Methods Approaches (Fifth Edition);
By John Creswell and J. David Creswell, Sage Publications
- 2) Research Methodology: A Step-by-Step Guide for Beginners; By Ranjit Kumar, Sage Publications
- 3) IAPSM's Textbook of Comprehensive Research Methodology (2024). Chief Editor: Sanjay Zodpey, Jaypee Brothers Medical Publishers
- 4) Methods in Biostatistics for Medical Students and Research Workers. 7th Edition (2018); By B K Mahajan, Jaypee Brothers Medical Publishers

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Section II: Public Health

| Public Health | Weightage |
|--|------------------|
| Introduction to Public Health Core functions of public health, universal health coverage and universal access, Sustainable Development Goals related to health, health care systems, health sector planning, planning commission, NITI Ayog, demography & family planning, national health programmes – nutrition, maternal and child health, mental health, adolescent health, elderly care | 20% |
| Epidemiology Definition of epidemiology, Epidemiological triad, burden of disease concept, India burden of disease estimates, proportion, ratio, incidence, prevalence, odds ratio, relative risk, attributable risk, attributable fraction, ecological study, cross sectional study, cohort study, case control study, randomised controlled trials, selection bias, information bias, confounding, disease surveillance, public health screening, sensitivity and specificity | 20% |
| Occupational and Environmental Health Definition of occupational and environmental health, elements of industrial safety, elements of Industrial hygiene, environmental hazards and sources, climate change and impact on environment and health, occupational diseases, environmental disasters | 20% |
| Health Policy and Management Globalization and health, economic evaluation of health, health economics, cost benefit and cost-effective analysis, health insurance, health care financing, health sector reforms, national health programs in India, policies and program formulation, implementation of health programs, monitoring and analyzing program outcomes, resource allocation | 20% |
| Social & Behavioural sciences and global health definition of health, disease, illness, sickness and disorder, understand health and wellbeing through biomedical, social, behavioural, economic, political, regional, spatial, cultural and environmental influence, lifestyle and disease, health equity, health disparities, gender and health, health promotion, global health, decolonization, migration and health, urbanization & health | 20% |

Suggested books:

- 1) Review of Preventive and Social Medicine. 14th Edition (2022); By Vivek Jain, Jaypee Brothers Medical Publishers
- 2) IAPSM's Textbook of Community Medicine. 2nd Revised Edition (2021); Editor-AM Kadri, Jaypee Brothers Medical Publishers
- 3) National Health Programs of India. 14th edition (2022); By J Kishore, Century Publication.
- 4) Social and Behavioural Science for Health Professionals. 1st Edition (2016); By Brian P. Hinote and Jason Adam Wasserman, Rowman & Littlefield Publishers.