

# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956) **Grade 'A++' Accredited by NAAC** 

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# **CHOICE BASED CREDIT SYSTEM**

(CBCS)

(with effect from 2022-23 Batches)

Curriculum for Master in Public Health

Amended upto AC-49/2024, Dated 25/04/2024

# **Amended History**

- 1. Approved in AC-42/2022, Resolution No. 4.4, Dated 26/04/2022.
- 2. As Amended in AC-42/2022 [Resolution No. 10.4.i], Dated 26/04/2022.
- As Amended in AC-44/2022 [Resolution No. 6.6], Dated 09/12/2022.
   As Amended in AC-48/2023 [Resolution No. 6.5], Dated 12/12/2023.
- 5. As Amended in AC-49/2024 [Resolution No. 3.10 ii], Dated 25/04/2024.

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**Resolution No. 4.4 of Academic Council (AC-42/2022)**: Resolved to accept synchronization of Semester I syllabus of Master in Public Health (MPH) Program & Master in Hospital Administration (MHA) Program and revision of syllabus for Semester II for MHA & MPH with effect from batch admitted in AY 2022-23, onwards. [ANNEXURE-45A]



# MGM SCHOOL OF BIOMEDICAL SCIENCES (A constituent unit of MGM INSTITUTE OF HEALTHSCIENCES)

(A constituent unit of MGM INSTITUTE OF HEALTHSCIENCES)
(Deemed to be University u/s 3 of UGC Act 1956)
(Grade "A" Accredited by NAAC)
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## **CHOICE BASED CREDIT SYSTEM (CBCS)**

With effect from Academic Year 2022 – 23

**Curriculum for Master in Public Health** 

First year (Semester I & II)

#### **ACADEMICS**

## MASTER IN PUBLIC HEALTH

(CHOICE BASED CREDIT SYSTEM)

**Duration of the Programme**: The Course shall extend over a period of 2 years with four semesters. Each year consist of 2 semesters with examinations at the end of every semester.

## Program pattern:

First Semester: July - December Second Semester: January - June Third Semester: July - December Fourth Semester: January - June

**Eligibility for admission:** Graduates in Medicine/ AYUSH/ Dentistry/ Veterinary Sciences/ Nursing/ Nutrition/ Sociology/Paramedical from a recognized University, with minimum 50% marks in qualifying (graduation) examination will be eligible for admission. The candidates having demonstrated experience in healthcare related field will be given preference.

**Scheme of Examinations:** There shall be examination at the end of each semester, which will be consisting of theory, practical, dissertation and Internal Assessments.

**Clinical Posting:** There will be mandatory clinical posting at Urban Health Training Centre, Rural Health Training Centre and in the Department of Community Medicine in each semester.

**Requirement to Appear for the Examination**: A candidate shall be permitted to appear for the university examination of any semester, if he/ she secure not less than 75% of attendance in the number of instructional days and not less than 35% Marks in Internal Assessment, failing which he/ she should redo that course of study. The criterion for appearing in last semester examination is to qualify all subjects of I, II and III semesters.

**Medium of Instruction and Examination**: The medium of instruction throughout the course and the examinations shall be English only.

**Passing:**A Candidate shall be declared to have passed the examination in a subject if he/she secured not less than 50% in aggregate internal and external examinations.

**Conferment of Degree:** A candidate, who has passed all the examinations as prescribed, shall be eligible to receive the degree of -"Masters in Public Health" from the MGM Institute of Health Sciences.

For any query visit the website: www.mgmsbsnm.edu.in

## **Programme Outcome:**

- 1. Nurture the scientific and/or clinical knowledge and skills for development of health care practices, industrial/community applications and entrepreneurship.
- 2. Develop the ability of critical thinking to analyze, interpret problems in health care and to find out systematic approach for solution.
- 3. Impart decision making capability for handling various circumstances in their respective areas.
- 4. Demonstrate research skills for planning, designing, implementation and effective utilization of research findings for community.
- 5. Develop an ability to function as an efficient leader as well a team player in multidisciplinary sectors for effective outcomes demonstrating managerial skills.
- 6. Demonstrate an effective written and oral communication skills to communicate effectively in health care.
- 7. Inculcate code of ethics in professional and social circumstances to execute them in daily practices and research in respective areas of specialization.
- 8. Develop lifelong learning attitude and values for enhancement of professional and social skills for an overall development.

# **Program Outline:**

## Semester I

		Credits / Week				Hrs./ Semester				Marks		
Course Code	Course Name	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Credits (C)	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Hrs. (H)	Internal Assessment	Semester Exam	Total
MPH 101 (T)	Introduction to Human Biology, Environment, Public Health& Hospital Industry	3	1	-	4	45	15	-	60	20	80	100
MPH 102 (T)	Introduction to Epidemiology & Biostatistics	3	1	-	4	45	15	-	60	20	80	100
MPH 103 (T)	Introduction to Health Care System in India and Demography	3	1	-	4	45	15	-	60	20	80	100
MPH 104 (T)	Introduction to Concepts & Principles of Management, Health Economics and Business Communication	3	1	-	4	45	15	-	60	20	80	100
MPH 105 (CP)	Practice of Public Health (Basic)	-	-	24	12	-		360	360	-	50	50
TOTAL 12 4				24	28	180	60	360	600	80	370	450

## Semester II

			Credits	/ Week		Hrs./ Semester				Marks		
Course Code	Course Name	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Credits (C)	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Hrs. (H)	Internal Assessment	Semester Exam	Total
MPH 201 (T)	Reproductive, Maternal, Child, Adolescent &Geriatric Health	3	1	-	4	45	15	-	60	20	80	100
MPH 202 (T)	Epidemiology of Communicable & Non-Communicable Diseases	3	1	-	4	45	15	-	60	20	80	100
MPH 203 (T)	Health Planning, Health Management, Health Communication & Health Care	3	1	-	4	45	15	-	60	20	80	100
MPH 204 (CP)	Practice of Public Health (Advance)	-	-	20	10	-	-	300	300	-	50	50
CC 001 L	Research Methodology & Biostatistics (Core Course)	4	-		4	60	-	-	60	20	80	100
CC 001 P	Research Methodology & Biostatistics (Core Course)	-	-	4	2	-	-	60	60	10	40	50
	TOTAL	13	3	24	28	195	45	360	600	90	410	500

# FIRST YEAR Master in Public Health (MPH) SEMESTER–I

Code No.	Core Subjects		
Lectures, Self-Directed Learning& Clinical Posting			
MPH 101 T	Introduction to Human Biology, Environment, Public Health & Hospital Industry		
MPH 102 T	Introduction to Epidemiology & Biostatistics		
MPH 103 T	Introduction to Health Care System in India and Demography		
MPH 104 T	Introduction to Concepts & Principles of Management, Health Economics and Business Communication		
MPH 105 CP	Practice of Public Health (Basic)		

MPH	Semester I
MPH 101 T	Introduction to Human Biology, Environment, Public Health &
(60 Hrs. / Credits –04)	Hospital Industry

# MPH 101 T:

## Course Contents / Syllabus

## **Human Biology**

- Introduction--A Human Perspective, Chemistry of Life
- Cell Structure and Function, Tissues, Organ Systems, and Homeostasis
- Introduction to Anatomy & Physiology of Digestive System and Nutrition
- Introduction to Anatomy & Physiology of Respiratory and Cardiovascular System
- Introduction to Composition and Function of Blood
- Introduction to Anatomy & Physiology of Urinary System and Excretion
- Introduction to Anatomy & Physiology of Musculoskeletal System
- Introduction to Anatomy & Physiology of Nervous System
- Introduction to Anatomy & Physiology of Endocrine System
- Introduction to Reproductive System
- Introduction to Medical Genetics

#### **Environment**

- Environment & Health
- Water Sources, Pollution, Purification, Quality
- Air Composition, Pollution, Ventilation,
- Light Requirement, Measurement and Standards
- Noise Sources, Effects, Control
- Radiation Sources, Effects, Protection
- Introduction to Meteorology
- Housing and Health
- Disposal of Waste
- Disposal of Bio Medical Waste
- Visit to Water Treatment Plant
- Visit to Sewage Treatment Plant
- Visit to Bio Medical Waste Disposal Unit

#### **Public Health**

- History of Medicine
- Changing Concepts of Health
- Dimensions of Health
- Determinants of Health
- Concept of Disease
- Iceberg of Disease
- Changing Concepts in Public Health
- Concept of Control
- Concept of Prevention
- Levels of Prevention and Modes of Intervention
- Hospitals & Community
- Health Indicators
- Public Health Approach

- Public Health Problems in India
- Limitations of Public Health

- Hospital IndustryGlobal Overview
- Hospital Industry in India
- Regulatory Councils, Accreditation and Laws related to hospital
- Opportunities, Issues and Challenges in hospital industry

MPH	Semester I
MPH 102 T	Introduction to Epidemiology & Biostatistics
(60 Hrs. / Credits – 04)	-

## MPH 102 T:

## Course Contents / Syllabus

## **Epidemiology**

- History of Epidemiology
- Measurements in Epidemiology
- Incidence and Prevalence
- Descriptive Epidemiology
- Cross sectional study design
- Analytical Epidemiology
- Case control study design
- Cohort study design
- Experimental Epidemiology
- Randomized control trials
- Non-randomized control trial
- Introduction to confounding and bias
- Interpretation of association
- Causation and association
- Screening
- Screening tests –Sensitivity & Specificity
- Introduction to Infectious Disease Epidemiology
- Disease surveillance
- Outbreak investigation

#### **Biostatistics**

- Biostatistics Scope / Use
- Types of variables
- Scales of measurement
- Measures of central tendency
- Measures of dispersion
- Types of distribution
- Normal Distribution
- Sampling Methods
- Type1 and type 2 error
- Concept of P value and 95% confidence Interval
- Chi Square Test
- T Test
- Choosing appropriate statistical test
- Concept of Correlation
- Concept of regression
- Data Visualization
- Histogram
- Bar Chart
- Pie Diagram
- Introduction to SPSS
- Introduction to EpiInfo

MPH	Semester I
MPH 103 T	Introduction to Health Care System in India and Demography
(60 Hrs. Credits –04)	

## MPH 103 T

## Course Contents / Syllabus

## **Health Care System**

- Concept of Health Care
- Levels of Health Care
- Global overview of Health Care Systems
- Health Care System in India
- Health Care Delivery Infrastructure in India
- Health Care Delivery Workforce in India
- National Strategy for Health for All
- National Health Policy
- National Health Mission
- Overview of National Health Programmes
- Private Sector in Health Care

## **Demography**

- Demographic Processes
- Demographic Cycle
- World Population Trends
- Demographic Trends in India
- Census
- Demographic Indicators
- Age Pyramid
- Sex ratio
- Population Density
- Migration
- Urbanization
- Literacy & Education
- Life Expectancy
- · Fertility and factors associated
- Fertility Indicators
- Measures of Mortality
- Growth rate
- Vital Statistics
- Concept of Life Table

# Introduction to Concepts & Principles of Management, Health Economics and Business Communication

## Course Contents / Syllabus

## **Concepts & Principles of Management**

- Concept of Management
- Principles of Management
- Managerial functions
- Contemporary Management Practice
- Management & Administration
- Roles and Skills of Manager
- Time Management
- Strategic Management
- Health Planning&Planning Cycle
- Management methods based on Behavioral Sciences
- Quantitative Management Methods
- Organizing, Directing & Staffing
- Management Control System
- Use of Information System

#### **Health Economics**

- Basic concepts in health economics
- Micro and Macro economics
- Production Function
- Determinants of demand, supply and costs of production
- Supply & Demand for Health Care Personnel
- Concepts of efficiency, effectiveness, equity, elasticity of demand
- Concept of costing, marginal cost analysis, and opportunity cost
- Short term and long-term cost
- Budgeting
- Measuring health outcomes
- Principles and application of economic evaluation in health care
- Cost Benefit Analysis (CBA)
- Cost-Effective Analysis (CEA)
- Lorenz's Curve
- Genie's Coefficient
- Universal health coverage and role of health care financing
- Health Insurance& Health Care Financing
- Health sector reforms

#### **Business Communication**

- Principles of Effective Writing
- Frequently Made Mistakes in Business Writing
- Conventions of Letter Writing
- Approaches to Writing Claims and Responses
- Memoranda
- E-Mail Etiquette

- Agenda and Minutes of Meeting

- Report Writing
  Business Proposals
  CVs and Applications
  Presentation Skills

MPH	Semester I
MPH 105 CP (360 Hrs. Credits – 12)	Practice of Public Health (Basic)
C-N-	NTP

Sr.No.	Clinical Posting	No. of Hrs.
	UNDER the Supervision of Community Medicine Faculty	
1	Clinical Posting in Department of Community Medicine	360
	Clinical Posting at Rural Health Centre	200
	Clinical Posting at Urban Health Centre	
	Total	360 Hrs.

# FIRST YEAR Master in Public Health (MPH) SEMESTER – II

Code No.	CoreSubjects				
Lect	Lectures, Self-Directed Learning& Clinical Posting				
MPH 201 T	Reproductive, Maternal, Child, Adolescent & Geriatric Health				
MPH 202 T	Epidemiology of Communicable & Non-Communicable Diseases				
MPH 203 T	Health Planning, Health Management, Health Communication & Health Care				
MPH 204 CP	Practice of Public Health (Advance)				
CC 001 L	Research Methodology & Biostatistics (Core Course)				
CC 001 P	Research Methodology & Biostatistics (Core Course)				

MPH	Semester II
MPH 201 T	Reproductive, Maternal, Child, Adolescent & Geriatric Health
(60 Hrs. / Credits <b>– 04</b> )	

## MPH 201 T:

## Course Contents / Syllabus

- Fundamentals of reproductive biology
- Adolescent Sexual and Reproductive Health
- Reproductive Health Policy
- Family Welfare and Contraceptives
- Reproductive Health programs in India
- Introduction to maternal, new-born and child health programs and their behavioural basis
- Historical developments in MCH in India
- Introduction to the RMNCH+A services historical context, evolution, coverage and innovations
- Various components of service delivery under RMNCH+A (including GoI programs)
- MCH Care service delivery
- Evolution of RCH services in the country Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)
- Framework for evaluation of services
- Reproductive & Perinatal Epidemiology
- Prenatal and Infant Growth and Development
- Issues in the Reduction of Maternal and Neonatal Mortality
- Preventing peri-natal and infant mortality
- Infectious Disease and Child Survival
- Nutrition and Growth in Maternal and Child Health
- Legislations and programs in MCH
- Overview of population health approaches for adolescents
- Adolescent Health and Development
- The Social Context of Adolescent Health and Development
- Adolescent Health status in India
- Adolescent Health Development policy and systems
- Health issues specific to adolescents: anemia, teenage pregnancy, menstrual hygiene, obesity, mental health promotion and illness prevention, substance use prevention, violence, media etc.
- Define concepts Gender, vulnerable populations, gender equality and equity and emerging issues
- Explain the difference between sex and gender and how these variables, combined with other forms of social exclusion impacts on health
- To increase understanding of the importance, benefits and urgency to identify and reduce barriers and address the needs of women and socially excluded groups, and promote their agency in the context of accessing health care and related information
- To identify good practices in Gender and Social Inclusion (GSI) within India
- Rights of the Child
- National Policy for Children
- School Health Services
- Integrated Child Development Services (ICDS)
- Health problems of Aged
- Health status of Aged in India
- Potential for disease prevention in elderly
- Old Age Homes

МРН	Semester I
MPH 202 T	Epidemiology of Communicable & Non-Communicable
(60 Hrs. / Credits – 04)	Diseases

## MPH 202 T:

## Course Contents / Syllabus

- Communicable disease epidemiology
- Recognize the burden of communicable diseases (CD) affecting the population
- Examine factors contributing to the persistence of infectious diseases
- Understand reasons for emergence and re-emergence of infectious diseases
- Key concepts Incubation periods, Epidemic patterns, Modes of transmission, Transmission dynamics. Measures of infectiousness Secondary attack rates
- Analyze the transmission dynamics of diseases and design appropriate control measures
- Apply basic infectious diseases epidemiological skills to address major emerging and re-emerging communicable diseases
- Surveillance: Case in point: Integrated Disease Surveillance Program (IDSP)
- Epidemiology of common communicable diseases like TB, Malaria, Leprosy, Polio, STIs, AIDS, Meningococcal
  meningitis, Hepatitis B, and Measles (mathematical models of infection dynamics, outbreak investigation and nonrandomized control trialsurveillance, schedules, adverse reactions, contraindications, vaccine efficacy, impact
  assessment)
- Live outbreak investigation
- Adverse Event Following Immunization (AEFI) investigation
- Non-communicable diseases (NCD) epidemiology:
- Describe and understand the epidemiology of NCDs Cardiovascular diseases, Hypertension, Diabetes mellitus, Cancers, Mental health, Stroke, Burns/trauma/ accidents etc.
- Comprehend the upstream and downstream determinants of NCDs
- Understand the Individual approaches/or high-risk approaches and population based/ or public health approaches to prevent NCDs
- Recognize the risk factor approach to prevent non-communicable diseases
- Comprehend the Population based/public health approaches to prevention of common NCD risk factors (physical inactivity, tobacco and unhealthy diet)
- Familiarize with the current projects on targeting the prevention of NCDs, including, innovations in prevention
- How prevention of NCDs interlinks with Communicable diseases. How women and child health, health of the girl child links to prevention of NCDs
- Recognize Economic burden of NCDs and benefits of prevention
- Comprehend how sustainable development and prevention of NCDs go hand in hand
- Comprehend the power of policy and role of environment in the prevention of NCDs
- Population-based screening
- Surveillance of cancers including cancer registry
- Use of EpiInfo & GIS for Disease Surveillance
- Covid 19 Pandemic Global & Local Scenario
- Epidemiology of Corona Virus
- Covid 19 Pandemic Control Measure
- Covid 19 Vaccination

МРН	Semester II
MPH 203 T	Health Planning, Health Management, Health Communication
(60 Hrs. Credits – 04)	& Health Care

## MPH 203 T

## Course Contents / Syllabus

- Policy framework
- Stake holders in policy making
- Translating research in policy making
- Effects of national and international affairs on health policy
- Introduction to different national population, disease control, tobacco control, nutrition, maternal and child health policies
- Short term versus long term policies
- Design and evaluation of public health programs
- Concepts underlying the design of health programs;
- Concepts of Governance and Institutions
- Critical appraisal of issues in health policy and financing
- Theory explaining public health action, its evolution and application in health policy
- Methods of assessing the health impact of different types of policy; national and global perspective
- Assessing health impacts of different policies across sectors
- Impact of health threats and interventions to counter health threats including crisis management
- Role of Non-governmental Organizations (NGOs) in health care
- Inter-sectoral coordination in health including Public Private Partnership
- Advocacy and planning in health care
- Strategy: various definitions
- Major concepts and frameworks in strategic management: SWOT, experience curve, portfolio theory, value chain
- Strategic thinking and decision making
- Strategic planning: Environmental, scenario, implementation and evaluation
- Sustainability
- Innovations in public health
- Health informatics, e-Health
- Telemedicine, m-Health
- Business modelling: preparing your own business model
- Operational Research and
- Safety, Acceptability, Feasibility and Effectiveness (SAFE) in designing Public Health Interventions
- Objectives, Targets & Goals
- Planning Cycle
- Management methods and techniques
- Health Planning in India
- Health Care System in India
- Evaluation of Health Services
- Concept, Elements and Principles of Primary Health Care
- Indian Public Health Standards
- Communication Process
- Health Communication
- Health Education

MPH	Semester II
MPH 204 CP	Practice of Public Health (Basic)
(300 Hrs. Credits – 10)	

Sr. No.	Clinical Posting	No. of Hrs.
1	<ul> <li>UNDER the Supervision of Community Medicine Faculty</li> <li>Clinical Posting in Department of Community Medicine</li> <li>Clinical Posting at Rural Health Centre</li> <li>Clinical Posting at Urban Health Centre</li> </ul>	300
	Total	300 Hrs.

Name of the Course	Research Methodology & Biostatistics (Core Course)
Course Code	CC 001 L

Course Outcome	Student will be able to understand develop statistical models, research designs with the understating of background theory of various commonly
Course Outcome	used statistical techniques as well as analysis interpretation & reporting of results and use of statistical software.

Sr. No.	Topics	No. of Hrs.
A	Research Methodology:	
1	Scientific Methods of Research: Definition of Research, Assumptions, Operations and Aims of Scientific Research. Research Process, Significance and Criteria of Good Research, Research Methods versus Methodology, Different Steps in Writing Report, Technique of Interpretation, Precaution in interpretation, Significance of Report Writing, Layout of the Research Report	5
2	Research Designs: Observational Studies: Descriptive, explanatory, and exploratory, Experimental Studies: Pre-test design, post-test design, Follow-up or longitudinal design, Cohort Studies, Case Control Studies, Cross sectional studies, Intervention studies, Panel Studies.	5
3	Sampling Designs: Census and Sample Survey, Implications of a Sample Design, Steps in Sampling Design Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs (Probability sampling and non probability sampling), How to Select a Random Sample?, Systematic sampling, Stratified sampling, Cluster sampling, Area sampling, Multi-stage sampling, Sampling with probability proportional to size, Sequential sampling.	5
4	Measurement in research: Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Technique of Developing Measurement Tools, Scaling Meaning of Scaling, Scale Classification Bases, Important Scaling Techniques, Scale Construction Techniques, Possible sources of error in measurement, Tests of sound Measurement	5
5	Methods of Data Collection: Types of data, Collection of Primary Data, Observation Method, Interview Method, Collection of Primary Data	5
6	Sampling Fundamentals: Need and importance for Sampling, Central Limit Theorem, Sampling Theory, Concept of Standard Error, Estimation, Estimating the Population Mean Estimating Population Proportion, Sample Size and its Determination, Determination of Sample Size through the Approach Based on Precision Rate and Confidence Level.	5
В	Biostatistics	
7	Data Presentation: Types of numerical data: Nominal, Ordinal, Ranked, Discrete and continuous. Tables: Frequency distributions, Relative frequency, Graph: Bar charts, Histograms, Frequency polygons, one way scatter plots, Box plots, two way scatter	3

	Measures of Central Tendency and Dispersion: Mean, Median, Mode Range, Interquartile range, variance and Standard Deviation, Coefficient of variation, grouped mean	3
	and grouped standard deviation (including merits and demerits).	
9	Testing of Hypotheses: Definition, Basic Concepts, Procedure for Hypothesis Testing, Measuring the Power of a Hypothesis Test, Normal distribution, data transformationImportant Parametric Tests, Hypothesis Testing of Means, Hypothesis Testing for Differences between Means, Hypothesis Testing for Comparing Two Related Samples, Hypothesis Testing of Proportions, Hypothesis Testing for Difference between Proportions, Hypothesis Testing for Comparing a Variance to Some Hypothesized Population Variance, Testing the Equality of Variances of Two Normal Populations.	6
	Chi-square Test: Chi-square as a Non-parametric Test, Conditions for the Application Chi-square test, Steps Involved in Applying Chi-square Test, Alternative Formula, Yates' Correction, and Coefficient by Contingency.	2
	Measures of Relationship: Need and meaning, Correlation and Simple Regression Analysis	2
12	Analysis of Variance and Covariance: Analysis of Variance (ANOVA):Concept and technique of ANOVA, One-way ANOVA, Two-way ANOVA, ANOVA in Latin-Square Design Analysis of Co-variance (ANOCOVA), ANOCOVA Technique.	4
13	Nonparametric or Distribution-free Tests: Important Nonparametric or Distribution-free Test Sign test, Wilcoxon signed-Rank Test, Wilcoxon Rank Sum Test: Mann-Whitney U test Kruskal Walli's test, Friedman's test, and Spearman Correlation test.	3
14	Vital Health Statistics: Measurement of Population: rate, crude rate, specific rate, Measurement of fertility: specific fertility rate, Total fertility rate, Reproduction rate, Gross Reproduction Rate, Net Reproduction Rate, Measures related to mortality: Crude Death Rate (CDR), Age-specific death Rate, Infant and child mortality rate, Measures related to morbidity.	4
15	Computer Application Use of Computer in data analysis and research, Use of Software and Statistical package.  Introduction to SPSS. Importing data from excel, access, tab and comma separated files. Entering data, labeling a variable, coding and recoding a categorical and continuous variable. Converting data from string to numeric variables, sorting & filtering, merging, appending data sets.  Frequencies, descriptive statistics, cross tabulations. Diagrammatic presentation include histogram, bar chart, pie chart, scatter diagram, box plot, line chart. Parametric test of hypothesis-one sample, Independent and paired sample t test, one way ANOVA& post HOC test. Testing for normality, Chi-square test with measures of association. Pearson correlation. Non parametric test.	3
1		

# $CC\ 001\ P-Research\ Methodology\ \&\ Biostatistics$

Sr. No.	Topics	No. of Hrs		
A	Research Methodology			
1	Sampling Designs	4		
2	Measurement in research	5		
3	Methods of Data Collection	3		
4	Sampling Fundamentals	3		
В	Biostatistics			
5	Data Presentation 4			
6	Measures of Central Tendency and Dispersion 4			
7	Testing of Hypotheses	12		
8	Chi-square Test 2			
9	Measures of Relationship	3		
10	Analysis of Variance and Covariance 4			
11	Nonparametric or Distribution-free Tests 4			
12	Vital Health Statistics: Measurement of Population 6			
13	Computer Application Using Statistical Software 6			
	Total	60 hrs		

# REVISED SCHEME OF UNIVERISTY EXAMINATION FOR PG PROGRAM (w.e.f. AY 2022-23) MASTER of PUBLIC HEALTH (MPH)

# & MASTER of HOSPITAL ADMINISTRATION (MHA)

## **SEMESTER I & II**

General structure / patterns for setting up question papers for Theory / Practical courses, their evaluation weightage for PG Programs (MPH & MHA) are given in following tables

## Marks Scheme for the University Examination

 $Final\ Theory\ Mark\ will\ be\ 100\ Marks\ (80\ Marks\ University\ Theory\ Exam+20\ Marks\ Internal\ Assessment)$ 

Theory Paper Pattern: Marks: 80 Time: 3 Hrs.

Question Paper	Question No.	Question Type	Marks Per Section	
Section A	1	LAQ (1 out of 2)	1 X 10 Marks = 10	40
	2	SAQ (5 out of 6)	5 X 06 Marks = 30	40
Section B	3	LAQ (1 out of 2)	1 X 10 Marks = 10	40
Section b	4	SAQ (5 out of 6)	5 X 06 Marks = 30	40
			TOTAL	80 Marks

Note: If the paper is combination of two sub-subjects, the each section is to be dedicated for separate subsubject for 50% weightage each.

## Practical Examination, if applicable, will be as per last approved pattern

## **Internal Assessment Pattern - Theory**

Marks - 20

Internal Theory Examination	30 Marks / 2 = 15 Marks
Seminar / Assignment	10 Marks / $2 = 05$ Marks
Total	20 Marks

## Resolution No. 10.4 of Academic Council (AC-42/2022):

i) "Resolved to accept "50% eligibility in internal assessment" pattern for all the CBCS programs (UG & PG) running under the constituent units of MGMIHS.(MGM School of Biomedical Sciences, MGM School of Physiotherapy, MGM Medical College (M.Sc. Medical 3 year courses).

This will be applicable to all existing batches (for remaining regular examinations) and forthcoming batches from June 2022 onwards"

Resolution No. 6.6 of Academic Council (AC-44/2022): Resolved to approve the syllabus for III & IV Semester of Master in Public Health (MPH) [ANNEXURE -61] to be implemented from batch admitted in AY 2022-23 onwards.

(With effect from AY 2022-23 Batch)

# Curriculum for Master in Public Health

II<sup>nd</sup> YEAR
SEMESTER III & IV

# Program Outline:

## Semester III

		Credits / Week				Hrs./ Semester				Marks		
Course Code	Course Name	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Credits (C)	Lecture (L)	Seminar / Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Hrs. (H)	Internal Assessment	Semester Exam	Total
MPH 301 (T)	Sociology, Occupational Health and Public Health Laws	3	1		4	45	15	- 51	60	20	80	100
MPH 302 (T)	Nutrition, Mental Health, Tribal Health, Genetics, & International Health	3	1	•	4	45	15		60	20	80	100
MPH 303 (T)	Advanced Epidemiology & Biostatistics	2	2		4	30	30		60	20	80	100
MPH 304 (T)	National Health Programmes	3	1	12	4	45	15	- 21	60	20	80	100
MPH 305 (P)	Practice of Public Health (Project)	51	15	24	8	- 5		360	360	1.50	100	100
TOTAL		11	5	24	24	165	75	360	600	80	420	500

## **Index MPH Semester IV**

## SEMESTER IV – REVISED

			Credits	/Week			Hrs./Sesemest	er			Marks	
Course Code	Course Name	Lectur e (L)	Seminar /Self Directed Learning (SDL)	Practical/ Clinical Posting (P)	Total Credits (C)	Lecture (L)	Seminar /Self Directed Learning (SDL)	Practic al/ Clinica IPosting (P)	Total Hrs. (H)	Internal Assessm ent	Semester Exam	Total
GE001	Pursuit of Inner Self Excellence											
(T)	(POISE)	4	-	-	4	60	-	-	60	20	80	100
GE002	Bioethics, Biosafety, IPR and											
(T)	Technology Transfer											
GE003(T)	Disaster Management											
GE004 (T)	Human Rights											
MHA 401(P)	Dissertation	-	-	36	18	-	-	540	540	-	200	200
T	OTAL	4	-	36	22	60	0	540	600	20	280	300

## Resolution No. 6.5 of Academic Council (AC-48/2023):

(i) Resolved to grant Post-facto approval for correction in the index for Master in Public Health (MPH) Program Semester IV & Master in Hospital Administration (MHA) Program-Semester II & Semester IV for the batch admitted in the Academic Year- 2022-23 onwards [Annexure-48A & 48B].

# **SECOND YEAR**

# **Master in Public Health**

# (SEMESTER – III)

Code No.	Core Subjects					
Th	neory					
MPH 301 T	Sociology, Occupational Health and Public Health Laws					
MPH 302 T	Nutrition, Mental Health, Tribal Health, Genetics, & International Health					
MPH 303 T	Advanced Epidemiology & Biostatistics					
MPH 304 T	National Health Programmes					
Clinical Posting / Pr	ractical					
MPH 305 P	Practice of Public Health (Project)					

МРН	SEMESTER III	
MPH 301 T	Sociology, Occupational Health and Public Health Laws	
(60 Hrs. Credits - 04)		

## **Sociology**

- Social Context of Medicine
- Social & Behavioural Sciences
- Concepts in Sociology
- Society, Community, Social Structure, Social Institution
- Socialization
- Social Control Measures
- Culture and cultural factors in Health & Disease
- Dynamics of Social Change
- Social Psychology
- Social Organization
- Family: characteristics, types, functions
- Socio-Economic-Scales
- Hospital Sociology
- Medical Social Work
- Social Problems
- Sociology & Economics

## **Occupational Health**

- Occupational Environment
- Occupational Hazards
- Occupational Diseases
- Occupational Hazards of Agricultural Workers
- Health problems due to Industrialization
- Measures for Health protection of Workers
- Medical Measures for Prevention of Occupational Diseases
- Engineering Measures for Prevention of Occupational Diseases

## **Public Health Laws**

- Consumer Protection Act, 1986
- Registration of Births & Deaths Act, 1969
- Epidemic Disease Act, 1897 & regulations during emergencies and outbreaks
- Narcotic Drugs and Psychotropic Substances Act, 1985
- Prevention of Food Adulteration Act, 1954, Food Safety & Standards Act, 2006
- Medical Termination of Pregnancy Act, 1971
- Protection of Women from Domestic Violence Act, 2005
- PCPNDT Act, 1994
- Child Labour Act, 1986
- Juvenile Justice Act, 2000
- POCSO Act, 2011
- Trade Union Act, 1926
- Factories Act, 1948

•	ESI Act, 1948 & Regulations 1950
•	Minimum Wages Act, 1948 Environment Health Legislations Clinical Establishment Act, 2010
•	Environment Health Legislations
•	Clinical Establishment Act 2010
•	Chinical Establishment Act, 2010

МРН	SEMESTER III	
MPH 302 T	Nutrition Montal Haalth Tribal Haalth Counting 9 Intermedianal Haalth	
(60 Hrs. Credits - 04)	Nutrition, Mental Health, Tribal Health, Genetics, & International Health	

#### Nutrition

- Classification of Foods
- Macronutrients: Proteins, Fats, Carbohydrates
- Vitamins: A, B, C, D, E, K
- Major Minerals, Trace elements and Trace Contaminants
- Nutritional Anemia & Anemia Mukt Bharat Strategy
- Nutritional profiles of Principle foods
- Nutritional requirements
- Energy
- Balanced Diet
- Dietary Goals (Prudent Diet)
- Nutritional Problems in Public Health
- Assessment of Nutritional Status
- Nutritional Surveillance
- Problem of Malnutrition
- Ecology of Malnutrition
- Preventive & Social Measures for Malnutrition at family, community, national and international level
- Food Surveillance
- Food Adulteration
- Food Fortification
- Community Nutritional Programs

## **Mental Health**

- Mental Health Situation in India
- Warning signals of poor Mental Health
- Mental Health Services
- Alcoholism
- Drug Dependance
- Substance abuse in India & Rehabilitation Strategy

## Tribal Health

- Demographic Profile of Tribal Population
- Burden of Diseases of Tribal Community
- Tribal Development & Health sector

## **Genetics**

- Genetics and Health
- Preventive & Social Measures for Genetic Disorders

#### **International Health**

- Structure and functions of WHO, UNICEF & Other UN Agencies
- International Non-Governmental Agencies
- International Health Regulations
- Role of India in Global Public Health

МРН	SEMESTER III	
MPH 303 T	Advanced Full culture 0 Diseaset deter	
(60 Hrs. Credits - 04)	Advanced Epidemiology & Biostatistics	

- Outline of Advanced Epidemiology
- Infectious Disease Epidemiology
- Epidemiological Measurements
- Methodological Issues in Epidemiological Research
- Survey design and methods
- Pre survey formative research
- Sampling and sample size calculations
- Ethical issues in surveys
- Tool development
- Conduct of surveys
- Quality control and assurance in surveys
- Designing Cross Sectional Study
- Designing Case Control Study
- Designing Cohort Study
- Designing Randomized Control Trial
- Advanced designs in clinical trials
- Systematic reviews and meta-analysis overview
- Use of Computer and software in Epidemiology & Biostatistics
- Data Analysis and Interpretation of Analysis
- Outline of advanced Biostatistics
- Principles of regression
- Methods of regression
- Linear regression
- Logistic regression
- Cox proportional hazards regression
- Introduction to modelling
- Advance data visualization techniques
- Health Informatics
- EpiInfo
- EpiInfo Tutorials
- SPSS
- Geographical Information System

МРН	SEMESTER III	
MPH 304 T	N-4'	
(60 Hrs. Credits - 04)	National Health Programmes	

- MDG & SDG
- National Vector Borne Disease Control Program
- National Leprosy Eradication Programme
- National TB Elimination Programme
- National AIDS Control Programme
- National Programme for Control of Blindness
- Iodine Deficiency Disorder Programme
- Universal Immunization Programme
- National Health Mission: Urban & Rural
- RCH Programme
- RMNCH+A Strategy
- India Newborn Action Plan
- National Program for Health Care of Elderly (NPHCE)
- National Program for Prevention & Control of Cancer, Diabetes, CVD and Stroke (NPCDCS)
- National Mental Health Programme
- Integrated Disease Surveillance Project (IDSP)
- National Guinea worm Eradication Programme
- Yaws Eradication Programme
- National Programme for Control of Occupational Diseases
- National Family Welfare Programme
- National Water Supply & Sanitation Programme
- Swachh Bharat Mission
- Ayushman Bharat
- NITI Aayog
- National Health Policy

МРН	SEMESTER III
MPH 305 CP	Practice of Public Health (Project)
(360 Hrs. Credits – 08)	

## **Clinical Posting (Project)**

## UNDER the Supervision of Community Medicine Faculty at UHTC or RHTC

A Project report is to be submitted and presented for assessment that includes the candidate's role and support in assessing, monitoring, or studying of health problems or services in a population; developing / implementing policies and intervention strategies to meet public health needs. Overall it should contribute to the organization activity and should help in understanding public health management and coordination and gaining personal confidence and leadership experience.

# **Semester IV**

# GENERAL ELECTIVES ACADEMIC SYLLABUS FOR SEMESTER - IV

**ELECTIVE COURSE** 

Name of the Programme	Master of Public Health
Course Code	GE 001 T
Name of the Course	PURSUIT OF INNER SELF EXCELLENCE (POISE)

	<ol> <li>To inculcate moral values in students – Self-Discipline , Time Management, Develop attitude of Service with humility, Empathy, Compassion, brotherhood, Respect for teachers, colleagues &amp; society members.</li> </ol>
	2. Develop Effective means of communication & presentation skills in students
Course objective	<ol> <li>To develop wisdom in students for deciding their career based on their areas of interest and inner skills.</li> </ol>
	4. Introduce techniques for Relaxation, Meditation & Connecting with innerself.
	5. Rejuvenation Techniques which can be used by students to distress themselves
	6. To improve performance of students during various assignments, projects, elocutions, events, quiz, interviews.
	<ol> <li>Students will become self dependent, more decisive and develop intuitive ability for their study and career related matter.</li> </ol>
	2. Students ability to present their ideas will be developed.
	3. Enhanced communication skills, public speaking & improved Presentation ability.
Course outcomes	4. Students will be able to explore their inner potential and inner ability to become a successful researcher or technician & hence become more focused.
	5. Students will observe significant reduction in stress level.
	6. With the development of personal attributes like Empathy, Compassion, Service, Love &brotherhood, students will serve the society and industry in better way with teamwork and thus grow professionally.

Unit no.	Topics	Hours allotted 60hrs
1	<b>Spiritual Values for human excellence :</b> The value of human integration; Compassion, universal love and brotherhood (Universal Prayer); Heart based living; Silence and its values, Peace and non-violence in thought, word and deed; Ancient treasure of values -	

	Shatsampatti , Patanjali's Ashtanga Yoga , Vedic education - The role of the Acharya , values	
	drawn from various cultures and religious practices - Ubuntu, Buddism, etc.; Why spirituality?	
	Concept – significance; Thought culture	
2	Ways and Means: Correlation between the values and the subjects; Different teaching	15 hrs
	techniques to impart value education; Introduction to Brighter Minds initiative; Principles of	
	Communication; Inspiration from the lives of Masters for spiritual values - Role of the living	
	Master	
3	Integrating spiritual values and life: Relevance of VBSE (Value Based Spiritual Education)	15 hrs
	in contemporary life; Significant spiritual values; Spiritual destiny; Principles of Self-	
	management; Designing destiny	
	Experiencing through the heart for self-transformation (Heartfulness Meditation): Who	15 hrs
4	am I?; Introduction to Relaxation; Why, what and how HFN Meditation?; Journal writing for	
	Self-Observation; Why, what and how HFN Rejuvenation (Cleaning)?; Why, what and how	
	HFN connect to Self (Prayer)?; Pursuit of inner self excellence; Collective Consciousness-	
	concept of egregore effect;	

## **Reference Books:**

- 1. <u>www.pdfdrive.net</u>
- 2. www.khanacademy.org
- 3. www.acadeicearths.org
- 4. www.edx.org
- 5. <u>www.open2study.com</u>
- 6. www.academicjournals.org

Name of the Programme	me Master of Public Health	
Course Code	GE 002 T	
Name of the Course	BIOETHICS, BIOSAFETY, IPR & TECHNOLOGY TRANSFER	

	The students will gain structural knowledge on:  1. To list the routes of exposure for a pathogen to a human being.
	2. To demonstrate and assess the proper use of PPE, best practices, biological containment, and be prepared to safely conduct research
	<ol> <li>To identify the role of the Biosafety Professional inBiomedical Research Laboratories</li> </ol>
Course objective	4. To appreciate the importance of assertion in interpersonal communication and beintroduced to some key assertion strategies
	<ol> <li>To understand the interpersonal nature of giving feedback, receiving criticism and resolving conflicts.</li> </ol>
	6. To establish attentive listening as an assertion strategy
	Students will learn to:
	Effectively manage the health and safety aspects of a biological laboratory.
	<ol><li>Give reliable, professional and informed advice and information to colleagues and managers.</li></ol>
	3. Help to ensure that their institution complies with relevant legislation, liaise effectively with enforcing authorities and be aware of the penalties for failing to comply.
Course outcomes	4. Build a context of understanding through communication.
	5. Mediate between other conflicting parties.
	6. Exhibit de-escalatory behaviors in situations of conflict.
	7. Demonstrate acknowledgment and validation of the feelings, opinions, and contributions of others.

Unit no.	Topics	Hours allotted 60hrs
1	<b>Ethics</b> : Benefits of biotechnology, ELSI of Bioscience, recombinant therapeutic products for human health care, genetic modifications and food consumption, release of genetically engineered organisms, applications of human genetic rDNA research, human embryonic stem cell research.	15 hrs
2	Patenting: Patent and Trademark, Bioscience products and processes, Intellectual property rights, Plant breeders rights, trademarks, industrial designs, copyright biotechnology in developing countries. Biosafty and its implementation, Quality <i>control in</i> Biotechnology.	15 hrs

	Introduction to quality assurance, accreditation & SOP writing: Concept of ISO standards and certification, National regulatory body for accreditation, Quality parameters, GMP & GLP, Standard operating procedures, Application of QA in field of genetics, Data management of clonical and testing laboratory	15 hrs
3	<b>Funding of biotech business</b> (Financing alternatives, VC funding, funding for Bioscience in India, Existrategy, licensing strategies, valuation), support mechanisms for entrepreneurship (Bioentrepreneurship efforts in India, difficulties in India experienced, organizations supporting biotech growth, areas of scope, funding agencies in India, biotech policy initiatives), Role of knowledge centers and R&D (knowledge centers like universities and research institutions, role of technology and up gradation)	15 hrs

### **Reference Books:**

- 1. <u>www.pdfdrive.net</u>
- 2. www.khanacademy.org
- 3. www.acadeicearths.org
- 4. www.edx.org
- 5. <u>www.open2study.com</u>
- 6. www.academicjournals.org

Name of the Programme	Master of Public Health	
Course Code	GE 003 T	
Name of the Course DISASTER MANAGEMENT AND MITIGATION RESOURCE		

	The course will uplift about:
	1. Understand and appreciate the specific contributions of the Red Cross/Red Crescent
	movement to the practice and conceptual understanding of disaster management and
	humanitarian response and their significance in the current context.
	2. Recognize issues, debates and challenges arising from the nexus between paradigm of
Course objective	development and disasters.
	33 (375)
	3. Critically evaluate disaster risk reduction and humanitarian response policy and practice from
	multiple perspectives.
	4. Respond to disaster risk reduction initiatives and disasters in an effective, humane and
	sustainable manner.
	At the successful completion of course the student will gain:
	1. knowledge and understanding of the disaster phenomenon, its different contextual aspects,
	impacts and public health consequences.
	2. Knowledge and understanding of the International Strategy for Disaster Reduction (UN-
Course outcomes	ISDR) and to increase skills and abilities for implementing the Disaster Risk Reduction (DRR)
	Strategy.
	3. Ensure skills and abilities to analyse potential effects of disasters and of the strategies and
	methods to deliver public health response to avert these effects.

**UNIT I: Introduction-** Definition of Disaster, Emergency; Type of Disasters, Disaster Codes, Incident Management Team (IMT), Community partners, Hazard Vulnerability Assessment – mitigation, Preparedness, response, recovery;

**UNIT II: Communication-** Notification of Disaster situation, Disaster/emergency announcement, Internal and External Information

**UNITII:** Emergency Patient Management-Triage, First aid center, Assessment and transportation of injured persons, Categorization of casualties, Disaster Tags, Evacuation, Hospital preparedness for mass admissions of patients,

**UNIT IV: Disaster plan of a hospital-** Basic Requirements, Components of disaster plan: pre-hospital and hospital; Organization and Structure of Management in the Hospital, Alarm and Mobilization, Competencies and Emergency Rights, Admission and Treatment Capacities, Admission and Registration of Patients, Predefined Patient Transportation Routes, internal disaster plan-evacuation of hospital

**UNITV: Staff Responsibilities-** General, Incident commander, hospital administrator, Clinicians, Chief Nursing Officer, Chief of Security, Facility Manager, Food Service Manager, Pharmacy Incharge, Front Desk Staff, Information, Training, Exercise- Mock exercise on disaster management in Hospital

#### **Reference Books:**

- 1. ShailendraK.Singh : Safety & Risk Management, Mittal Publishers
- 2. J.H.Diwan: Safety, Security & Risk Management, APH
- 3. Stephen Ayers & Garmvik: Text Book of Critical Care, Holbook and Shoemaker
- 4. <u>www.pdfdrive.net</u>
- 5. www.khanacademy.org
- 6. www.acadeicearths.org
- 7. <u>www.edx.org</u>
- 8. <u>www.open2study.com</u>
- 9. www.academicjournals.org

Name of the Programme Master of Public Health	
Course Code	GE 004 T
Name of the Course	HUMAN RIGHTS

	Students will comprehend on:
	<ol> <li>A branch of public international law, and relevant juridical mechanisms at global as well as regional levels,</li> </ol>
Course objective	2. Human rights as an object of study in history, philosophy and the social sciences, as well as a practical reality in national and international politics.
	3. Different forms of promoting and implementing human rights, domestically as well as on the international level.
	4. The role of human rights in contemporary issues relating to terrorism, religion, ethnicity, gender and development.
	<ol> <li>Cholarly values such as transparency, impartiality, clarity, reliance and the importance of sound reasoning and empirical inference.</li> </ol>
	Student will be able to virtue:
	<ol> <li>identify, contextualise and use information about the human rights situation in a given country</li> </ol>
	<ol> <li>critically appraise source material, including cases from human rights committees and tribunals and reports and summary records from treaty bodies</li> </ol>
Course outcomes	3. analyse a country's situation or an international situation in terms of human rights and formulate human rights-based initiatives and policies
	4. Promote human rights through legal as well as non-legal means.
	<ol> <li>Participate in legal, political and other debates involving human rights in a knowledgeable and constructive way</li> </ol>

Unit no.	Topics	Hours allotted 60hrs
1	Background: Introduction, Meaning, Nature and Scope, Development of Human Rights, Theories of Rights, Types of Rights	08 hrs
2	Human rights at various level: Human Rights at Global Level UNO, Human Rights – UDHR 1948 – UN Conventions on Human Rights: International Covenant on civil and Political Rights 1966, International Convent on Economic, Social and Cultural Right, Racial Discrimination -1966 International, Instruments: U.N. Commission for Human Rights, European Convention on Human Rights.	15 hrs
3	Human rights in India: Development of Human Rights in India, Human Rights and the Constitution of India, Protection of Human Rights Act 1993- National Human Rights Commission, State Human Rights Commission, Composition Powers and Functions, National Commission for Minorities, SC/ST and Woman	12 hrs
4	Human Rights Violations: Human Rights Violations against Women, Human Rights Violations against Children, 35 Human Rights Violations against Minorities SC/ST and Trans-genders, Preventive Measures.	13 hrs
5	Political issues: Political Economic and Health Issues, Poverty, Unemployment, Corruption and Human Rights, Terrorism and Human Rights, Environment and Human Rights, Health and Human Rights	12 hrs

#### **Reference Books:**

- JagannathMohanty Teaching of Human sRights New Trends and Innovations Deep & Deep Publications Pvt. Ltd. New Delhi2009
- 2. Ram Ahuja: Violence Against Women Rawat Publications JewaharNager Jaipur.1998.
- 3. SivagamiParmasivam Human Rights Salem 2008
- 4. Hingorani R.C.: Human Rights in India: Oxford and IBA New Delhi.

#### MPH 401 P: DISSERTATION 540 hrs

The students are placed for 12 weeks in various hospitals and healthcare organizations throughout the country or abroad for hands-on training. The students will be required to complete a satisfactory thesis based on the project assigned to them. The thesis must be approved by Industry and faculty members. Students have to maintain the logbook throughout and submit at the time of reporting back to the college post dissertation. During Dissertation, there would be two presentations in the respective organization where student is posted in presence of faculty incharge from the college and the organizational mentor. The university exam would be as per therules.

In case, if student fails to qualify the same, he/she has to appear for the university examination during the next semester examination.

# REVISED SCHEME OF UNIVERISTY EXAMINATION FOR PG PROGRAM(w.e.f. AY 2022-23) MASTER of PUBLIC HEALTH (MPH)

#### **SEMESTER III & IV**

General structure / patterns for setting up question papers for Theory / Practical courses, their evaluation weightage for PG Programs (MPH & MHA) are given in following tables

### Marks Scheme for the University Examination

Final Theory Mark will be 100 Marks (80 Marks University Theory Exam + 20 Marks Internal Assessment)

Theory Paper Pattern: Marks: 80 Time: 3 Hrs.

Question Paper	Question No.	Question Type	Marks Distribution	Marks Per Section
Section A	1	LAQ (1 out of 2)	$1 \times 10 \text{ Marks} = 10$	40
Section A	2	SAQ ( 5 out of 6)	$5 \times 06 \text{ Marks} = 30$	40
Section B	3	LAQ (1 out of 2)	1 X 10 Marks = 10	40
Section B	4	SAQ ( 5 out of 6)	$5 \times 06 \text{ Marks} = 30$	40
	TOTAL 80 Marks			

Note: If the paper is combination of two sub-subjects, the each section is to be dedicated for separate sub-subject for 50% weightage each.

## Practical Examination, if applicable, will be as per last approved pattern

#### **Internal Assessment Pattern - Theory**

Marks - 20

Internal Theory Examination	30  Marks / 2 = 15  Marks
Seminar / Assignment	$10 \mathrm{Marks} / 2 = 05 \mathrm{Marks}$
Total	20 Marks

(i) Resolution No. 6.5 of Academic Council (AC-48/2023): Resolved to grant Post-facto changes for the batch admitted in the Academic Year 2022-23 onwards. Submission of check list for Master in Public Health (MPH) program for Academic Year 2022-23 onwards.

Checklist format for MPH-1<sup>st</sup>, 2<sup>nd</sup> semester

- 1. MPH 105 CP Practice of Public Health (Basic) [Annexure-48F].
- 2. MPH 204 CP Practice of Public Health (Advance) [Annexure-48G].

# Checklist for Evaluation of Practice of Public Health (Basic) MPH 105 CP UNIVERISTY EXAM

Name of the student: Date	te:				
Program:					
Semester: Name of the Internal faculty/Observer	:				
Core Competencies	Marks allotted	Marks obtained			
Students will develop critical thinking and research skills, data analysis, docur	nentation.	-			
Торіс					
The topic and the importance of topic are precise / Independent scientific thinking/originality	2.5				
Introduction & Literature Review					
1. Does the student present enough and relevant background on what is known on the topic, existing information gap, and importance of bridging that gap?	2.5				
2. Does the student cite enough, relevant literature properly to support the information presented?	2.5				
Methods					
1. Is there enough detail of what, when, where, and how the research was performed so that other researcher can repeat the method for similar studies?	2.5				
Results					
1. Are the results presented clearly, concisely, and in logical order for each objective, hypothesis, or research question (in case of multiple objectives, hypotheses, and/or research questions)?	5				
2. Are the Pictures, Figures, Tables, and any other artwork presented of high quality (legible, labelled properly, standing alone) and described and referred in the text properly?	5				
Discussion					
1. Is the discussion presented in a logical order for each objective, hypothesis, or research question (in case of multiple objectives, hypotheses, and/or research questions)?	2.5				
2. Does the student answer the research question(s), or accept or fail to accept null hypothesis(es) proposed for the study?	2.5				
3.Does the student relate the findings to relevant literature with proper citation?	2.5				

disagreement with previously reported results in other literature?  Conclusions and other parts		
•		
Does the student draw reasonable conclusion(s) based on the research findings,	5	
and present implications of the findings? Are the conclusions of any utility to		
the scientific community, or any other stakeholders? Are the		
acknowledgements and cited references properly presented?		
Overall Quality of Writing		
Given the entire application, what is the overall assessment of the individual	5	
thesis?		
Communication		
In a cogent manner	5	
Using appropriate style	2.5	
By adequately defending the results orally	2.5	
Total	50 marks	

Sign of Internal Examiner:		
Sign of External Examiner:		

# Checklist for Evaluation of Practice of Public Health (Advance) MPH 204 CP UNIVERISTY EXAM

Name of the student:Date:		
Program:		
Semester:	Name of the Internal faculty/Observer:	

Semester: Name of the Internal faculty/Observer	•	
Core Competencies	Marks allotted	Marks obtained
Students will develop critical thinking and research skills, data analysis, docume	entation.	•
Торіс		
The topic and the importance of topic are precise / Independent scientific thinking/originality	2.5	
Introduction & Literature Review		
1. Does the student present enough and relevant background on what is known on the topic, existing information gap, and importance of bridging that gap?	2.5	
2. Does the student cite enough, relevant literature properly to support the information presented?	2.5	
Methods		
1. Is there enough detail of what, when, where, and how the research was performed so that other researcher can repeat the method for similar studies?	2.5	
Results		
1. Are the results presented clearly, concisely, and in logical order for each objective, hypothesis, or research question (in case of multiple objectives, hypotheses, and/or research questions)?	5	
2. Are the Pictures, Figures, Tables, and any other artwork presented of high quality (legible, labelled properly, standing alone) and described and referred in the text properly?	5	
Discussion		
1. Is the discussion presented in a logical order for each objective, hypothesis, or research question (in case of multiple objectives, hypotheses, and/or research questions)?	2.5	
2. Does the student answer the research question(s), or accept or fail to accept null hypothesis(es) proposed for the study?	2.5	
3.Does the student relate the findings to relevant literature with proper citation?	2.5	
4. Does the student present satisfactory reasons for findings that are in disagreement with previously reported results in other literature?	2.5	
Conclusions and other parts		
Does the student draw reasonable conclusion(s) based on the research findings, and present implications of the findings? Are the conclusions of any utility to the scientific community, or any other stakeholders? Are the acknowledgements and cited references properly presented?	5	
Overall Quality of Writing		

Given the entire application, what is the overall assessment of the individual thesis?	5	
Communication		
In a cogent manner	5	
Using appropriate style	2.5	
By adequately defending the results orally	2.5	
Total	50 marks	

Sign of Internal Examiner:	
Sign of External Examiner:	_

# **Checklist for Evaluation of Practice of Public Health-Project (MPH 305P)**

Name of the student:	Date:	Progran
Semester: Name of the Internal faculty/Observer:		
Semester Name of the internal faculty/observer		
	Marks	Marks
Core Competencies	allotted	obtained
Students will develop critical thinking abilities utilizing the healthper olver and public health manager.  udents will take initiative to analyse the program / activity and complete		-
pertise in public health practice.	os a project activ	, , , , , , , , , , , , , , , , , , ,
Field Teaching		
a. Demonstrate competency in technical skills.	15	
Independent Work by Student guided by faculty		
a. Develop effective communication skills (verbally and through charting) with patients, team members, and family	05	
b. Identify intra and inter-professional team member roles and scopes of practice. Establish appropriate relationships with teammembers.	05	
Hands on practical work by students		
<ul> <li>a. Protect confidentiality of electronic/manual health records data, information, and knowledge of technology in an ethical manner</li> </ul>	05	
Independent work by student		
b. Demonstrate expected behaviors and complete tasks in a timely manner. Arrive to field experiences at assigned times. Maintain professional behavior and appearance and Logbook	20	
PROJECT REPORT	25	
Viva	20	
Attendance	05	
Total	100 Marks	
gn of Internal Examiner:	1	1
gn of External Examiner:		

## Resolution No. 3.10 of Academic Council (AC-49/2024):

Resolved and approved to collect the Dissertations/Projects 60 days before the University examination for all 2-year M.Sc. programs under MGM School of Biomedical Sciences to fulfil the credit allotted for project work, to be effective from batch 2023-24 onwards.



# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A++' Accredited by NAAC

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