MPHW (MULTI PURPOSE HEALTH WORKER)

Diploma in Multipurpose Health Worker (DMHW)

Program: Diploma in Multipurpose Health Worker (DMHW)

Duration: 1 & Half Year + (6 Month Internship)

Medium: English/Hindi

Minimum Attendance Required: 75%

Total Days: 180 Total Marks: 800

Assessment:

	Internal	External	Total	
Theory	25	75	100	
Practical	40	60	100	
Total			200	

Internal Evaluation (Theory papers):

Mid Term-I	Mid Term-II	Attendance	Total
10	10	05	25

Evaluation Practical's/Dissertations/Project Reports:

Internal	External	Total
40	60	100

Duration of Examinations:

Internal	External
2 Hrs	03Hrs

Internal Practical Evaluation (10 marks)

The Internal evaluation done by the Internal Examiner is based on the experiment performed during the internal examination.

Experiment	Attendance	Viva+Record	TotalInternal
(20 MARKS)	(05 MARKS)	(15 MARKS)	(40 MARKS)

External Practical Evaluation (15 marks)

The external evaluation done by the External Examineris based on the experiment performed during the external examination.

Experiment	File work	Viva	Total External
30 Marks	15 Marks	15 Marks	60 Marks

Admission to the Next Year: As per the university norms-Internship

PHC/CHC/SC / **Field training:** It will be of six months after one & Half year. The students will be exposed to real conditions of PHC/CHC/SC and field trainings. A proper hand on training will be provided to increase the ability and competency of the students. The students have to submit a detailed report of their PHC/CHC/SC field work.

Internal Seminar + Viva	External Seminar + Viva	Report	Total
50 Marks	50 Marks	50 Marks	150 Marks

First Year MPHW

S.NO	PAPER	SUBJECT NAME	THEORY	TOTAL
	CODE			
1	DMHW-101	Anatomy & Physiology	100	100
2	DMHW-102	Fundamental of computer	100	100
3	DMHW-103	Microbiology	100	100
4	DMHW-104	Health & Hygiene	100	100

Practical

S.NO	PAPER	SUBJECT NAME	PRACTI	TOTA
	CODE		CAL	\mathbf{L}
1	DMHW-151	Practical: Anatomy &	100	100
		Physiology		
2	DMHW-152	Practical:Fundamental of computer	100	100
3	DMHW-153	Practical: Microbiology	100	100
4	DMHW-154	Practical: Health & Hygiene	100	100

Total 800

Second Year MPHW

S.NO	PAPER	SUBJECT NAME	THEORY	TOTAL
	CODE			
1	DMHW-201	Public Health	100	100
2	DMHW-202	First aid and Emergency Care	100	100
3	DMHW-203	Health Information Education & Communication	100	100
4	DMHW-204	Midwifery (only females)	100	100

Practical

S.NO	PAPER CODE	SUBJECT NAME	PRACTI CAL	TOTAL
1	DMHW-251	Public Health	100	100
2	DMHW-252	First aid and Emergency Care	100	100
3	DMHW-253	Midwifery (only females)	100	100

Total 700

First Year Paper-I (100 Marks)

Anatomy (Part-A)
Paper code (DMHW-101)

Introduction of Bones of the Human Body of:

- Upper Limb : clavicle, scapula, humerus, radius, ulna, carpals, metacarpals & phalanges
- Lower Limb: hipbone, femur, tibia, fibula, tarsus, metatarsus & phalanges
- Skull: name the bone of skull and sutures between them
- Thorax: ribs and their articulations
- Vertebral Column: Cervical, thoracic, lumber, sacral and coccysial vertebrae

Surface Markings of the Body:

- Nine regions of the abdomen
- Four quadrants of the Hip

Introduction of different Vital Organs:

A) Respiratory Organs:

- Nasopharynx
- Oropharynx
- Larynx
- Trachea
- Bronchi
- Lungs (and their lobular segments)
- Thoracic cavity
- Pleura and Pleural cavity

B) Circulatory Organs:

- Anatomical position of the heart
- Pericardium of the heart
- Chambers of the heart
- Great vessels of the heart
- Valves of the heart

C) Digestive Organs:

- Tongue
- Teeth

- Oral cavity
- Pharynx
- Oesophagus
- Stomach
- Small intestine
- Large intestine and its colons

PRACTICAL: 100 Marks

• Labelled Diagrams of different organs and bones Vivo

Physiology (Part-B) (100 Marks)

A) The Cell in health and disease

- Introduction of pathology
- Cellular structure and metabolism
- Inflammation Acute and Chronic
- Derangement of Body Fluids and Electrolytes
 - 1) Types of shocks
 - 2) Ischemia
 - 3) Infection
- Neoplasia Aetiology and Pathogenesis

B) Introduction of haematology

- Formation of Blood
- Erythropoiesis
- Leucopoiesis
- Thrombopoiesis
- Collection of Blood
- Anticoagulants
- Red cell count Haemocytometer, Methods and Calculation
- WBC Count -- Methods
- Differential Leucocytes Count (DLC)-Morphology of White Cells, Normal Values
 Rananocostry Stains: Staining procedures
 Counting Methods, Principle of staining
- Hb estimation Method

Colorimetric Method

Chemical Method

Gasmetric Method

S.G. Method

Clinical Importance

C) Haematology:

- ESR
- Methods
- Factors Affecting ESR
- Normal Values

- Importance
- RBC Indices
- WBC
- Platelets

D) Body Fluids:

(a) Urine:

- Method of Collection
- Normal Constituents
- Physical Examination
- Chemical Examination

(b) Stool Examination:

- Method of Collection
- Normal Constituents and appearance
- Abnormal Constituents (Ova, Cyst)

(c) C.S.F. Examination

- Physical Examination
- Chemical Examination
- Microscopy
- Cell 1 Count
- Staining

(d) Semen Analysis

- Collection
- Examination
- Special Tests

Practical

- Collection of Sample
- Hb estimation
- TLC and DLC
- RBC Count
- Peripheral blood film staining and study of Malarial Parasite
- Laboratory management Sample Collection, Labelling, Transport,

Paper-II

Computer Skill (100 Marks)

Paper Code-DMHW-102

Fundamentals of Computers

Introduction:

Classification of computer & generation, Basic architecture of computer and its building blocks, input devices, Computer memories.

Number System:

Binary, Octal, Decimal, Hexadecimal representation of characters: ASCII and EBDIC codes, Binary arithmetic and logic circuit.

Classification of Computer language:

Machine, Assembly and High level language, Brief idea of operating system, Assembler, Compiler and interpreter.

Fundamentals of Computer Programming:

Problem solving through computer algorithms and flow chart level of programming.

Operating System:

Introduction to O.S., Types of operating system, Multiprogramming, Timesharing, Batch, Real time and UNIX

Internet:

Introduction to Internet, Components, Services and working on internet, introduction to protocols, tools.

Practical 100 Marks

Paper-III

Microbiology (100 Marks)
Paper Code: DMHW-103

I. Introduction of brief history of Microbiology

- Historical Aspect
- Relationship of Micro-organism to men
- Micro-organism in Disease and Health

II. Requirement and uses of common Laboratory Equipments

- Incubator, Hot Air Oven, Water Bath
- Anaerobic Jar, Centrifuge, Autoclave
- Microscope
- Glassware Description of Glassware, its use, handling and care

III. Sterilization:

- Definition
- Classification and General Principal of Sterilization
- Autoclave its structure, functioning, control and indicator

IV. Antiseptics & Disinfectants

- Definition
- Types
- Mode of Action
- Uses

V. Collection, Transportation and processing of clinical samples for Microbiological

Investigations

Bacteriology:

- Definition
- Bacteria General characteristics of Bacteria
- Classification and morphology of Bacteria
- Structure of Cell, Capsule, Flagella, and Spore
- Growth of Bacteria
- Nutrition of Bacteria

Virology:

- Definition
- General Introduction of Virus
- Physiochemical characteristic of Viruses
- Diseases caused by different Virus and mode of infection

Parasitology:

- Definition
- General Characteristics of Parasite
- Classification of Parasite
- Mode of transmission

Fungus:

- Definition
- Structure
- Classification

Practical: 100 Marks

- Demonstration of washing of instruments
- Staining Type of Staining, Principal, Procedure and Interpretation

Paper-IV

Health & Hygiene

- Definition of Health
- Responsibility of Health
- Nutrition
- Environmental sanitation
- Concept of Health & Diseases
- Factors influencing Health
- Healthful Living
- Health Habits & Practices
- Maternal Health
- Equipment & supplies for Maternal Health Work.
- School Health Service
- National Health Programme
- Community Resources for health education.

- Communication Skills for health worker
- Audio Visual aids in health education
- Dietary needs of the patient

PRACTICAL-100MARKS

Second Year Paper-I

Public Health (Paper Code-DMHW-201)

Introduction of Public Health:

Concept of health,nursing, community, community health and development. Responsibilities of health workers. Ethics and behavior of health worker. Health team. Organisation of health and nursing and nursing services, principles of organizing care, in the home, health agencies, clinics, scholl and hospitals., principles of organizing care according to the needs and priorities, health and medical problems

Public Health and problems in india:-

Factors related to family health, integrating family services (MCH servuces), family life education for parents, nutritions of the family, introduction of nutrition relation of nutrition of health, foods nutrients and function offood, vitamins minerals, vitamins minerals deficiencies, applied nutrition Programme, nutrition education.

Dietary needs of the patient:

Healthful environment in the home care of Sick, aged person handicapped, home visiting and domiciliary health service, in home Understanding and learning about community, family structure and activities, Urban and rural administrative pattern, social processes, social control(traditional, customs and habits).

PRACTICAL- 100 MARKS

Paper-II

First aid and Emergency Care (Paper Code-DMHW-202)

Life saving measures, management of emergency situation, general rules for first aid, observations, examinations, tests, temperature, pulse, respirations, blood pressure, weight and height, history taking physical examination, urine analysis, collection of specimens, X-ray and special tests, dressing and bandages. First aid in the injuries of the skin(wounds, burns and scalds, bites and stings), first aid in injuries to bones, joint and muscles(fracture), transport of casualties, first aid in loss of consciousness, first aid in convulsions and hysteria, first aid in shock, first aid for forign bodies in the ear, eye, nose and throat, artificial respiration, first aid in asphyxia, first aid in poison. Mental Health:- Introduction to psychology, mental hygiene and health, self understanding and growth, mental hygiene and health in various stages of life. Mental illness: normal and abnormal behavior, education

PRACTICAL- 100 MARKS

Paper-III

Health Information Education & Communication (Paper Code-DMHW-203)

Child health, growth and development of a child, tags of child life an basic needs, teaching mother about child health needs and priorities, assessment of growth and development ,new born observation and assessment, care of the normal new born at home, management of minor disorders, care of premature baby at home, feeding of infants and children prevention and treatment of common childhood diseases and ailments, agencies for child care and welfare. Health of mother:- principles of care during the maternity cycle, ante-natal care, action in case of abnormalities of pregnancy , intranatal care , post. Natal care, health education: diet, exercise, hygiene and family planning, organization of maternal health care services, training of dais. Immunization: Immunity immunization, care and storage of vaccines, immunization schedule, methods of immunization , immunization reaction,

treatment, and prevention, responsibilities of health workers in immunization campaigns. Family Planning & family welfare including population duration:-introduction importance of family planning to the family and community, aspects of family health and welfare services, contraception and family planning methods, methods requiring medical attention and supervision, national family welfare programme, organizing family welfare work, records and reports, supervision of dais and community level workers.

Paper-IV

Midwifery (Paper Code-DMHW-204) Only for Female

- 1. Describe male and female reproductive organs.
- 2. Explain process of conception and foetal development.
- 3. Describe female pelvis and the muscles involved in delivery of foetus.
- 4. Conduct normal delivery and provide care to the newborn.
- 5. Provide care to pregnant mother during ante, intra and post natal period at home and hospital.
- 6. Provide need based counselling to the mother and to her family during antenatal, intranatal, and postnatal period.
- 7. Resuscitate the high-risk newborn baby.
- 8. Identify high-risk pregnancies and refer them immediately for safe mother hood.
- 9. Identify deviation from normal labour in time and take necessary action.
- 10. Provide adequate care identifying abnormal puerperium.
- 11. Administer the drugs as per the protocols.
- 12. Educate community for improving quality of life of the family.
- 13. Promote improvement in the status of women in society.
- 14. Identify women's health problem and provide guidance and support.
- 15. Provide care and guidance to women with reproductive health problems.
- 16. Participate in reproductive health and family welfare programmes.

PRACTICAL-100MARKS

Activity/Visit

To visit the following places, meet people visiting/living/working in that environment, understand their life style,understand value of human life in each environment and share with them the aspects of their joys and sorrows:

- 1. Charitable and Government Hospitals.
- 2. Orphanages.
- 3. Old age homes.
- **4.** Training Institute for handicapped.
- **5.** Drug De-Addiction centres.
- **6.** Schools in rural areas.
- **7.** Industries.
- 8. Slums.
- **9.** Jails.

The students shall prepare their project note books during each visit mentioning their experiences about life of the people to whom they visited