

Annexure-II**NOTIFICATION NO.15/2021**
SCHEME AND SYLLABUS FOR THE POST OF LECTURERS / ASSISTANT PROFESSORS IN
HOMOEOPATHY IN AYUSH DEPARTMENT

WRITTEN EXAMINATION (OBJECTIVE TYPE)				
PAPER	Subject	No. Of Questions	Duration in Minutes	Maximum Marks
Paper - I	General Studies & Mental Ability (Degree Standard)	150	150	150
Paper - II	Homoeopathy Concerned Subject (P.G. Standard)	150	150	300
Total				450

Note: 1. As per G.O.Ms. No.235 Finance (HR-1, Plg & Policy) Dept, Dt: 06/12/2016, for each wrong answer will be penalized with 1/3rd of the marks prescribed for the question in all Objective type papers.

2. Candidates eligible for Post Code No. 1, 2, 3 & 4 concerned subjects only for Paper – II

3. Candidates eligible for Post Code No. 5,6,7,8,9,10,11, & 12 Common to all for Paper – II. The Examination may be conducted different sections.

4. Medium of Examination will be English only.

Post Code	Subject
1.	Pharmacy
2.	Materia medica
3.	Organon of medicine and principles of homoeopathic philosophy & psychology
4.	Repertory and case taking
5.	Human anatomy
6.	Physiology
7.	Medicine including homeopathic therapeutics
8.	General pathology & microbiology
9.	Forensic medicine & toxicology
10.	Surgery
11.	Obstetrics & gynaecology
12	Community medicine (social preventive medicine)

SYLLABUS**PAPER-I: GENERAL STUDIES AND MENTAL ABILITY**

1. Events of national and international importance.
2. Current affairs- international, national and regional.
3. General Science and its applications to the day to day life Contemporary developments in Science & Technology and information Technology.
4. Social- economic and political history of modern India with emphasis on Andhra Pradesh. **(Starts from 1707 AD)**
5. Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives with specific reference to Andhra Pradesh.
6. Economic development in India since independence with emphasis on Andhra Pradesh.
7. Physical geography of Indian sub-continent and Andhra Pradesh.

8. Disaster management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.
9. Sustainable Development and Environmental Protection
10. Logical reasoning, analytical ability and data interpretation.
11. Data Analysis:
 - a) Tabulation of data
 - b) Visual representation of data
 - c) Basic data analysis (Summary Statistics such as mean, median, mode, variance and coefficient of variation) and Interpretation
12. Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and Legal implications/problems.

1. For the post of Assistant Professor/Lecturer (Hemoeo) in Pharmacy

Paper – II **PHARMACY**

1. Explanation of terms like common names synonyms, Hyponyms, typonyms, invalidation
2. Schools of Medicine; their discovery, principles, pharmacology and Materia Medica, scope limitations.
3. History of the art and science of pharmaceuticals.
4. Sources of Homoeopathic Pharmacy.
5. Importance of the knowledge of pharmacy.
6. Sources of knowledge about curative powers of the technique of drug proving in Homoeopathy.
7. Relation of pharmaceuticals with other sciences.
8. Inter-relationship of different schools of pharmacy with emphasis on relationship of Allopathic and Homoeopathic pharmacy.
9. Routes of Administration of drugs in general. Routes of Administration of Homoeopathic remedies. Action of Drugs. Uses of Drugs.
10. Pharmacy and pharmacopoeia; its Sources and relation with other science. Classification of Homoeopathic Medicines according to their.
11. Homoeopathic posology its logic, advantages and disadvantages.
12. Potentisation: Its logic, Scientificity and evolution and scales.
13. Vehicles.
14. Scales for preparation of drugs.
15. Abbreviations used in prescription writing.
16. Legal part: legislation in respect of Homoeopathic Pharmacy, Drugs and Cosmetic Act, Pharmacy Act.

2. For the post of Assistant Professor/Lecturer (Hemoeo) in materia medica

Paper – II

MATERIA MEDICA

1. Nature and scope of Homeopathic Materia Medica.
2. Sources of Homeopathic Materia Medica
3. Drugs as prescribed for the PG course
4. A study of 12 tissue remedies according to Schusler's biochemic system of medicine.
5. Importance of drug relationship.
6. Importance of source books

**3. For the post of Assistant Professor/Lecturer (Hemoeo) in Organon Of Philosophy/
Organon Medicine**

Paper – II

**ORGANON OF MEDICINE AND PRINCIPLES OF HOMOEOPATHIC PHILOSOPHY &
PSYCHOLOGY**

1. Fundamentals of Homeopathic Science: Preliminary lectures or the evolution of Medicinal practice by the ancients giving stress to rationalistic vitalistic thoughts.
2. Short history of Hahnemann's life and contributions.
3. Brief life and contributions of early pioneers after Hahnemann
4. Brief study of early history of spread of Homeopathy & position of Homeopathy in various countries.
5. Fundamentals Principles of Homeopathy.
6. Health: Hahnemann's and modern concept.
7. Introductory lectures on diseases, their classification, drug diseases, case taking and drug proving.
8. Logic
9. Introductions to Psychology.
10. Hahnemann's organon of medicine from aphorism : 1 to 291 of 6th edition and aphorism 1 to 294 of 5th edition.
11. Analysis and evaluation of symptoms: classification of symptoms:
12. Hahnemann's theory of chronic disease
13. Kent's lectures, Robert and Stuart close works in philosophy
14. Posology
15. Diet, ancillary mode of treatment.

In addition the following points be considered

1. History of Medicine.
2. History of Homoeopathy, its spread to different countries.
3. Concepts of health and factors modifying it.
4. Concept of susceptibility and vital reaction.
5. Concept of disease and totality of symptoms
6. Concept of Drug, Medicine and Remedy.
7. Concepts of Cure and Disease and Drug relationship.
8. Scope and limitations of different modes of employing medicines in disease Antipathy,, Allopathy and Homoeopathy.
9. Various methods of classification and evaluations of symptoms common and characteristic General and particular.
10. Concepts of incurable disease, suppression and palliation.
11. Prophylactics.
12. Scope and limitations of Homoeopathy.
13. Remedy response, prognosis after administration of a remedy.
14. Principles and criteria for repetition and selection of potency.
15. Understanding of Homeopathic Philosophy by kent, HA Roberts, Stuart close, Dudgeon & Hughes.

4. For the post of Assistant Professor/Lecturer (Hemoeo) in Repertory

Paper – II

REPERTORY AND CASE TAKING

1. Difficulties of taking a chronic case. Recording of cases and usefulness of record keeping.

2. Totality of symptoms, prescribing symptoms: uncommon peculiar and characteristic symptoms Analysis of the case uncommon and common symptoms. Gradation and evaluation of Symptoms. Importance of Mental symptoms. Kinds and sources of general symptoms. Concomitant symptoms.
3. Learning the language of repertory i.e. meaning of rubrics in correlation with Materia Medica and clinical experiences.
4. History and development of repertories till date.
5. Types of repertories
6. Explanation of terminologies used in various repertories.
7. Boenninghausen's therapeutic pocket book and Boger Boenninghausen's repertory.
8. Kent's repertory.
9. Card repertory.
10. Brief introduction to puritan group of repertory as Knerr, Gentry. Robert in respect of their clinic use.
11. Computer Repertorization.
12. Latest software in Repertorization -their advantages & limitations.
13. Robin Murphy's Rep & theory.

5. For the post of Assistant Professor/Lecturer (Hemoeo) in Anatomy

Paper – II

HUMAN ANATOMY

1. Development anatomy-General principles of development and growth and the effect of hereditary and environment factors to be given by lectures, charts, models and slides.
2. Micro-anatomy (Histology)-Modern conceptions of cell, epithelial tissue, connective tissue, muscular tissue, nervous tissue and systematic structure.
3. Modern conception of cell-components and their functions, why a cell divides, cell division, types with their significance.
4. Regional anatomy - Regional Anatomy with emphasis on developmental anatomy, broad relationship, surface marking, radiological anatomy, and applied anatomy.
 - 4.1. Thorax
 - 4.1.1. Surface marking - pleura, lung, and heart - valves of heart, border, arch of aorta, superior vena cava, bifurcation of trachea.
 - 4.2. Abdomen and Pelvis
 - 4.2.1. The abdominal wall-skin and muscles, innervations of fascia, peritoneum, blood vessels, lymphatics, autonomic, ganglia and plexuses.
 - 4.2.2. Stomach, small intestine, caecum, appendix, large intestine,
 - 4.2.3. Duodenum, pancreas, kidneys, uterus, supra renals.
 - 4.2.4. Liver and gall bladder
 - 4.2.5. Applied anatomy of referred pain, portal systemic anastomosis, catheterization of the urinary bladder in the male and female.
 - 4.2.6. Surface marking of organs and blood vessels.
 - 4.3. Head and Neck
 - 4.3.1. The eyelids, eyeball, lachrymal apparatus, the muscles that move the eyeball.
 - 4.3.2. The nasal cavity and nasopharynx, septum, conchae, para-nasal sinus, Eustachian tube lymphoid masses.
 - 4.3.3. Teeth and dentition.
 - 4.3.4. The external middle and internal ear.
 - 4.3.5. Surface marking: parotid gland, middle meningeal artery, thyroid gland, common internal and external carotid arteries.
 - 4.3.6. Cerebrum-areas of localization, vascular supply basal ganglion, internal capsule. Cerebellum-functions.
 - 4.3.7. Cerebro-spinal fluid-formation, circulation function, absorption.
 - 4.3.8. Cranial nerves, origin, courses (with minimum anatomical detail) areas

of distribution.

4.3.9. The sympathetic and parasympathetic nervous system location, distribution, functions.

6. For the post of Assistant Professor/Lecturer (Hemoec) in Physiology

Paper – II

PHYSIOLOGY

1. Introductions
 - 1.1. Fundamental phenomena of life. The cell and its differentiation. Tissues and organs of the body.
 - 1.2. Environmental Physiology
 - 1.3. Skin - structure and functions.
 - 1.4. Regulations of body temperature hypothermia.
2. Skeleton - Muscular System
 - 2.1. General introduction and classification of muscle fibers.
 - 2.2. Properties of skeletal muscles and factors affecting development of tension.
 - 2.3 Energy metabolism of muscles.
3. Nerve
 - 3.1 Structure and function of nerve cell.
 - 3.2 Classification and properties of nerve fibers.
 - 3.3 Wellerian degeneration, regeneration and reaction of degeneration.
4. Blood composition
 - 4.1 Composition and functions in general.
 - 4.2 Physiology of plasma proteins, normal values, E.S.R & other blood indices.
 - 4.3 Physiology of R. B.C, W.B.C. and platelets formation, fate and physiological and functions of formed elements of blood.
 - 4.4 A.B.O. and RH. Blood group systems.
 - 4.5 Lymphatics and RE system.
 - 4.6 Coagulation & haemostasis.
- 5.** Cardio-vascular system_
 - 5.1 Structure and properties of cardiac muscle.
 - 5.2 Generation and conduction of cardiac impulse, E.C.G. (Normal).
 - 5.3 Cardiac cycle with reference to pressure, volume changes, heart sounds etc.
 - 5.4 Heart rate and its regulations.
 - 5.5 Haemodynamics, B.P. and its regulation.
 - 5.6.1 Physiological basis of shock.
6. Respiratory system
 - 6.1 Mechanics of respiration, compliance.
 - 6.2 Pulmonary volumes and capacities.
 - 6.3 Pulmonary and alveolar ventilation.
 - 6.4 Physical principles of gaseous exchange a transport of respiratory gases.
 - 6.5 Hypoxia, acclimatization, cyanosis, dyspnoea, asphyxia, abnormal respiration.
 - 6.6 Pulmonary function tests.
7. Digestive system
 - 7.1 Composition, function and regulation of salivary, gastric pancreatic intestinal and biliary's secretion.
 - 7.2 Physiology of Liver and Gall bladder structure and functions.
8. Excretory system
 - 8.1 General introduction, structure and functions of kidney.
 - 8.2 Mechanism of formation of urine.
 - 8.3 Mechanism of concentration and dilution of urine.
 - 8.4 Physiology of micturation.
9. Endocrine System
 - 9.1 Physiology of pituitary, thyroid, parathyroid, pancreas adrenal cortex

- and adrenal medulla.
- 9.2 Regulation of secretion of endocrine gland.
10. Reproduction
- 10.1 Introduction in general and types of reproduction.
- 10.2 Physiology of testes and ovaries.
- 10.3 Physiology of menstruation, Pregnancy and Lactation.
- 10.4 Placenta and its function, foetal circulation and respiration.
11. Central Nervous System
- 11.1 General Organisation, structure and function of nerve cell and neuralgia.
- 11.2 Cerebrospinal fluid.
- 11.3 Physiology of reflex action - classification properties etc. of reflexes.
- 11.4 Sensory and motor tracts and effects of sections transaction & hemi section of the spinal cord.
- 11.5 Spinal decerebrate and decorticate preparations and Regulations of posture and equilibrium.
- 11.6 Cerebellum and basal ganglia.
- 11.7 Sensory and motor cortex.
- 11.8 Higher functions of cortex: sleep and wake fulness, EEG memory, speech, learning.
- 11.9 Physiology of thalamus and hypothalamus: and limbic system.
- 11.10 Physiology of autonomic nervous system, peripheral and central mechanism.
12. Special senses
- 12.1. Nutrition: Balanced diet and special dietary requirements during pregnancy, lactation and grown.
13. BIO-chemistry
- 13.1. Biochemical principles and elementary constituents of protoplasm.
- 13.2. Chemistry of proteins.
- 13.3. Chemistry of carbohydrates.
- 13.4. Chemistry of lipids.
- 13.5. Enzymes and vitamins.
- 13.6. Metabolism of proteins, fats, carbohydrates, minerals. Biophysical process and their principles in relation to human body.

7. For the post of Assistant Professor/Lecturer (Hemoeo) in Medicine/Practice of Medicine

Paper – II

MEDICINE INCLUDING HOMEOPATHIC THERAPEUTICS

1. Clinical Methods of Examination of patients as a whole
2. Respiratory diseases
3. Alimentary Tract and Pancreas Disease
4. Genetic Factors- Chronic Diseases and Miasms Dept. of Organon & Philosophy
5. Nutritional diseases- Nutrition, Hygiene in Dept. in Community Medicine
6. Immunological Factors in Diseases - Epidemiology in Dept. of Community medicine
7. Climacteric Factors in Diseases
8. Metabolic Disease
9. Endocrinal Diseases
10. Liver and Billiary Tract Diseases
11. Hematological Diseases
12. Cardiovascular system Diseases.
13. Kidneys& Urinary Tracts- Disease-Genito -urinary dis. Including STD
14. Water and Electrolytes balance- Diseases
15. Connective Tissue Disorder, Bones and Joints Disorders
16. Skin Diseases

17. CNS & peripheral nervous system- Mental Diseases
18. Pediatrics
19. The above diseases with Homeopathic Therapeutics
20. Latest investigative & diagnostic Procedures in the evaluation of a disease

8. For the post of Assistant Professor/Lecturer (Hemoeo) in Pathology & Microbiology

Paper – II

GENERAL PATHOLOGY & MICROBIOLOGY

(Including Parasitology, Bacteriology & Virology)

1. TOPICS OF GENERAL PATHOLOGY IN RELATION WITH MIASM

- 1.1 Inflammation Repair Healing Injury
- 1.2 Immunity
- 1.3 Degeneration
- 1.4 Neoplasm
- 1.5 Thrombosis and Embolism
- 1.6 Oedema
- 1.7 Disturbances of Pigment Metabolism
- 1.8 Hypertrophy Healing and Hyperplasia
- 1.9 Anaplasia - Metaplasia
- 1.10 Ischaemia - Haemorrhage - Shock - Atrophy - Relaxation
- 1.11 Hyperemia 1.12 Infection
- 1.13 Pyrexia
- 1.14 Necrosis, Gangrene and Infarction

2. BACTERIOLOGY

1. Morphology, and Biology
2. Sterilization
3. Immunity and Hypersensitiveness
4. Staphylococci, Streptococci, Neisseria,
5. Mycobacterium tuberculosis (Types) Mycobacterium leprae,
6. Corynebacterium diphtheriae.
7. Bacillus anthracis, Salmonella, and Vibrio
8. Pasteurella,
9. Haemophiles, pseudomonas, brucella, rickettsia, proteus, and spirochaetes-general idea details of treponema palladium and leptospira haemorrhagica. Viruses-general characters, classification of disease, e.g. varicella, Rabies, bacteriophage. Koch's postulates

PARASITOLOGY

1. Protozoa - classification names of important rhizopoda, entamoeba, Histolytica, morphology, pathogenesis and pathogenicity, diagnosis, difference from ent. Coli, sporozoan species of plasmodia life history and pathogenesis differentiation of species.
2. Kala - Azar.
3. Helminths - definition of certain terms; simple classification, differences between nematodes cestodes and trematodes
4. General difference between schistosomes and other trematodes.

VIROLOGY

1. Diagnosis of Infectious Diseases
2. Host Parasite Relationship. Disinfectant. Mode of action.
3. Practical aspects of Immunology i.e. Application in diagnosis, Passive Immunization,
4. Immunopathies in brief including AIDS

9. For the post of Assistant Professor/Lecturer (Hemoeo) in Forensic Medicine & Toxicology

Paper – II

FORENSIC MEDICINE & TOXICOLOGY

1. Legal Procedure: Definition of medical Jurisprudence. Courts and their Jurisdiction.
2. Medical ethics
 - 2.1. Law relating to medical registration and Medical relation between practitioners and the State. The Homeopathy Central Council Act, 1973 and the Code of Ethics under it, the practitioners and the patient. Malpractice covering professional secrecy, the practitioner and the various legislations (Acts) Provincial and Union such as workman's compensation Act, Public Health Act, Injuries Act, Child Marriage Registration Act, Borstal Schools Act, Medical Termination of Pregnancy Act, Lunacy Act, Indian Evidence Act etc.
3. Forensic Medicine
 - 3.1. Examination and identification of person living and dead; parts, bones, stains, etc. health, Medico legal: putrefaction mummification, saponification, forms of death, causes, agencies, onset etc. Assaults, wounds Injuries and death by violence. Asphyxial death, blood examination, blood stains, seminal stains, burns, scalds, lightning stroke etc. Starvation, pregnancy, delivery, abortion Infanticide, sexual Crimes. Insanity in relation to the State life and accident insurance.
4. Toxicology
 - 4.1. Poisoning in general, the symptoms and treatments of various poisons, post-mortem appearance and test should be given, study of the following poisons:-
 - 4.2. Mineral Acid, corrosive, sublimate, arsenic and its compound alcohol opium and its alkaloids, carbolic acids, carbon monoxide, carbon dioxide. Kerosene oil, cannabis indica, cocaine, Belladonna, strychnine and nux vomica, aconite, oleander, snake poisoning, prussic acid, lead.

10. For the post of Assistant Professor/Lecturer (Hemoeo) in Surgery

Paper – II

SURGERY

1. Fundamentals of Examination of a patient with surgical problems.
2. Basics of general surgical procedures.
3. Inflammation, Infections (Specific and Non- specific) Suppuration, Bacteriology, Immunity.
4. Injuries of various kinds - wound healing and management including Ulcers, Sinuses, Gangrene, etc.
5. Hemorrhage, shock , their management.
6. Resuscitation and support in emergencies.
7. Accidents and Warfare injuries management.
8. Burns Management.
9. Fractures and Dislocation : general principles.
10. Diseases of the bones : general principles including growing skeleton.
11. Diseases of the joints: general principles including Rheumatology.
12. Diseases of the muscles, tendons, Fascia, etc: General principle.
13. Diseases of the Arteries: general principles.
14. Diseases of the veins : general principles.
15. Diseases of the Lymphatic system : general principles.
16. Diseases of the nerves: general principles.

17. Oncology: Tumors, Cysts, etc. General principles of management.
18. Congenital disorders: orientation and correction procedures.
19. ORTHOPAEDICS
 - a. Study as above about injuries, inflammation. Ulcer, sinus, tumors, cysts, etc., (related to common condition of all bones and joints including spine) with relevant management, correlating with physiotherapy etc.,
20. OPHTHAMOLOGY
 - a. Knowledge of common diseases, accidents, injuries, etc. Of various part of Eyes. Clinical Examination of Eyes (various parts) using various instruments including Ophthalmoscopy. Common Eyes operations and relevant care of the patients.
21. OTORHINOLARYNGOLOGY (ENT)
 - a. Study as above of Ear, Nose, Throat, Tracheo-brochial Tree, Oesophagus.

11. For the post of Assistant Professor/Lecturer (Hemoeo) in Obstetrics & Gynaecology

Paper – II

OBSTETRICS & GYNAECOLOGY

1. Gynaecological Examination.
2. Uterine displacements.
3. Inflammation. Ulceration and traumatic lesions of the female genital organs. Malignant / non malignant Growths, Common Gynaecological operations and radiotherapy.
4. Leucorrhoea.
5. Menstrual disorders
6. Infertility
7. Diagnosis of pregnancy
8. Ante-natal care.
9. Abnormal Pregnancy Introduction.
10. Normal labour
11. Abnormal Labour Introduction
12. Post natal care Puerperal.
13. Abnormal Puerperal
14. Care of the New born
15. Infant Care
16. Neonatal hygiene
17. Breast feeding
18. Artificial feeding
19. Management of premature child
20. Asphyxia
21. Common disorders new born
22. Abnormal pregnancies: Abortions , Molar pregnancy, Extra Uterine, Diseases of placenta and membrane, Toxaemia of pregnancy, Antepartum Hemorrhage, Disorders of Genital tract Retroversion, prolapse, Tumours, etc. Multiple pregnancy , protracted gestation.
23. Common disorders and systemic diseases associated with pregnancy.
24. Labour Abnormal Position and Presentation, Twins, prolapse of Cord and limbs, abnormalities in the action of the Uterus, abnormal condition of soft parts, contracted pelvis, obstructed labour, Complications of third stage of labour , injuries of birth canals.
25. Common Obstetrical operations.

26. Homoeopathic therapeutics diseases of women.

**12. For the post of Assistant Professor/Lecturer (Hemoeo) in Social Preventive Medicine/
Community Medicine**

Paper – II

COMMUNITY MEDICINE (Social Preventive Medicine)

1. Introduction to preventive and Social medicine, aim and scope of preventive and social medicine, social causes of disease and social problems or the sick, relation of economic factors and environment in health and disease.
2. Physiological hygiene
 - 2.1. Food and nutrition - food in relation to health and disease. Balanced diets. Nutritional deficiencies and nutritional survey. Food processing, pasteurization of milk. Adulteration of food and food inspection, Food poisoning.
 - 2.2. Air, light and sunshine.
 - 2.3. Effect of climate - humidity temperature, pressure and other meteorological conditions - comfort zone, effect of overcrowding.
 - 2.4. Personal hygiene - (Cleanliness, rest, sleep, work) Physical exercise and training care of health in tropics.
3. Environmental sanitation:
 - 3.1. Definition and importance.
 - 3.2. Atmospheric pollution- purification or air, air sterilization, air borne diseases.
 - 3.3. Water supplies - sources and uses, impurities and purification. Public water supplies in urban and rural areas. Standards of drinking water , water borne diseases.
 - 3.4. Conservancy- Methods in villages towns and cities, septic tanks, dry earth latrines - water closets Disposal sewage, disposal of the deceased, disposal of refuse incineration.
 - 3.5. Sanitation of fairs and festivals.
 - 3.6. Disinfection - disinfectants, deodorants, antiseptics, germicides. Methods of disinfection and sterilization.
 - 3.7. Insects - Insecticides and disinfection - insects in relation to disease. Insect control.
 - 3.8. Protozoal / helminthic diseases life cycle, their prevention.
4. Medical Statistics.
5. Preventive Medicine
 - 5.1. General principles of prevention and control of communicable diseases, plague, cholera, small pox , Diphtheria, Leprosy, Tuberculosis, Malaria, Kala- Azar, Filriasis, Common viral diseases e.g. Common cold Measles, Chicken pox. Poliomyelitis, Infective Hepatitis, Helminthic Infections, Enteric fever, dysenteries and also animal diseases transmissible to man. Their description and methods of preventive spread by contact, by droplet infection by environmental Vehicles, water, soil food insects, animals, founderies, prophylaxis and vaccination.
 - 5.2. General principles of prevention and control of non - communicable diseases e.g. obesity, hypertension etc.

6. Maternal and Child Health, School health services, health education, mental hygiene - elementary principles; school medicine its aim and methods.
7. Family planning - Demography, channels of communication, National Family planning programme, knowledge, attitudes regarding contraceptive practices. Population and growth control.
8. Public health administration and international health relation.
9. Homoeopathic concept of prophylaxis, vaccination, Immunology and personal hygiene.
10. Collection, Analysis & presentation of Data.
11. Single blind & Double blind research Trials.