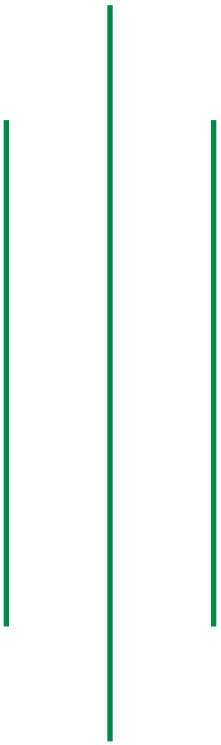
Syllabus for Licensing Examination of Bachelor of Homeopathic Medicine and Surgery (BHMS) 2021



Nepal Health Professional Council

Bansbari, Kathmandu

First Revision 2022

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UNIT-1
Anatomy & Physiology

Anatomy

General

- Introduction to Anatomy, nomenclature, anatomical position, planes, tissues and movements.
- Developments Anatomy, Histological study

Embryology

Spermatogenesis, Oogenesis, formation of germ layers, Placenta development of - abdominal organs, Cardio vascular system, Nervous system, Respiratory system, Body Cavity, Uro-genital system, Endocrine system.

Regional Anatomy:

Upper & lower extremity, Head, Neck, Face, Brain, Thorax, Special Senses, Abdomen and Pelvic to be studied regionally and system wise with reference to bones, muscles joints, arterial supply, venous drainage, lymphatic supply,

Nervous System:

Gross anatomy of brain and spinal cord and the main nerve tracts. The peripheral nerves tracts. The peripheral nerves, cranial nerves there relations course and distributions. Autonomic nervous system-development and anomalies, applied Anatomy.

Physiology

Introduction:

Fundamental phenomena of life. The cell and its differentiation. Tissues and organs of the body. Normal functioning of all the organ systems of the body and their interactions.

Environmental Physiology

- Skin Structure and functions.
- Regulation of body temperature.
- Sweat gland their structure and composition

Skeleton- muscular system.

- General introduction and clasification of muscle fibers, simple contraction.
- Excitation-construction coupling and molecular basis of construction.
- Properties of skeletal muscles. Energy metabolism of muscle.
- Blood
- Blood, its composition and functions,
- Life history of red blood cells and white blood cell, their functions.
- Blood groups, Coagulation of blood and Haemostasis.
- Plasma proteins. Lymphatics and RE system,

Cardio Vascular System

- Heart structure innervations. Cardiac cycle, heart sound their character and
- causation, properties of cardiac muscle, regulations of cardio vascular system.
- Normal and Abnormal E.C.G.
- Heart attack & Heart block
- Pulse its normal characters.
- Blood pressure.

Lymphatic System

Structure of lymphatic gland and vessels, Composition of lymph, mechanism of lymph fluid and its flow.

Respiratory System

- Physiological Anatomy of respiratory tract, -Structure of trachea, bronchi and lungs.
- Mechanism of respiration, artificial respiration.
- Pulmonary volumes and capacities, Pulmonary function test.
- Physical principles of gaseous exchange and transport. of respiratory
- gases.
- Apnoea, Asphyxia abnormal respiration.

Digestive system-

- Food stuff-vitamin, Functions of the oesophagus, Stomach. Large and small intestine, salivary glands, pancreas, liver.
- Composition function and regulation of digestive juices – Salivary, gastric, pancreatic intestinal and bile's secretion.
- Movements of G.I. tract.
- Mechanism of digestion. Digestion and Absorption of food stuff-carbohydrates Proteins and lipids.
- Function of liver.
- General Metabolism of fat, carbohydrates and proteins.

Excretory system

- Structure and function of kidney.
- Urine, physical character and chemical composition. Common and abnormal ingredients, urine formation glomerular, filtration, concentration of urine, Renal function test. Endocrine Structure and function of kidney. Physiology of Micturation.

Endocrine Glands-

- Pituitary, Thyroid, Parathyroid, Pancreas, Adrenal cortex and adrenal medulla
- Regulation of secretion of endocrine glands.

Reproductive System

- Male and female reproductive organs, functions of hormones fertilization of ovum, mammary gland.
- Physiology of Testis, Ovaries, Menstruation, Pregnancy and lactation. Placenta and its function, foetal circulation.

Nervous system

- Structure and Function of Nerve cell.
- The central and autonomic nervous system.
- Cerebro – Spinal fluid.
- Structure and functions of Spinal cord-ascending and descending tracts.
- Brain-structure and functions of cerebral and cerebellum, Thalamus, Hypothalamus, Physiology of Sleep.
- Medulla-vasomotor, cardiac and respiratory centres.
- Physiology of Pain.

Special Senses

- Physiology of taste and smell sensation, Sensation of touch.
- Functional anatomy of eye, Mechanism of accommodation, errors of refraction.
- Functions of retina: photoreception, colour vision and electroretinography
- Central mechanisms of vision and visual perception
- Functional anatomy of ear, Organ of Corti, auditory mechanism, Auditory pathway
- Olfaction, Physiology of taste

Biochemistry

- Function and classification of carbohydrates, lipids, protein and amino acids, their Metabolism, metabolic pathways, Vitamins, Enzymes, minerals & immunology.

UNIT-2
Homeopathic Pharmacy

Homeopathic Pharmacy

1. General introduction about Homeopathic Pharmacy ,Pharmacopoeia with reference to it's speciality and originality.
2. Scope of Homeopathic pharmacy in relation to Organon of Medicine, Materia Medica and National Economy as well as growth of Homeopathic Pharmacy.
3. Weights, measures and different homeopathic scales.
4. Commonly used instrument and appliances.
5. Sources of homeopathic drugs. Process of collection of drug substances, identification, purification & preservation of potentized drugs.
6. Vehicles, Dispensing of Medicines.
7. Methods of preparation of drugs from Organic and Inorganic chemicals, Vegetables, Animal products. Diseased products and the view of Hahnemann on it.
8. Methods of preparation of Mother Tinctures, Dilutions, Potencies and Trituration.
9. Fluxion potency, methods of conversion of Trituration into liquid form.
10. External application – focus on scope of Homoeopathic lotion, glycerol, liniment and Ointment it's preparation and uses of external applications.
11. Doctrine of signature, Prescription writing including abbreviation and it's validity
12. Posology, Concept of placebo, General knowledge of legislation in relation to homeopathic Pharmacy. Pharmacological terms.
13. Technique of Homeopathic drug proving.

UNIT-3
Organon of Medicine and Principles of Homeopathic Philosophy

Organon of Medicine

1. Definition of homeopathy and it's Scientific, Artistic, holistic, Individualistic and dynamic approach to life, health, disease, remedy and cure.
2. Short history of Hahnemann's life and his contribution. History of Homeopathy, Homeopathic Philosophy, spread of Homeopathy in Nepal, India and various countries
3. Hahnemann's Organon of Medicine from aphorism 1 to 294 and Different editions
4. Cardinal and Fundamental Principles of Homeopathy including following:-
   - Highest ideal of cure, mission of physician, cause of disease, different modes of treatment; therapeutic Law of cure (Homeopathic Law of Nature), modus operandi, health, disease and cure, Theory of vital force, complex disease, double complex disease, Acute and chronic disease, one sided disease, local disease, mental disease, intermittent disease, alternating disease, Action of medicine, primary and secondary action of drug.
   - Classification of disease, allergy, immunity, susceptibility, idiocyncrasy, theory and principles of miasm, chronic miasm, drug proving; Individualisation, indisposition, mongrel sect., dynamisation, kent's observation; Second prescription, Selection of potency, Repetition of dose, specific remedy, Symptomatology, homeopathic aggravation, incurable disease, suppression and palliation.
   - Hearings law of cure, obstacles to cure, limitation of homeopathy, management with partially imperfect medicine, prophylaxis in homeopathy, genus epidemicus, materia pecans, evaluation of symptoms, Anamnesis and diagnosis, fundamental principles of homeopathy, case taking, Totality of Symptoms, diet and regimen, obstacles to cures.

UNIT-4
Homeopathic Materia Medica & Repertory

Materia Medica

1. Sources, Nature and Scope of Homeopathic Materia Medica.
2. Different ways of study of Homeopathic Materia Medica.
3. Comparative study of drugs.
4. Applied Materia Medica
5. Relationship of remedies.
6. Study of Homoeopathic Remedies including 12 tissues remedies.

The Homeopathic Materia Medica contains following Medicines

1. Abies Canadensis,
2. Abies nigra,
3. Abroma Augusta,
4. Abrotanum,
5. Acalypha Indica,
6. Aconitum napellus,
7. Actea Spicata,
8. Adonis Vermalis,
9. Aethusa Cyan,
10. Allium Cepa,
11. Aloe socotrina,
12. Anthracinum,
13. Antimonium ars,
14. Antimonium Crude,
15. Antimonum tart,
16. Apis mallefica,
17. Argentum metallicum,
18. Argentum nitricum,
19. Arnica Montana,
20. Asafoetida,
21. Asterias rubens,
22. Bacllinum,
23. Baryta carb,
24. Baryta mur,
25. Belladonna,
26. Bellis perennis,
27. Benzoic Acid,
28. Borex,
29. Bovista,
30. Bromium,
31. Bryonia,
32. Bufo,
33. Cactus Grandiflorus,
34. Caladium Seguinum,
35. Calcarea arsenica,
36. Calcarea carb,
37. Calcarea flour,
38. Calcarea phos,
39. Calcarea suiph,
40. Calendula,
41. Calotropis,
42. Camphora,
43. Cannabis indica,
44. Cannabis sativa,
45. Cantharis,
46. Capsicum,
47. Carbo animalis,
48. Carbo vegitabilis,
49. Carbolic acid,
50. Carica papaya,
51. Cassia,
52. Caulophyllium,
53. Causticum,
54. Cedron,
55. Chamomilla,
56. Childonium,
57. Cicuta virosa,
58. Cina,
59. Clamatis,
60. Cocculus Indica,
61. Coffea cruda,
62. Colchicum,
63. Collinsonia,
64. Colocynthis,
65. Condurango,
66. Conium Mac,
67. Corallium,
68. Crataegus,
69. Crocus Sativa,
70. Crotalus horridus,
71. Croton tiglium,
72. Cuprum metallicum,
73. Cyclamen,
74. Dioscorea,
75. Digitalis pur,

76. Drosera,
77. Dulcamara,
78. Equisetum,
79. Eupatorium perfol,
80. Euphrasia,
81. Ferrum metallicum,
82. Ferrum phosphoricum,
83. Ficus religiosa,
84. Flouric acid,
85. Gelsemium,
86. Gionoine,
87. Graphitis,
88. Helleborus foetidus,
89. Helionius,
90. Heper–sulph,
91. Hydrastis can,
92. Hydrocotyle,
93. Hyoscyamus,
94. Hypericum,
95. Ignatia,
96. Iodum,
97. Ipecac,
98. Jonosia Asoca,
99. Justicia Adhatoda,
100. Kali brom,
101. Kali carb,
102. Kali mur,
103. Kali phos,
104. Kali sulph,
105. Kalimia latifolia,
106. Kreosotum,
107. Lac can,
108. Lac def,
109. Lachesis Mutus,
110. Ledum Pal,
111. Lilium tig,
112. Lithum carb,
113. Lobelia inf,
114. Lycopodium,
115. Lyssinum,
116. Magnesium Carb,
117. Magnesium a mur,
118. Medorrhinum,
119. Melilotus,
120. Millefolium,
121. Mephitis,
122. Mercurius cor,
123. Mercurius cyanatus,
124. Mercuris dul,
125. Mercuris sol,
126. Mercuris sulph,
127. Mezereum,
128. Magnesia Phos,
129. Moschus,
130. Murex pur,
131. Muriaticum acid,
132. Naja tri,
133. Natrium Carb,
134. Natrium Mur,
135. Natrium phos,
136. Natrium sulph,
137. Nitic acid,
138. Nux moschata,
139. Nux vomica,
140. Ocimum Sanct,
141. Onosmodium,
142. Opium,
143. Oxalic acid,
144. Petroleum,
145. Phosphoricum acid,
146. Physostigma,
147. Phytolacca d,
148. Picric acid,
149. Platina met,
150. Plumbum met,
151. Podophyllum,
152. Psorinum,
153. Pulsatilla,
154. Pyrogenium,
155. Radium bromide,
156. Ranuculus bulb,
157. Raphanus,
158. 158.Ratanhia,
159. Rauwolfia Serpentina
160. Rheum,
161. Rhododendron,
162. Rhus tox,
163. Rumex,
164. Ruta g,
165. Sabadilla,
166. Sabal serrulata,
167. Sabina,
168. Sambucus,
169. Sanguinaria Can,
170. Sanicula,
171. Sarsaparilla,
172. Secale cor,
173. Selenium met,
174. Sepia off,
175. Syzygium, jambolanum,
176. Silicea,
177. Spigelia,
178. Spongia tosta,
179. Squilla,
180. Stannum Met,
181. Staphysagria,
182. Sticta pul,
183. Stramonium,
184. Sulphur,
185. Sulphuric acid,
186. Symphytum off,

187. Syphilinum,
188. Tabacum,
189. Taraxacum,
190. Terentula c,
191. Teribinthina,
192. Theridion,
193. Thuja Occi,
194. Thyroidinum,
195. Trillium pendulum,
196. Urtica urens,
197. Vaccinum,
198. Variolinum,
199. Veratrum alb,
200. Varatrum viride,
201. Viburnum opulus,
202. Vinca minor,
203. Vipera,
204. Zincum met,

Homeopathic Repertory

1. Repertory: Meaning, History, Philosophical back ground, structure, Need, Scope & limitations and Classification of Repertories.
2. Study of different Repertories
    - Kent's, Synthesis, Boerick, Boennighausen's Therapeutic pocket book, Boger Boenninghausen's, Murphy's, Phatak, Card, Complete, Computer Repertory (Various types of Homoeopathic Software)
3. Methods and techniques of Repertorisation, Steps of Repertorisation
4. Gradation of Remedies by different authors (Kent, Synthesis, Boenninghausen, Boericke)
5. Terms and language of Repertories (Rubrics),word meaning, Cross references in other repertories and Materia Medica.
6. Conversion of symptoms into rubrics and Repertorisation using different repertories.
7. Case Taking – (From Aph -83 to 104) Definition of case taking, Purpose of case taking, Difficulties of case taking during chronic case. Recording of cases and usefulness of recorded keeping. Totality of Symptoms, Miasmatic assessment, Prescribing Symptoms, Uncommon, Peculiar and Characteristic Symptoms. Analysis of the cases Uncommon and common symptoms, Gradation and Evaluation of symptoms, Importance of General symptoms - Mental and Physical Symptoms. Sources of General symptoms. Particular symptoms, Importance of Concomitant symptoms.
8. Repertory – its relation with organon of Medicine and Materia Medica.

UNIT-5
Pathology- General & Systemic Pathology including Microbiology (Parasitology, Bacteriology, Virology and Mycology).

Pathology

(a) General Pathology

Cell injury and cellular adaptation, Infection, Inflammation, Repair, Healing, injury, Immunity, Degeneration, Embolism, Thrombosis, Oedema, Atrophy, Hypertrophy, Hyperplasia, Anaplasia, Metaplasia, Ischaemia, Haemorrhage, Shock, Atrophy, Hyperaemia, Gangrene, Infarction, Pyrexia, Necrosis, Disorder of Pigmentation, Neoplasia, Calcification, Effects of radiation, Hospital infection.

(b) Systemic Pathology

- **Diseases of blood:** anaemia, aplastic anaemia, chlorossis and leukaemia, hemophilia, DIC, Hereditary hemolytic anaemias: Thalassemia, sickle cell anaemia, hereditary spherocytosis, G-6-PD deficiency
- **Lymphoreticular System:** Lymphadenitis, Hodgkin's and Non-Hodgkin's Lymphomas, Splenomegaly causes and effects, Thymus: Dysgenesis, Atrophy, Hyperplasia, Neoplasia
- **Diseases of Cardiovascular system-** Rheumatic fever and Rheumatic Heart Disease, Infective Endocarditis, Atherosclerosis and Ischemic Heart Disease; Myocardial Infarction, Hypertension and Hypertensive Heart Disease, Congenital Heart Disease: ASD, VSD, Pericarditis and other pericardial diseases, Cardiomyopathy
- **Disease of Nervous system:** Meningitis, CNS tumors – glioma and meningioma, CSF and its disturbances: cerebral edema, raised intracranial pressure, Cerebrovascular diseases: Atherosclerosis, thrombosis, embolism, aneurysm, Hypoxia, Infarction and Hemorrhage
- **Diseases of Respiratory systems:** Pneumonia, Bronchial asthma, Bronchitis, Bronchiectasis, Emphysema, Empyema, Atelectasis, Pulmonary Tuberculosis Bronchogenic Carcinoma, Interstitial Lung Disease (ILD), Cor Pulmonale, Pulmonary Function Test. Occupational lung disorders: anthracosis, silicosis, asbestosis.
- **Diseases Of Kidney and Urinary tract:** Glomerulo Nephritis, Pyelo nephritis, Tubercular Pyelo nephritis, Nephrotic Syndrome, Metabolic disease of kidney, Acute & Chronic Renal Failure, Kidney tumors, Renal calculi, Cystitis, Uretheral stricture, Urethritis, Renal Function Test.
- **Diseases of G.I. System.**
  - Tongue- Glossitis, Ulcer, Tumors
  - Oesophagus- Reflux oesophagitis, tumour of Oesophagus
  - Stomach- Gastritis, Gastric Ulcers, Ca stomach
  - Liver- Liver function test, Jaundice, Hepatitis, Liver Abscess, Cirrhosis, Ca of Liver.
  - Gall Bladder- Cholecystitis, Stones and Tumours
  - Pancrease- Acute and Chronic Pancreatitis, Diabetes mellitus, Ca Pancrease

- Intestine- Duodenitis, ulcers (Typhoid ulcer, Tubercular ulcer), Amoebic and Bacillary dysentery, Ca Colon & Rectum, intestinal tumors, mal absorption syndrome, intestinal infection,
- Appendix- Acute Appendicitis, lump.

- **Diseases of Reproductive System including male and female Diseases.**
  - Testicular tumour, acute & chronic Prostatitis, Prostatic Tumors, Sterility, Ca Penis, Ovarian tumours, Fibroids, Ca cervix, Infertility, Endometriosis & endometrial diseases, Mastitis and Breast tumours, Ca breast.
  - Diseases of Skin, Soft tissues and Musculo-Skeletal system.
  - Skin infections & Tumours, Sarcoma, Osteoma, Paget's disease, Osteomyelitis, tubercular osteomyelitis, Rheumatoid arthritis, Osteoarthritis, Muscular dystrophy, Myasthenia gravis, Myositis
  - Endocrinal disease
  - Thyroid- Goiter,Hypothyroidism, thyrotoxicosis, and thyroid tumour, Diabetes mellitus, Adrenal diseases: Cortical hyperplasia, atrophy, tuberculosis, tumors of cortex and medulla, Parathyroid hyperplasia and tumors and Hyperparathyroidism, Pituitary tumors

Microbiology

Parasitology

The morphology, pathogenicity and laboratory investigation of the following parasites:- Entamoeba histoytica, Leismania donovani, Plasmodium vivax and P. Falciparum, Giardia limbia, Tricomonas vaginalis

Helmenthis-, Taeania Sanginata. T. Solium. Wochereria Bancrofti, Ancylostoma dudodenaie, Ascaris lumbricoides, Enterobius vermucularis, Trichuris trichura, Hymeolepsis nana & Echinococcos granulosus.

Virology

Nature and classification of viruses ,Morphology and replication of viruses-

Chiken pox, measles, common cold, Herpes zoster, Acute poliomyelitis, Influenza, Hepatitis and Primary typical pneumonia.

Bacteriology

The morphology ,biology and pathogenicity of the Gram positive,Gram negative, aerobic and anaerobic cocci and Bacilli , bacterial Staining and Cultivation and Tests for Bacterial identification.

Streptococcus,Staphylococcus, Pneumococcas and Gonococcus, Mycobacterium Tuberculosis, Bacillus tetanus, S.Typhi , Bacillus Leprae, B.Anthrax.

Mycology

Nature of fungi : basic structures and classification, Superficial mycoses, Systemic fungal infections with opportunistic mycosis.

Immunity to infection

Normal immune system, Innate Immunity, Antigens, presentation and association in immunity, Immunoglobulins and their role in immunity, Cell mediated immunity and their role, Hypersensitivity, Immunodeficiency, Antigen-antibody reactions & Vaccines.

Sterilisation and disinfection

Principles,Various methods, equipments and agents used in sterilization, CSSD.

UNIT-6
Forensic Medicine and Toxicology

Definition of Forensic Medicine (Medical jurisprudence) Courts and there jurisdiction. Medico legal acts in Nepal. Medical Ethics

- **Legal Procedure**

  Inquests, court in Nepal, legal procedure, Medical evidences in courts, Dying declaration, medical certificates and medico legal Autopsy, medico legal reports.

- **Personal Identification**

  Determination of age and sex in living and dead, race and religion, DNA finger printing, Foot print, Medico- legal importance of bones ,Scars and teeth, Tattoo marks, Handwriting, Anthropometry, Examination of biological stains and hair.

- **Death and it's medico legal importance**

  Types of Death, their medico legal importance, Immediate, early and late, signs of death and their medico legal importance, Asphyxial death (Mechanical Asphyxia and drowning),Death from starvation, cold and heat, Sudden death.

- **Sexual Offences Abortion And infanticide**

  Different methods, complications, Accidents and criminal abortions, MTP, Infant death, Rape, incest, sodomy, sadism, masochism, Tribadism, bestiality, Buccal coitus and other sexual offences (Perversions).

- **Injuries**

  Mechanical injuries, regional injuries, wound and burn

Toxicology

General and clinical Toxicology and Study of different poisons ,diagnosis of poisoning in living and dead ,General principles of management of poisoning, Medico legal aspects of poisons & Antidotes.

Clinical Toxicology

Types of poison, Clinical signs and Symptoms, diagnosis, management and medicolegal aspects of :

1. Corrosive poisons- sulphuric acid, phenol, oxalic acid, nitric acid, hydrochloric acid, organic acids and alkalies.
2. Irritant non metallic poisons- Phosphorus, Halogens, Organophosphorus.
3. Agricultural poisons- Organophosphorous, zinc phosphide, common insecticides and pesticides
4. Metallic poison- arsenic, lead, iron, copper, zinc.
5. Animal poisons- snake bite, scorpion bite, wasp, bee, cantherides & toxic fishes.
6. Somniferous poisons- opium & its derivatives, pethidine & codeine.
7. Deliriant poisons- Dhatura, cannabis, LSD, muscaline & cocaine.

8. Domestic poisons- kerosene, cleansing agents, disinfectants, household medicines.
9. Barbiturate poisoning, drug abuse & common drug overdoses like Paracetamol.
10. Vegetable poisons- ergot, capsicum, camphor, argemone, lathyrus & calotropis.
11. Alcohol poisoning (ethyl & methyl alcohol) and benzodiazepine poisoning.
12. Cardiac poisons- HCN, aconite, tobacco, quinine, digitalis and oleander.
13. Asphyxiant poisons- carbon monoxide, carbon dioxide, hydrogen sulphide, phosgene and phosphine.
14. Food adulteration. Common food poisonings- Botulism and Poisonous Mushrooms.

UNIT-7
Preventive and Social Medicine -Community Medicine (including health education and family medicine)

1. Introduction to preventive and social medicine concept, man and society 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**
   - 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.
   - Air, light and sunshine
   - Effect of climate, humidity, Temperature, pressure and other meteorological conditions comfort zone effect of overcrowding.
   - Personal Hygiene. (Cleanliness, rest, sleep, work) Physical exercise and training
   - care of health in tropics.

3. **Environmental Sanitation (Environment and Health)**
   - Definition and importance
   - Atmospheric pollution Purification of air, air sterilization, air bone diseases.
   - Water supplies sources and uses, impurities and purification. Public water supplies in urban and ruler areas. Standard of drinking water water borne diseases. • Conservancy methods in villages, towns and cities Septic tanks, dry earth latrines. Water closets, disposal of the dead, disposal of refuge and incineration.
   - Sanitation of fairs and festivals.
   - Disinfections- disinfectants, deodorants, antiseptics, germicides. Methods of disinfections and sterilization.
   - Insects insecticides and disinfection insects in relation of disease insect control.
   - Prophylaxis and vaccination Immunology and personal hygiene According to Homeopathic point of view.

4. **Biostatistics**
   - Need of Bio-statistics in Medicine
   - Statistical Methods
   - Frequency Distribution
   - Measures of Central Tendency.
   - Proportions
   - Normal Distribution
   - Standard error estimation
   - Tests of Significance
   - Confidence Interval
   - Bias/Random errors

- Sample size calculation
- Sampling methods
- census
- Demography

5. Epidemiology

Principles of epidemiology and Epidemiological methods:

- Aims, approach, Rates and ratios, measurement of Mortality,morbidity, methods, immunity, immunizing agents, disease prevention and control.

6. Epidemiology Of Communicable Diseases And Noncommunicable Diseases.

- Chicken pox, measles, Mumps influenza, Diphtheria, Whooping Cough, meningitis, SARS, Tuberculosis
- Polio, Hepatitis, diarrhea, Cholera, Amoebiasis, Ascariasis, Hookworm, food poisoning, typhoid,
- Malaria, Filariasis, Dengue
- Rabies, Japanese encephalitis,
- Plague, leptospirosis
- Taeniasis, Hydatid disease, Leishmaniasis
- Tetanus, leprosy, AIDS, STD
- Immunity, Immunization schedule, Cold chain, Immunization for international travel, Nutritional Disorders, RHD/CHD /Hypertension, stroke, Cancers, Blindness, Road Traffic Accidents, Diabetes mellitus, Obesity

7. Maternal and child health, School health services, Health Education, Mental Health, Nutrition.
8. Demography and Family Planning, National family planning programme, contraceptives. Preventive medicine in Obstetrics, Paediatrics and Geriatrics
9. Occupational Health, Rehabilitation, Councelling, Disaster management, Hospital Waste management.
10. National Immunization Schedule of Nepal. Important National Health Programmes

UNIT-8
Surgery

General

1. Basics of general surgical procedures.
2. Inflammation, infections (Specific and Non-specific suppuration, Bacteriology, Immunity).
3. Ulcers, sinuses, fistula, Gangrene, Haemorrhage, shock, Burns, wound healing and management, skin infections (boils, carbuncle, abcess), cysts (epidermoid cyst, dermoid), skin tumors (basal cell carcinoma, squamous cell carcinoma, melanoma)
4. Resuscitation and support in emergencies, Accidents and warfare injuries management. Head injury.
5. Diseases of the muscles, tendons, fascia, nerves, arteries, veins, lymphatic system general principles.
    - Arteries: Features of limb Ischaemia, atheroma, aneurysms, Raynaud's syndrome, arterial emboli.
    - Veins: varicose veins, deep vein thrombosis , pulmonary embolism.
    - Swellings of lymph nodes (tuberculosis, lymphoma)
6. Immunology general organ rejection transplants etc. , Oncology, tumours, cysts, Pulmonary Embolism, Lung abscess, Ca lungs etc. general principles of management.
7. Surgical Diseases of the infancy and childhood & Congenital disorders: (cleft lip, cleft palate, branchial cyst and fistula, thyroglossal cyst)

Common clinical conditions, diagnosis prognosis, management, Relevant surgical procedures, Preventive aspects.

Abdominal Conditions

- Acute abdomen:- Appendicitis, Pancreatitis, cholecystitis, Cholelithiasis, Peritonitis, choledocholithiasis, collitis
- Hernias, dysphagia, reflux, hiatus hernia, Peptic Ulcer, Intestinal obstruction, intussusception, Ulcerative colitis, Ca colon.
- Liver Abscess, liver rupture in abdominal trauma, Hydatid Cyst, Splenomegaly.
- Rectal bleeding and other common rectal disorders, Haemorrhoids, Fissure, sinus, Fistula in ano.

Genitourinary Conditions

- Vasectomy, Hematuria, Dysuria, Oliguria, Chyluria
- UTI And Urinary Stones, Sticture
- Urinary Retention, Incontinence, tumor of testis,
- Benign Prostatic Hyperplasia, Epididymo-orchitis, ca prostate.
- Hydrocele, Varicocele, Ca bladder, Ca penis, Phimosis, Para Phimosis

Breast

- mastalgia, fibroadenoma, cyst, breast abscess, cancer of the breast.

Orthopaedics

Diseases of bone and joints:

- Fracture and Dislocation (mainly calvicle, dislocation shoulder, supracondylar fracture & dislocation of elbow, fracture shaft humerus, dislocation & fracture both bones of forearm, Fracture pelvis & dislocation of hip, Fracture neck of femur, Fracture shaft of femur & tibia)
- Crush Injury, Amputation, Osteoporosis, Osteomalacia, Osteomyelitis, Tubercular Spine, Poliomyelitis, Rickets, Spondylosis & Rheumatoid arthritis

Ophthalmology

Common lid diseases: Chalazion, stye, blepharitis, entropion, ectropian and trichiasis.

Conjunctivitis, Trachoma, Xeropthalmia, Cataract, Glaucoma, Pterygium, Refractive errors, Foreign body in eye, Dacryocystitis.

Knowledge of common disease, accidents, injuries etc. of various part of eyes, Clinical Examination of eye. (Various parts) using various instruments including Ophthamoscopy.

Dentistry

- Dental Plaque and Calculus, Dental Caries Gingivitis, Periodontitis, Oral Cancers, Temporomandibular Joint Dislocation

Otorhinolaryngology (ENT)

- ASOM, CSOM, Mennier's Disease
- DNS, Nasal Polyp, Epistaxis, Sinusitis, Atrophic Rhinitis, Allergic Rhinitis
- Tonsillitis, Pharyingitis, Laryngitis, Epiglottitis,

UNIT-9
Obstetrics and Gyanaecology

Obstetrics

1. Over all review of the Applied Anatomy and Applied Physiology.
2. Diagnosis of Pregnancy, Vomiting in pregnancy
3. Development of the Intra Uterine Pregnancy.
4. Antenatal care, Care of newborn
5. Abnormal Pregnancy, abnormal Puerperal,
6. Normal Labour and Abnormal labour,
7. Post natal care. Preterm labour, Post term Pregnancy, IUFD
8. Abnormal pregnancies: Abortion, molar pregnancy, Extra Uterine, Diseases of placenta and membrane, Toxaemia of pregnancy,
9. Ante partum Haemorrhage (Placenta praevia, accidental Haemorrhage, Obstetrics anuris)
10. Disorders of Genital tract Retroversion, Prolepses Tumours etc.
11. Multiple pregnancies, protracted gestation. Hydramnios, Oligohydramnios
12. Common disorders an systemic diseases associated with pregnancy.
13. Abnormal labour- Position and Presentation .Twins ,Prolapsed of cord and limbs, abnormalities in the acting of the Uterus, Abnormal condition of soft part, contracted pelvis, obstructed labour, Complications of third stage of labour, injuries of birth canals.
14. Abnormal Puerperal infections etc.
15. New Born: healthy, Sick baby in the neonatal period Asphyxia neonatorum, Premature baby, convulsion,

Gynaecology

1. Applied anatomy and physiology.
2. Gynaecological Examination.
3. Menstrual Disorders: Amenorrhoea, Menorrhagia, Metrorrhagia, Dysmenorrhoea, Post menopausal Bleeding, Menopausal syndrome
4. Sex: Diagnosis of Sex, intersexuality, Virilism, Hersutism
5. Developmental Abnormalities: Congenital anomalies in the female genital tract
6. Inferlity
7. Disorder of Sexual function: Vaginismus, Dyspareunia, frigidity
8. Uterine displacements: Retroversion, Inversion, Genital Prolapse, Cystocele, Rectocele, Urethrocele
9. Urinary: Urinary in continence, Retention of urine, Dysuria, Rectovaginal fistula, Genitourinary fistula
10. Inflammation: PID, Cervicitis, Endometritis, Salpingitis, Cervical Erosion. Ulceration and traumatic lesion of the female genital organs,
11. malignant/non malignant Growths: Uterine Fibroid, Uterine Polyps, cysts, Tubo Ovarian mass, Ovarian tumour & cysts and genital malignancies.

UNIT-10
Practice of Medicine (General Medicine)

Concept Of Diseases to the homeopathic approach

(Knowledge of about its causation, Manifestations, Management and Prognosis in details.)

Specific Infections (Tropical Diseases):-

Epidemiology, clinical features, laboratory diagnosis, treatment and prevention of

Protozoal infections: Amobiasis Malaria Leishmaniasis Toxoplasmosis Giardiasis Trichomoniasis Trypanosomiasis

Bacterial infections: Streptococcal infections Pneumococcal infections Staphylococcal infections Meningococcal infections Gonococcal infections Legionella infections Pertussis and Diphtheria Tetanus, Botulism, Gas gangrene, other clostridial infections, Cholera, Salmonellosis (Typhoid and paratyphoid fevers),Shigellosis and bacillary dysentery, Brucellosis, Plague), Helicobacter Pylori, Infections due to pseudomonas & other gram negative bacteria, Anaerobic infections, Mycobacterial diseases (Tuberculosis, Leprosy), Spirochetes infection (syphilis).

Viral infections

Common exanthemata (Measles, Mumps, Rubella ,Varicella)

Common viral respiratory infections, Human immunodeficiency virus (HIV) Viral gastroenteritis, Dengue fever, Rabies

Rickettsia, Mycoplasma & Chlamydial diseases

Fungal infections Candidiasis Aspergillosis Histoplasmosis Cryptococcosis, Pneumocystis carinii

Helminthic infections

Nematodes & Cestodes:- (Taeania Sanginata. T. Solium. Wochereria Bancrofti, Ancylostoma dudodenaie, Ascaris lumbricoides, Enterobius vermucularis, Trichuris trichura, Hymeolepsis nana, Echinococcos granulosus)

Diseases due to genetic factors

Cystic fibrosis, Sickle-cell anemia, Duchenne muscular dystrophy, Huntington disease, Neurofibromatosis, Hemophilia, Hereditary spherocytosis, Down syndrome, Klinefelter syndrome, Patau syndrome (trisomy 13), Edwards syndrome (trisomy 18), Turner syndrome

Diseases due to nutritional disorder.

Protein Energy Malnutrition (Kwashiorkor and marasmus), Obesity, Vitamin and mineral deficiency & excess, Scurvy, Rickets, Beriberi, Hypocalcemia, Osteomalacia, Vitamin K Deficiency, Pellagra, Xerophthalmia, and Iron Deficiency.

Gastrointestinal Disease:

Acid Peptic Diseases, Cirrhosis of Liver and ascites, Hepatitis, Jaundice, Hepatic Coma, Abdominal Tuberculosis, Pancreatitis, cholecystitis, Worm Infestation, Ulcerative, Colitis, Carcinoma of Gastro Intestinal Tract, Gastroenteritis, H pylori, Gastro-esophagealreflux disease irritable bowel

disease, inflammatory bowel disease. Portal hypertension and ascites, Infiltrative diseases of liver (Wilson's disease, Hemachromatosis)

Haematological and Lymphoreticular Diseases:

Anemia, Leukemia, Purpura Agranulocytosis, Polycythemia, Reticulosis, Lymphomas, Leucopenia, Leucocytosis, Thrombocytopenia, Thrombocytosis Pancytopenia.

Respiratory Diseases:

Acute Bronchitis, Chronic Obstructive Airway Disease, Bronchial Asthma, Pneumonias, Tuberculosis, Bronchogenic Carcinoma, Bronchiectasis, Empyema, Emphysema, Occupational Lung Diseases, Respiratory Failure, SARS, Pleural effusion, Pneumothorax, Bird Flue

Cardiovascular Diseases:

Rheumatic Fever, Rheumatic Heart Disease, Congestive Cardiac Failure, Acute LVF, Ischemic Heart Disease, Myocardial Infarction, Hypertension, Infective Endocarditis, Congenital Heart Diseases, Cardiomyopathies, Corpulmonale, Cardiac Arrhythmias, Cardiogenic Shock.

Renal & Urinary tracts Diseases:

Urinary Tract Infection, Acute Glomerulonephritis, Nephrotic Syndrome, Urinary Calculi, Renal Failure, Tuberculosis, Neoplasm, Acidosis, Alkalosis, Hyperkaliemia.

Conditions of water and Electrolytes balance.

Water and electrolyte physiology, Acid-base disorders, Fluid and electrolyte disturbance.

Hyponatremia, Hypernatremia, hypokalemia, hyperkalemia, hypocalcemia hypercalcemia.

Diseases of Connective Tissue (Joint and Collagen Diseases):

Rheumatoid Arthritis, Gout, Osteoarthritis, Osteomalacia and Osteoporosis, Ankylosing, Spondylitis, SLE, Sarcoidosis, Amyloidosi, Fibromyalgia.

Endocrine and Metabolic Diseases:

Diabetes Mellitus, Nonketotic Coma, Ketoacidosis, Thyrotoxicosis, Hypothyroidism, Cushing's Syndrome, Addison's Disease, Hyperparathyroidism, Tetany, Hypogonadism, Diabetes Insipidus Hypopituitarism, Galactorrhea.

Diseases of CNS & Peripheral nervous system(Neurological Diseases):

Headache, dizziness, syncope & vertigo, Sleep disorders, Migraine and cluster headaches, Seizures and epilepsy, Dementias, Peripheral neuropathy, Intracranial tumours.

Cerebrovascular Accident, Meningitis, Encephalitis, Parkinson's Disease, Paraplegia, Multiple Sclerosis, Myasthenia Gravis, Epilepsy, Neuro-cysticercosis, Bell's palsy, GBS, Neurosyphilis, Spin bifida, Neurogenic Shock, Coma, Cerebral Malaria.

Dermatology (Skin Diseases& STD)

Urticaria, Pruritis, Erythroderma, Scabies, Dermatophytosis, Herpes Simplex, Herpes zoster, Eczema, Psoriasis, Tinea, Lichen Planus, Pemphigoid, Pemphigus, Drug Eruption,Vitiligo

STD: Syphilis, gonorrhoea, warts, HIV, AIDS

Paediatrics.

Care of normal newborn, congenital heart disease, genetic disorders,Immunization, Growth and development, Nutrition.

Some childhood Diseases:-

ARI, Measles, Mumps, Pertussis, Poliomyelitis, Diphtheria, Tuberculosis, Enteric Fever, Diarrhoeal Diseases, Pneumonias, Lung Abscess Cellulitis, Candidiasis, Meningitis, Rheumatic Fever, Worm Infestations, Cretinism, Protein-energy Malnutrition, Rickets

Psychiatry (Mental diseases)

Emotional expression (Happiness, Fear, Anger, Disgust, Sadness, Surprise, Contempt), Emotional Disorders (Anxiety, Depression, Stress related disorders), Neurosis, Psychosis, Schizophrenia, Mania, Psychosomatic Disorders, Phobia, OCD, Conversion Disorder, Eating Disorders, Substance abuse (Alcohol/drugs), personality disorders.

Acute Emergencies including Poisoning

Circulatory failure: shock, Respiratory failure, Renal failure, Heatstroke and hypothermia, Drowning and near drowning, Electrical injuries, Radiation injury

General approach to the poisoned patient, Poisoning by specific pharmaceutical agents, Drugs of misuse, Chemicals and pesticides, Snake bite and Envenomation Other bites and stings - scorpion, spider.

Pain management and palliative care: General principles of pain, Assessment and treatment of pain, Palliative care.

Health system of Nepal.

Nepal Health Services Act, 2053; Nepal Health Service Regulation, 2055; Nepal Health Professional Council Act, 2075; Public Health Service Act, 2075; Public Health Service Regulation, 2077; DDA drugs rules and regulations.