

*Curriculum*  
*for*  
**Certificate in Health Science**  
**(Homeopathy)**



Council for Technical Education and Vocational Training  
**Curriculum Development Division**  
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## 1. **Background**

Government of Nepal has called for the provision of basic health care for all by establishing a network of health services in remote villages and urban population centers. The Council for Technical Education and Vocational Training (CTEVT) works toward solutions for Nepal's health care system by preparing health workers to provide middle level health care. Successful completion of this educational program qualifies the graduate as a candidate for CTEVT certification as a Certificate in Health Science (Homeopathy). The certified graduate is then eligible for appointment to the position of Health Post Manager in the field of Homeopathy by the government or concern authority.

## 2. **Mission of the Curriculum**

To provide the document which directs CTEVT schools and faculty in the process of educating quality middle level homeopathic health personnel, to promote and establish the net work of homeopathic system in grass root level to meet the health care needs of Nepal.

## 3. **Strategy**

Strategies to achieve our mission of educational excellence will be achieved by maintaining an expert faculty, implementing a sound curriculum, and recruiting quality students. Strategic planning will include:

1. Ensuring that faculty are experts in their area of teaching, with training in curriculum design and teaching strategies.
2. Assuring availability of resources
  - Financial
  - Physical infrastructure
  - Learning materials and equipment
  - Current library references
  - Tools for information technology skill development.
3. Recruitment of students from remote areas.
4. Enacting appropriate policy and procedure.

## 4. **Philosophy and Educational Approach**

The curriculum is both clinical and public health focused, with emphasis on primary level curative services and preventive and promotive health care at the Health Post level. Identification of indications for case referral to higher-level facilities is a component of the role of the health worker. The teaching/learning activities are designed to promote independent thinking, problem solving skills, and a value for continued professional education and life long learning.

## 5. **Educational Philosophy**

The curriculum ascribes to the following beliefs:

- The teacher is seen as a facilitator of learning.
- The learning environment should be stimulating, challenging and fair.
- The learning environment promotes independent life-long learning.
- The learning environment is guided by clear policy and procedure.
- Learning is measured through the application of knowledge and skill to clinical experiences.
- The curriculum will reflect multicultural perspectives on health care practice.
- The teacher, the student, and the patient have the right to be treated with dignity and respect.

## 6. **Objectives of the Curriculum**

The graduates of Certificate in Health Science (Homeopathy) Program will:

- Demonstrate competency in identifying and resolving community health problems.

- Demonstrate basic knowledge and clinical skills necessary to diagnose and manage primary health problems of patients.
- Exhibit leadership skills and professional characteristics and attitudes required in the role of Health Post Manager.
- Demonstrate the necessary knowledge and skills to work in a variety of health care settings.

#### 7. **Curriculum Overview:**

The Certificate in Health Science (Homeopathy) program is three years' duration. The first year focuses on basic sciences and foundational subjects, the second on medical sciences, and the third year is given to the application of learned theory and skill development within comprehensive practice settings, both hospital and community. The graduate is eligible for registration as Grade-II with the Nepal Health Professional Council or concern council upon the successful completion of the courses.

#### **First Year:** (basic science & other related subjects):

English, Nepali, Social Studies, Chemistry, Physics, Botany, Zoology, Anatomy & Physiology and Mathematics & Statistics with computer skills

#### **Second Year:** (clinical sciences and community health)

Organon of Medicine & Homeopathic Philosophy I,  
 Homeopathic Materia Medica I,  
 Homeopathic Repertory I  
 Clinical Pathology & Microbiology  
 Homeopathic Pharmacy,  
 Health Education & Public Health  
 Preventive & Social Medicine (PSM)  
 Health Management & Environmental Health,  
 First Aid & Medical Emergency

#### **Third Year:** (clinical specialties and advanced community health)

Organon of Medicine & Homeopathic Philosophy II,  
 Homeopathic Materia Medica II,  
 Repertory II,  
 Basic Surgery  
 Practice of Medicine  
 Medical Jurisprudences  
 Obstetrics & Gynaecology  
 Comprehensive Clinical Practice

The remaining 6 months are given to: Comprehensive Clinical Practice (3 months hospital based) and Comprehensive Community Field Practice (1.5 months in community and 1.5 months in HP/PHC attendance).

#### 8. **Duration:**

The total duration of this curricular program is three years.

#### 9. **Target group:**

Individuals who have passed SLC or equivalent in second division with English, Science, and Mathematics or related Technical SLC (TSLC)

#### 10. **Group size:**

The group size will be maximum of 40 (Forty) in a batch.

11. **Target location:**

The target location will be all over Nepal.

12. **Entry criteria:**

- SLC or equivalent in second division with English, Science, and Mathematics or related Technical SLC (TSLC)
- Should pass entrance examination.
- Candidate should be physically fit for the program.
- Individuals of lower economic status preferred.

13. **Selection:**

Applicants fulfilling the entry criteria will be selected for admission on the basis of merit.

14. **Medium of instruction:**

The medium of instruction will be in English and/or Nepali.

15. **Pattern of attendance:**

Minimum of 90% attendance in each subject is required to appear in the respective final examination

16. **Teacher and student ratio:**

- For theory: As per the nature of the course.
- For practical / demonstration: 1:10.
- For bench work: 1:5.
- 75 % of the teachers must be full timer.

17. **Teachers and demonstrators:**

- Humanities faculty teacher must be a master's degree holder in the related area with three years experience in the related field.
- Health related teacher must be a Bachelor degree holder in the related area with three years experience in the related field.
- The demonstrator must be +2 or equivalent degree holder in the related area with two years experiences in training activities.

18. **Mode of education:**

There will be inductive and deductive mode of education.

19. **Instruction methods:**

- Lecture will be the method of instruction supported by practical works.
- The topic and concepts presented in the lecture will be enlarged and developed in tutorials.
- Practical classes will be used in the form of laboratory works. Project-works, hospital attachment, clinical practice, community field practice to verify the concepts and develop related technical knowledge, skills, and attitudes.

20. **Teaching learning methodologies:**

The methods of teachings for this curricular program will be a combination of several approaches. Such as Illustrated Lecture, Tutorial, Group Discussion, Demonstration, Simulation, Guided practice, Practical experiences, Fieldwork and Other Independent learning.

- Theory: Lecture, Discussion, Assignment, Group work.
- Practical: Demonstration, Observation, Guided practice and Self-practice.

21. **Examination and marking scheme:**

- The subject teacher will internally assess the students' achievement in each subject during the course followed by a yearly final examination at the end of each year.
- A weight age of 20% for the internal assessment and 80% for the yearly final examination will be allocated for theoretical components of a subject.
- The final examinations of all theory components will be conducted through written tests.
- Generally the method of continuous assessment will be adopted for practical components.
- In some cases, yearly final examinations are also conducted for practical components as per the needs.
- Student who fails in the internal assessment will not be allowed to sit in the yearly final examination and will also not allowed continuing the following study.

22. **Provision of back paper:**

There will be the provision of back paper but a student must pass all the subjects of all three years within three years from the enrolment.

23. **Certification and degree awards:**

- Students who have passed all the components of all the subjects of all year are considered to have successfully completed the course.
- Students who have successfully completed the course will be awarded by a degree of "**Certificate in Health Science (Homeopathy)**" with completed specialization.

24. **Disciplinary and ethical requirements:**

- Intoxication, insubordination or rudeness to peers will result in immediate suspension followed by review by the disciplinary review committee of the Institution.
- Dishonesty in academic or practice activities will result in immediate suspension followed by administrative review, with possible expulsion.
- Illicit drug use, bearing arms on Polytechnic, threats or assaults to peers, faculty or staff will result in immediate suspension, followed by administrative review with possible expulsion.

25. **Pass marks:**

The students must secure 40%marks in the internal assessment and 40% in the annual final examination of each subject to pass the subject

26. **Grading system:**

The overall achievement of each student will be measured by a final aggregate percentage of all final yearly examinations and graded as follow:-

**Marks division:**

- Distinction : > or =80 %
- First division : 65 % to < 80 %
- Second division : 50 % to 65 %
- Pass : 40 % to < 50 %

27. **Course description:**

This course is based on the job required to perform by a homeopathy technician at different related health organization in Nepal. The Certificate in Health Science (Homeopathy) program extends over three years. This curriculum includes the core subtests like physics, chemistry, zoology, botany and mathematics applicable in the field of health. It also includes language subjects like Nepali and English applicable for the communication in the field of health sector. It also has provision of

specialization in the specific areas of Health sector. The course structure and the subject wise contents that follow reflect the details of this curriculum. In short, this curriculum guides its implementers to produce competent and highly employable middle level technical workforce in health sector

The contents of individual subjects prescribed in the curriculum are incorporated in the light of "must to know and must to do" principle.

**28. *Career path:***

The graduates will be eligible for the position equivalent to Non-gazetted 1st class (technical) as "Homeopathic Health Assistant" or as prescribed by the Public Service Commission of Nepal. The graduate will be eligible for registration with the related Council in the grade as mentioned in the related Council Act (if any).



## Structure of Certificate in Health Science (Homeopathy)

### First year

S. No	Subjects	Activity	Hours				Assessment Marks
			Weekly	Yearly			
				Theory	Practical	Total	
1	English	Theory	3	120	-	120	100
2	Nepali	Theory	3	120	-	120	100
3	Social Studies	Theory	3	80	-	80	50
4	Anatomy & Physiology	Theory & practical	5	120	60	180	100
56	Physics	Theory & practical	4	120	60	180	100
6	Chemistry	Theory & practical	5	120	60	180	100
7	Zoology	Theory & practical	5	120	60	180	100
8	Botany	Theory & practical	5	120	60	180	100
9	Mathematics, Statistics & Computer Application	Theory & practical	5	120	60	180	100
	Total		38	1040	360	1400	850

### Second Year

S. No	Subjects	Activity	Hours				Assessment Marks
			Weekly	Yearly			
				Theory	Practical	Total	
1	Organon of Medicine & Homeopathic Philosophy I,	Theory & practical	5	175	20	195	100
2	Homeopathic Materia Medica I,	Theory & practical	7	203	70	273	100
3	Homeopathic Repertory I	Theory & practical	6	114	120	234	100
4	Clinical Pathology & Microbiology	Theory & practical	6	184	50	234	100
	microbiology,	Theory & practical		0	0	0	
	Parasitology,	Theory & practical		0	0	0	
	biochemistry	Theory & practical		0	0	0	
	Haematology	Theory & practical		0	0	0	
5	Homeopathic Pharmacy,	Theory & practical	4	78	78	156	100
6	Health Education & Public Health	Theory & practical	3	69	48	117	100
7	Preventive & Social Medicine (PSM)	Theory & practical	4	106	50	156	100
	Epidemiology & communicable diseases	Theory & practical		0	0	0	
	Family Planning	Theory & practical		0	0	0	
	Mental Health	Theory & practical		0	0	0	
	Child Health	Theory & practical		0	0	0	
	Nutrition	Theory &		0	0	0	

		practical					
	Population Issue	Theory & practical		0	0	0	
8	Health Management & Environmental Health,	Theory & practical	2	53	25	78	100
9	First Aid & Medical Emergency	Theory & practical	3	60	57	117	100
	<b>Total</b>		<b>36</b>	1042	518	1560	900

### Third Year

S.No	Subjects	Activity	Hours				Assessment Marks
			Weekly	Yearly			
				Theory	Practical	Total	
1	Organon of Medicine & Homeopathic Philosophy II ,	Theory & practical	5	78	20	98	100
2	Homeopathic Materia Medica II,	Theory & practical	7	120	15	135	100
3	Homeopathic Repertory II	Theory & practical	6	37	80	117	100
4	Basic Surgery	Theory & practical	6	80	40	120	100
	General	Theory & practical	0	0	0	0	
	EENT	Theory & practical	0	0	0	0	
	Dental	Theory & practical	0	0	0	0	
	Orthopedic	Theory & practical	0	0	0	0	
5	Practice of Medicine	Theory & practical	9	115	60	175	100
	Clinical Method	Theory & practical	0	0	0	0	
	Communicable Diseases	Theory & practical	0	0	0	0	
	Systemic Diseases	Theory & practical	0	0	0	0	
6	Medical Jurisprudences	Theory	3	57	-	57	100
7	Obstetrics & Gynaecology	Theory & practical	4	60	18	78	100
	<b>Sub Total</b>		<b>40</b>	<b>547</b>	<b>18</b>	<b>780</b>	
8 a	Comprehensive Clinical Practice	Practical	12 weeks		480	480	300
8 b	Comprehensive Community Field Practice:	Practical	12 weeks		480	480	300
	<b>Total</b>		<b>36</b>		<b>960</b>	<b>1740</b>	<b>1300</b>

## Course structure

### First year

S.No.	Subject	Mode		Weekly Hours	Distribution of Marks						Total Marks
		T	P		Theory			Practical			
					Internal	Final	Time (Hrs)	Internal	Final	Time (Hrs)	
1	English	3	-	3	20	80	3	-	-	-	100
2	Nepali	3	-	3	20	80	3	-	-	-	100
3	Social Studies	3	-	3	10	40	3	-	-	-	50
4	Anatomy & Physiology	3	2	5	16	64	3	8	12	3	100
5	Physics	3	1	4	16	64	3	8	12	3	100
6	Chemistry	3	2	5	16	64	3	8	12	3	100
7	Zoology	3	2	5	16	64	3	8	12	3	100
8	Botany	3	2	5	16	64	3	8	12	3	100
9	Mathematics, Statistics & Computer Application	3	2	5	16	64	3	8	12	3	100
	<b>Total</b>	<b>27</b>	<b>10</b>	<b>38</b>	<b>146</b>	<b>584</b>		<b>48</b>	<b>72</b>		<b>850</b>

### Second Year

S.No.	Subject	Mode		Weekly Hours	Distribution of Marks						Total Marks
		T	P		Theory			Practical			
					Internal	Final	Time (Hrs)	Internal	Final	Time (Hrs)	
1	Organon of Medicine & Homeopathic Philosophy I	4.5	0.5	5	16	64	3	8	12	3	100
2	Homeopathic Materia Medica I	5.5	1.5	7	16	64	3	8	12	3	100
3	Repertory I	3	3	6	16	64	3	8	12	3	100
4	Clinical Pathology & Microbiology	4.5	1.5	6	16	64	3	8	12	3	100
	Microbiology,										
	Parasitology,										
	Biochemistry										
	Hematology										
5	Homeopathic Pharmacy,	2	2	4	16	64	3	8	12	3	100
6	Health Education & Public Health	2	1	3	16	64	3	8	12	3	100
7	Preventive & Social Medicine (PSM)	2.5	1.5	4	16	64	3	8	12	3	100
	Epidemiology & communicable diseases										
	Family Planning										
	Mental Health										
	Child Health										
	Nutrition										
	Population Issue										
8	Health Management & Environmental Health,	1.5	0.5	2	16	64	3	8	12	3	100
9	First Aid & Medical Emergency	1.5	1.5	3	16	64	3	8	12	3	100
	<b>Total</b>			<b>36</b>	<b>144</b>	<b>576</b>		<b>72</b>	<b>108</b>		<b>900</b>

### Third Year

S.No.	Subject	Mode		Weekly Hours	Distribution of Marks						Total Marks
		T	P		Theory			Practical			
					Internal	Final	Time (Hrs)	Internal	Final	Time (Hrs)	
1	Organon of Medicine & Homeopathic Philosophy II ,	4	1	5	16	64	3	8	12	3	100
2	Homeopathic Materia Medica II,	6	1	7	16	64	3	8	12	3	100
3	Homeopathic Repertory II	2	4	6	16	64	3	8	12	3	100
4	Basic Surgery	2	4	6	16	64	3	8	12	3	100
	General										
	EENT										
	Dental										
	Orthopedic										
5	Practice of Medicine			8	16	64	3	8	12	3	100
	Clinical Method										
	Communicable Diseases										
	Systemic Diseases										
6	Medical Jurisprudences	3	-	3	16	64	3	8	12	3	100
7	Obstetrics & Gynaecology	1	3	4	16	64	3	8	12	3	100
	<b>Total</b>				<b>112</b>	<b>448</b>		<b>56</b>	<b>84</b>		<b>700</b>
<b>8</b>	<b>Comprehensive Professional Field Practice</b>				<b>Internal Supervision</b>		<b>Internal Exam</b>		<b>External Exam</b>		<b>Total</b>
	(a) Clinical	40/week 12 weeks			100		100		100		300
	(b) Community	40/week 12 weeks			100		100		100		300
	<b>Total</b>				<b>200</b>		<b>200</b>		<b>200</b>		<b>600</b>
<b>Grand Total</b>											<b>1300</b>

## ***Program Regulations***

### ***Eligibility***

A student must complete the School Leaving Certificate (SLC) or Equivalent Certificate with English, Science and Math as the main subjects; the student must secure a minimum of second division marks, in aggregate.

### ***Attendance***

It is beneficial to a trainee to be attending 100% in all subjects. However, under unavoidable conditions the student must have not less than 80% attendance in the theory classes and 90% attendance in practical classes to be eligible for the internal and external examinations.

If a student lacks the stipulated attendance, he/she must repeat to make up the attendance in that subject, especially in the particular lesson, before he/she is permitted to take the internal or external examination.

### ***Discipline***

Intoxication, insubordination or rudeness to peers will result in immediate suspension followed by review by the disciplinary review committee of the school.

Dishonesty in academic or practice activities will result in immediate suspension followed by administrative review, with possible expulsion.

Illicit drug use, bearing arms on campus, threats or assaults to peers, faculty or staff will result in immediate suspension, followed by administrative review with possible expulsion.

### ***Evaluation Scheme***

In all courses, the student must achieve at 40% minimum in theory, and 60% minimum in practical before proceeding to the next level of instruction.

A minimum of three internal exams will be given for each course. In order to sit for the external exam in any course, a student must achieve (in aggregate) a passing mark for the internal examinations. A student must pass the external exam independently of the internal assessment mark (the internal mark and external mark will not be averaged together to give a passing mark). These standards will apply to all courses except the third year comprehensive practices, which will be evaluated as indicated on the third year evaluation scheme shown on the chart below. Third year students must achieve a passing mark in the internal supervision category in order to sit for the internal and external examinations.

## First Year:

1. Student performance shall be assessed for each subject accordingly:
  - a. Internal assessment (to be conducted by concerned department)
  - b. Yearly Examination (to be conducted by CTEVT) for the following courses: Mathematics & statistics (with computer skills), Chemistry, Physics, Botany, Zoology, Basic Health, Anatomy & Physiology.
2. Marks distribution for First Year course shall be as follows:

Subject	Component Assessment Marks							Total Marks
	Theory			Practical				
	Internal Assessment	CTEVT Yearly Examination	Total	Internal Assessment	CTEVT Yearly Examination		Total	
					Viva	Practical		
English	20	80	100	-	-	-	-	100
Nepali	20	80	100	-	-	-	-	100
Social study	20	80	100	-	-	-	-	50
Anatomy & Physiology	16	64	80	8	2	10	20	100
Botany	16	64	80	8	2	10	20	100
Zoology	16	64	80	8	2	10	20	100
Chemistry	16	64	80	8	2	10	20	100
Physics	16	64	80	8	2	10	20	100
Mathematics & Statistics, computer skills	16	64	80	8	2	10	20	100
<b>Total</b>	<b>156</b>	<b>624</b>	<b>780</b>	<b>48</b>	<b>12</b>	<b>60</b>	<b>120</b>	<b>850</b>

## Second Year:

1. Student performance shall be assessed for each subject accordingly:
  - c. Internal assessment (to be conducted by concerned department)
  - d. Yearly Examination (to be conducted by CTEVT)
2. Marks distribution for Second Year course shall be as follows:

Subject	Component Assessment Marks						Total Marks
	Theory			Practical			
	Internal Assessment	CTEVT Yearly Examination	Total	Internal Assessment	CTEVT Yearly Examination	Total	
Organon of Medicine & Homeopathic Philosophy I ,	16	64	80	8	12	20	100
Homeopathic Materia Medica I,	16	64	80	8	12	20	100
Homeopathic Repertory I	16	64	80	8	12	20	100
Clinical Pathology & Microbiology	16	64	80	8	12	20	100
Homeopathic Pharmacy	16	64	80	8	12	20	100
Health Education & Public Health	16	64	80	8	12	20	100
Preventive & Social Medicine (PSM)	16	64	80	8	12	20	100
Health Management & Environmental Health	16	64	80	8	12	20	100
First Aid & Medical Emergency	16	64	80	8	12	20	100
<b>Total</b>	<b>144</b>	<b>576</b>	<b>720</b>	<b>72</b>	<b>108</b>	<b>180</b>	<b>900</b>

**Third Year:**

1. Student performance shall be assessed for each subject accordingly:
  - a. Internal assessment (to be conducted by concerned department)
  - b. Yearly External Examination (to be conducted by CTEVT)
2. Marks distribution for Third Year course shall be as follows:

Subject	Mode of Assessment						Total Marks
	Theory			Practical			
	Internal Assessment	Annual Examination	Total	Internal Assessment	Annual Examination	Total	
Organon of Medicine & Homeopathic Philosophy II,	16	64	80	8	12	20	100
Homeopathic Materia Medica II,	16	64	80	8	12	20	100
Homeopathic Repertory II	16	64	80	8	12	20	100
Basic Surgery	16	64	80	8	12	20	100
Practice of Medicine	16	64	80	8	12	20	100
Medical Jurisprudences	20	80	100	-	-		100
Obstetrics & Gynaecology	16	64	80	8	12	20	100
<b>Total</b>	<b>116</b>	<b>464</b>	<b>580</b>	<b>48</b>	<b>72</b>	<b>120</b>	700
<b>Comprehensive Practice</b>				<b>Internal Supervision</b>	<b>Internal Exam</b>	<b>External Exam</b>	
Comprehensive community Practice				100	100	100	300
Comprehensive Clinical Practice	Practice			100	100	100	300
<b>Total</b>				200	200	200	600
<b>Grand Total</b>							1300

The Internal Supervision marks for the 3<sup>rd</sup> year comprehensive practices will be calculated using the following formula:

Comprehensive Community Field Practice:

Evaluation by supervising faculty	50 marks
Evaluation by facility staff	20 marks
Community Report grade	15 marks
Community Presentation	<u>15 marks</u>
<b>Total for Internal Supervision</b>	<b>100 marks</b>

Comprehensive Clinical Practice:

Evaluation by supervising faculty	50 marks
Evaluation by facility staff	20 marks
Written case studies	<u>30 marks</u>
<b>Total for Internal Supervision</b>	<b>100 marks</b>



# Second Year

## ***ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY I***

**Year: Second**

**Total hours: 5 / week  
Theory hour : 3 / week  
Practical hour :2 / week**

### ***Course Description:***

To make the students understand the principles and practice of homoeopathy, its philosophy to understand the process of cure, disease and application of law of similar

### ***Course Objectives:***

Upon successful completion of course, students will be able to :

1. Understand the philosophy of Homoeopathy
2. Classify Different methods of treatment
3. Understand the principles of Homoeopathy
4. Classify the diseases
5. Understand the principles of Health, diseases and cure

### ***Course Content:***

<b>Unit 1</b>	<b>Introduction</b>	<b>[30]</b>
	1.1 Define Theoretical Systems of medicine	
	1.2 Explain the old school's material view of disease	
	1.3 Describe the old school efforts to remove disease matter	
	1.4 Explain the dynamic form of disease and allopathic imitative and suppressive treatment	
	1.5 Explain the Flaws in the old schools approach to curing disease	
	1.6 Define about compound prescription	
<b>Unit 2</b>	<b>Principles of Cure</b>	<b>[29]</b>
	2.1 Explain about the highest ideal of cure	
	2.2 Describe about the cause of disease	
	2.3 Define disease and cure	
	2.4 Explain the role of Life force in health and disease	
	2.5 Explain about the power of medicine to cure	
<b>Unit 3</b>	<b>Similar and Dissimilar Diseases</b>	<b>[29]</b>
	3.1 Define about similar, dissimilar and opposite symptoms	
	3.2 Describe about the dissimilar diseases	
	3.3 Explain about the similar Diseases	
	3.4 Explain why medicines are better at curing than natural diseases?	
	3.5 Compare Homeopathic and allopathic medical treatment	
	3.6 Describe Antipathic Medical treatment compared with homeopathic treatment	
	3.7 Explain Primary and Secondary Actions	

- Unit 4     Understanding Diseases** **[15]**
- 4.1     Define Acute and chronic diseases
  - 4.2     Describe Acute Diseases
  - 4.3     Describe Chronic and other protracted diseases
- Unit 5     Case Taking** **[37]**
- 5.1     Define the individual examination of each case of disease
  - 5.2     Describe the guidelines for case taking
  - 5.3     Explain the uses of a well taken case
- Unit 6     Homeopathic Treatment of Disease** **[35]**
- 6.1     Describe the power of Homeopathic medicine to cure diseases
  - 6.2     Distinguish between indisposition and true diseases
  - 6.3     Define strange, rare and peculiar symptoms
  - 6.4     Describe Homeopathic Aggravation
  - 6.5     Explain treating diseases with an inadequate stock of medicine
  - 6.6     Explain treating diseases with too few symptoms
  - 6.7     Explain local and one sided diseases

**Text Books :**

1. Organon of medicine Dr. Samuel Hahnemann, 5<sup>th</sup>/6<sup>th</sup> edition
2. Text book of homoeopathic philosophy by J T Kent

**References :**

1. Text book of organon of medicine by A.K Das
2. Philosophy of H A Roberts
3. Genius of Homeopathy Stuart Close

## ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY I

### Practical

[20]

1. Perform case taking of the patient
2. Determine the types of symptoms

[10]

1[0]

## ***HOMEOPATHIC MATERIA MEDICA I***

**Year: Second**

**Total hours: 5 / week**  
**Theory hour : 3 / week**  
**Practical hour :2 / week**

### **Course description:**

This course has been described in 6 units. Each unit provides the basic concept of knowledge and skill of drugs picture including sign and symptom after having being proved in living being. Now materia medica is studied and the application of drugs, medical material to cure the sick.

### **Course objective:**

After the completion of the course the student will be able to:

1. Describe the sources of homeopathic drugs including its basic ingredient.
2. Describe the action and efficacy of the drugs.
3. Describe the modalities of drugs.
4. Describe the duration and longevity of different drugs.

### **Course Content**

<b>Unit 1: Vegetable Kingdom</b>	<b>[48]</b>
1.1 Define vegetable kingdom and its important.	
1.2 Describe its aim and proper utilization.	
1.3 Describe the physiological action of vegetable drugs.	
<b>Unit 2: Animal kingdom</b>	<b>[43]</b>
2.1 Define the animal kingdom and its importance.	
2.2 Describe its utilization in disease condition.	
<b>Unit 3: Mineral kingdom</b>	<b>[44]</b>
3.1 Describe the source of different minerals in homoeopathic drugs.	
3.2 Describe organic and inorganic minerals.	
3.3 Describe metal and non -metal drugs.	
<b>Unit 4: Nosode</b>	<b>[22]</b>
4.1 Define Nosode.	
4.2 Describe the nosodes are diseased product of human being.	
4.3 Describe the nosodes are disease product of animals and plants also.	
<b>Unit 5: Sarcode</b>	<b>[15]</b>
5.1 Describe sarcode are the product of whole endocrine gland.	
<b>Unit 6: Imponderabilia</b>	<b>[15]</b>
6.1 Describe imponderabilia.	
6.2 Describe medicine prepared from imponderabilia.	
<b>Unit 7: Different techniques to study Materia medica</b>	<b>[16]</b>
7.1 Inspiring Homeopathy	

### **Text Books:**

1. Allen's Key Notes
2. Materia Medica of Homeopathic Medicine by Dr. S.R Phatak

### **Reference Book:**

1. Boericke Materia Medica

2. Kent's Materia Medica
3. Practical Materia Medica for the consulting room Dr. Tinus Smits
4. Inspiring Homeopathy Dr. Tinus Smits

### List of the Medicine

Abrotanum	Crotalus
Acid phos	Cuprum Met
Aconite	Drosera
Arnica Montana	Eupatorium Per
Aesculus Hip	Ferum
Aethusa Cyn	Dulcumara
Allium Cepa	Graphites
Anacardium	Hamamellis Virginica
Cocculus	Hepar Sulphur
Antimonium Crudum	Gelsenium
Ledum P	Ignatia Amara
Apis Mellifica	Cina
Conium	Lachesis
Arg Nit	Lac Can
Arsenicum Album	Carboveg
Asteria Rub	Merc. Sol
Kali bich	Natrum Muriaticum
Baptisa	Rhustox
Baryta carb	Pulsatilla
Belladonna	Phosphorous
Kali C	Ruta G
Bovista	Secale Cor
Bryonia alba	Sepia
Calc.	Silicea
Calc- F.	Spongia
Camphor	Sulphur
Cantharis	Nuxvomica
Causticum	Tarentula
Chamomilla	Tuberculinum
Chelidonium M	Hypericum
Cinchona Off	Lycopodium
Colocynth	Saccharum- off

## Homeopathic Materia Medica I

### **Practical**

**[70]**

- |   |  |      |
|---|--|------|
| 1 | Familiarize with different techniques of study of Materia medica           | [10] |
| 2 | Visit hospital O.P.D section   | [10] |
| 3 | Develop understanding of the doctor's questioning and observing techniques | [40] |
| 4 | Counsel the patient as per doctor's advice                                 | [10] |

## ***HOMEOPATHIC REPERTORY I***

**Year: Second**

**Total hours: 7 / week  
Theory hour : 4 / week  
Practical hour :3 / week**

### ***Course Description:***

Now we have in homeopathy more than 4000 remedies. Some are in use very often and some are few. And one single remedy has thousands of symptoms. It is virtually impossible to remember all these symptoms. And not only are that new remedy invented. So the numbers of remedies are ever increasing. To assist the study of Homeopathic Materia Medica the concept of Repertory was developed by Dr Samuel Hahnemann .So Repertory is the logical index of symptoms of homeopathic materia medica in the form of rubrics with corresponding remedies, to facilitate the search of desired remedy.

### ***Course Objectives:***

Upon the completion of course the students will be able to:

1. Understand the history of Evolution of Repertory.
2. Understand the principles and concept of Repertory.
3. Classify the Repertory.
4. Understand the Utility of Repertory.
5. Understand the Scope and limitations of Repertory
6. Understand the philosophy, plan, construction and content of Repertories.
7. Understand the Steps, Methods and techniques of Repertorization

### ***Course Content:***

<b>Unit 1</b>	<b>History of Evolution of Repertory</b>	<b>[10]</b>
	1.1 Describe the origin of the concept of Repertorization	
	1.2 Explain Hahnemann's effort in making repertory	
	1.3 Explain Boger, Boenninghaussen's contribution in making the repertory	
	1.4 Explain the evolution of Kent's Repertory	
<b>Unit 2</b>	<b>Classifications of Repertories</b>	<b>[18]</b>
	2.1 Classify the repertories based on philosophical concepts	
	2.2 Explain the repertories having no distinct philosophy, their merits and demerits	
	2.3 Explain about the clinical repertories, their merits and demerits	
	2.4 Explain about card repertories, their merits and demerits	
	2.5 Explain about computer repertories, their merits and demerits	
<b>Unit 3</b>	<b>Utility of Repertories</b>	<b>[10]</b>
	3.1 Describe about the uses of repertories	
	3.2 Explain about the scope of repertories	
	3.3 Explain about the limitation of repertories	
<b>Unit 4</b>	<b>Explain The Philosophy, Plan, Construction And Content of Repertories</b>	<b>[26]</b>
	Kent's Repertory	
	Boenninghaussen's Repertory	
	Synthesis Repertory	



**Unit 5      Steps, Methods and techniques of Repertorization      [30]**

**Sub unit 1:      Steps**

- explain about the case taking
- Describe the recording and interpretation
- Define the problem
- Perform analysis of the symptoms (classification and evaluation of symptoms)
- Explain about totality of symptoms
- Understand about the selection of repertory and repertorization proper
- Explain about the reportorial result
- Explain about the analysis of reportorial result and prescription

**Sub unit 2:      Methods**

- Explain about the Boenninghausen's method of repertorization
- Explain about the Kent's method of repertorization
- Explain about the Clinical method of repertorization

**Sub unit 3:      Techniques**

- Explain the old method of repertorization (using plain paper sheet)
- Explain the modern method of repertorization (using repertorial sheet)
  - Total addition process
  - Eliminating process
- Explain the method of computer repertorization.
  - Radar

**Unit 6      Phrases and Terminologies      [20]**

6.1      Define the following terms

- Rubric
- Symptoms
- Synonyms and cross references
- Analogy
- Complete symptoms
- Totality of symptoms
- Synthesis of a rubric
- Concordance
- Concomitance

6.2      Explain about the relationship of remedies with duration of action

6.3      Explain about the relation between Repertory, Materia Medica and organon of medicine

6.4      Explain about record keeping

6.5      Explain about the remedy action

**Text Books:**

1. Essentials of Repertorization by Shashikant Tiwari Selected chapters

**Reference Books**

1. Repertory of the Homeopathic Materia Medica by J T Kent
2. Boeger Boeninghassen's Therapeutic Pocket book
3. BBCR
4. Synthesis Repertory By Fredrik Schroyens
5. Synthetic Repertory

6. Complete Repertory .etc.
7. Homeopathic Medical Repertory Dr. Robin Murphy

## Homeopathic Repertory I

### Practical

[120]

1. Find out the rubric of

[60]

- Kent's Repertory
- Synthesis Repertory
- Robin Murphy's Repertory

2. Analysis of the symptoms

[60]

- Construct totality of symptoms
- Find out cross reference of rubrics
- Convert the symptoms into the rubric
- Determine the hierarchy and evaluation of the symptoms

## ***CLINICAL PATHOLOGY & MICRO BIOLOGY***

**Year: Second**

**Total hours: 5 / week**

**Theory hour : 3 / week**

**Practical hour :2 / week**

### ***Course description:***

This is an introductory course to the basic and the clinical pathology and is divided in the five different units. Unit first is about the basic introduction to general pathology that enables the students to understand different terminologies used in pathology.

Unit two is about medical microbiology involving morphology of different categories of microorganisms, their relation to human disease, basic identification techniques and their growth and sterilization properties. Unit three contains medical parasitology and deals about mode of infection, pathogenicity, laboratory diagnosis and preventive measures of important intestinal as well as blood and tissue parasites of man including different kinds of defence mechanism of the body. Unit four deals about human blood and its constitutions together with different hematological techniques. Unit five is about medical biochemistry including the biochemical process of digestion and absorption of foods, metabolism of different kinds of foods and their disturbance effects in our body together with the physiological roles of different kinds of vitamins and enzymes.

### ***Course objectives;***

Upon the successful completion of the course, students will be able to;

1. Describe different kinds of microorganism related to human diseases.
2. Describe different kinds of parasites and their pathogenic effects to a human body.
3. Describe the formation and function of different components of blood .
4. Describe the biochemical processes of different kinds of foods in our body.
5. Identify the role of vitamins and enzymes in our body.
6. Perform basic microbiological, biochemical and hematological tests in the laboratory setting.
7. Describe and apply the general and clinical pathology in the field of Homeopathy.

### ***Course Content***

#### **Unit 1: General Pathology**

**[30]**

##### ***Sub unit-1: Basic Pathology.***

- define pathology.
- discuss the role of pathology and its significance in the diagnosis and treatment of the disease.
- define cell injury, death and adaptation,
- discuss about the cell regeneration, fibrosis and the process of wound healing in brief.
- define inflammation, discuss about acute and chronic inflammation.
- define anemia. classify anemia according to the aetiological and morphological basis.
- define the terms-atrophy, hypertrophy, dystrophy, aplasia, hyperplasia etc with common example of it.
- define the terms-oedema, necrosis, thrombosis, tumor, and neoplasm in brief.

**Unit -2: Medical microbiology** [40]

**Sub unit 1 General introduction to microbiology** [20]

- Describe the morphology of the following bacteria: cocci, bacilli, vibrio, spiral, and spirochaetes.
  - Describe the morphology of the following virus: polyhedral, helical, hexagonal, spherical, etc.
  - Describe the morphology of the following fungi: yeasts and molds .
  - Describe the morphology of the following parasites: protozoa\ helminths in general.
  - Describe the classification of microorganism: bacteria viruses, fungi, protozoan and helminthes.
  - Mention the common bacterial, viral, fungal, protozoan and helminthes disease along with their causative organisms of each of the above diseases.
    - Bacterial diseases(tuberculosis. diphtheria, typhoid(salmonella)etc.
    - Viral diseases (chickenpox, measles, mumps, cholera etc.)
    - .fungal diseases (ringworm etc.)
    - Protozoan diseases (amoebas, leishmaniasis etc.)
    - Helminthes diseases (ascariasis, tapeworm, hydatid hookworm filariasis etc.)

**Sub unit 2 Basic bacteriological investigations** [6]

explain the principle and procedures of gram staining

- Explain the principle and procedures of acid fast bacillus(AFB) staining, ziehl neelsens stain.
- Perform each of the above staining according to the guidelines.
- List culture media for bacteria, virus, and fungi.
- describe the method of identification of bacteria-
  - Colony character
  - Morphology and staininig character.

**Sub unit 3 Bacterial growth and sterilization** [14]

- Define bacterial growth and generation time.
- Derive the growth rate of bacteria.
- Draw the growth curve of bacteria.
- Describe the different phases of growth-lag, log, staionary, decline and survival, etc.
- Describe the factors influencing the bacterial growth.
- Define sterilization and methods of sterilization.
- Define physical method of sterilization-
  - Moist heat-stem under pressure and fractional sterilization, autoclave.
  - Dry heat-hot air, incineration
  - Radiation -x-rays, gamma rays, cathode rays.
  - Filtration.
- Introduce chemical method of sterilization (formaldehyde, ethylene oxide)
  - Describe mechanical method of sterilization (berkefeld filter, Seitz filter)

- Unit 3: Medical Parasitology** [36]
- Sub unit 1 Intestinal parasites** [16]
- Describe the mode of infection, pathogenicity, laboratory diagnosis and preventive measures of the followings; (ascaris, hookworm, trichuris, taenia, echinococcus, entamoeba, giardia, trichomonas)
  - Label the diagram of the followings: (ascaris, hookworm tapeworm, giardia)
- Sub unit 2 Blood and tissue parasites;** [6]
- describe the modes of infection, pathogenicity, laboratory diagnosis and preventive measures for;
    - Plasmodium
    - Leishmania
    - Wuchereria
- Sub unit 3 Defense mechanism of body** [14]
- Describe the defence mechanism of the body
  - Identify the external defence mechanism of body. (skin, mucous membranes and other mechanical barriers, coughing, sneezing, perspiring etc.)
  - Describe the nonspecific defence mechanism of the body. (interferon, phagocytosis, natural killer cells)
  - Describe the specific defence mechanism of the body (active and passive immunity)
  - Define antigen and antibodies and give examples of each.
  - Describe the types of antibodies (immunoglobulins)
  - Describe the mechanism of antigen-antibody rxn (primary, secondary, tertiary stage.)
- Unit 4: Haematology Blood and anticoagulants.** [38]
- Describe the general composition of the blood.
  - Describe the formation of mechanism of RBC, WBC, platelets and plasma.
  - List the functions of RBC, WBC, platelets and plasma cells.
  - Describe the structure, function, estimation (Shali's) method and normal values of haemoglobin.
  - Describe the methods of blood collection for-
    - Haematological investigations.
    - Biochemical investigations.
    - Microbiological investigations.
  - Define anticoagulants, their types and uses,
  - Describe the test methods for WBC total count, WBC differential count with their normal values.
  - Describe test methods (Wintrobe method) and normal value of erythrocyte sedimentation rate (ESR) and packed cell volume (PCV) of blood.

<b>Unit 5:</b>	<b>Clinical Biochemistry</b>	<b>[40]</b>
	<b>Sub unit 1 Carbohydrates.</b>	<b>[12]</b>
	<ul style="list-style-type: none"> <li>• Define carbohydrates.</li> <li>• Classify carbohydrates.(monosaccharides, disaccharides, oligosaccharides and polysaccharides)</li> <li>• Describe the digestion and absorption of carbohydrates(give biochemical reaction of digestion of it in the GI tract)</li> <li>• Describe the process of (glycolysis glycogenesis, glycogenolysis, gluconeogenesis and krebs citric acid cycle.</li> <li>• Explain the carbohydrate metabolism disturbance in diabetes mellitus.</li> <li>• Describe the glycemic effects of diabetes mellitus caused by inadequate or inavailable insulin.</li> <li>• Explain about the correction of hyperglycemia through administration of insulin.</li> </ul>	
	<b>Sub unit-2 Proteins</b>	<b>[12]</b>
	<ul style="list-style-type: none"> <li>• Define proteins.</li> <li>• classify proteins</li> <li>• classify proteins; <ul style="list-style-type: none"> <li>▪ on the basis of shape and size(fibrous and globular)</li> <li>▪ on the basis of functional properties(defence, contractile, structural, enzymes, hormones)</li> <li>▪ on the basis of solubility and physical properties(simple conjugated and derived)</li> </ul> </li> <li>• Write down the chemical reaction involved in the digestion of proteins.</li> <li>• List the chemical properties of protein(color reaction and denaturation)</li> <li>• List out the essential and non essential amino acids.</li> </ul>	
	<b>Sub unit 3 Lipids</b>	<b>[3]</b>
	<ul style="list-style-type: none"> <li>• Define lipids.</li> <li>• Classify lipids(simple, compound, derived and miscellaneous)</li> <li>• List the chemical properties of lipids.(saponification, hydrogenation and esterification)</li> <li>• Define cholesterol and list its physiological roles.</li> <li>• Describe digestion (biochemical reaction) and absorption of lipids.</li> </ul>	
	<b>Sub unit 4 Enzymes</b>	<b>[3]</b>
	<ul style="list-style-type: none"> <li>• Define enzymes <ul style="list-style-type: none"> <li>▪ Define different units of enzymes; (international union of biochemistry: U mole/min.</li> <li>▪ International system of units (i) katal (kat) -mole/sec.</li> </ul> </li> <li>• Define isoenzyme with example.</li> </ul>	
	<b>Sub unit 5 Vitamins</b>	<b>[10]</b>
	<ul style="list-style-type: none"> <li>• Define vitamins.</li> <li>• List the general properties of vitamins.</li> <li>• Classify vitamins-fat soluble and water soluble.</li> <li>• List the sources of each vitamin.</li> <li>• Describe the physiological role of all the vitamins.</li> </ul>	

**Texts Books;**

1. Basic pathology, Harsh Mohan
2. Paniker CK, Text book of Medical Parasitology,

**Reference books;**

1. Berezov, T.T. and Korovkin, B.F. Biochemistry. Mir Publishers, Moscow, Russia .
2. Chatterjee Medical Publishers, Textbook of Medical Parasitology. K. D. Chatterjee.
3. Basic pathology, Kumar, Cotran and Robbins. a Harcourt publishers International Company
4. Chatterjee, K.D. Parasitology, Chatterjee medical publishers, Calcutta, India.
5. Chatterjee, M.N. and Shinde, R. textbook of medical biochemistry, Jaypee brothers medical publishers (p) ltd. India
6. Chevalking, H., Tuladhar T. and Shrestha U. 1992. Integrated Sciences, Health Learning Materials Centre, p.o. box 2533, ktm Nepal .
7. Mukherjee, K. L. medical laboratory technology, volume I, II, III. Tata McGraw-Hill publishing company limited, New Delhi, India.



## **Clinical Pathology & Microbiology**

### **Practical**

**[50]**

#### **Unit 1 Experiments on clinical pathology**

**[50]**

1. Identify handling techniques of different laboratory apparatus.
2. Perform gram stain.
3. Perform AFB stain.
4. Perform stool examination Routine chemical & microscopic for ova, cyst and parasites.
5. Perform the routine and microscopic examination of urine for urinary deposits.
6. Perform the chemical examination of urine for sugar and albumin.
7. Perform the urine test for ketone bodies and bile pigment.
8. Perform the urine test for bile salt and urobilinogen.
9. Perform blood glucose determination.
10. Perform urea estimation.
11. Perform preparation, staining and examination of thick and thin blood smears.
12. Estimate haemoglobin level.
13. Demonstrate TLC, DLC, ESR, PCV, BT, CT, PT of the blood.

## ***HOMEOPATHIC PHARMACY***

**Year: Second**

**Total hours: 5 / week  
Theory hour : 3 / week  
Practical hour :2 / week**

### **Course Description:**

It is an art and Science of collecting, compounding, combining preparing, preserving and Standardizing drugs medicines from vegetable, mineral, animal and other kingdoms according to homoeopathic principles.

### **Course objectives:**

After completion of course student will be able to:

1. Identify of medicinal plants and sources of drugs.
2. Collect medicinal plants and preserving them.
3. Explain about Vehicles used for medicines.
4. Prepare lotion, liniment, ointment, Glycerol.
5. Dispense medicine according to physician's prescription.
6. Explain potentization, Scale of dilution & trituration

### **Course Content**

#### **Unit 1: Course definition and common terms used in pharmacy [6]**

- 1.1 Definition of pharmacy.
- 1.2 Define some terms- pharmacopoeia, short acting, long acting medicine, drug, medicine, remedy, medicine proving, potency, dilution.
- 1.3 Define antidote, Inimical, posology and placebo.
- 1.4 Define polychrest, mother tincture
- 1.5 Define palliative and preventive medicine
- 1.6 Define therapeutics and toxicology

#### **Unit 2: Sources of homoeopathic drugs [6]**

Classify vegetable and plant kingdom and some medicinal plants.  
Classify animal kingdom including the family group with some medicine collected from animal parts.  
Define mineral kingdom and some medicine from mineral groups.  
Define sarcodes with some medicines.  
Define Nosodes with some medicines.  
Define imponderabilia with some medicines.

#### **UNIT 3: Collection of drug substances: [7]**

- 3.1 Describe collection of medicinal plants.
- 3.2 Describe collection of animal substances.
- 3.3 Explain collection of mineral substances.
- 3.4 Explain Nosodes and sarcodes collection.
- 3.5 Explain process of collecting poison products.

<b>UNIT 4: Vehicles</b>	<b>[12]</b>
<b>Sub unit1: Solid vehicle</b>	
• Classification of vehicle.	
• Source of vehicle.	
• Utility of vehicle.	
• Globules	
• Tablets and cones	
<b>Sub unit 2: Liquid vehicle</b>	
• Explain applicant of distilled water, alcohol.	
<b>Sub unit 3:</b>	
• Definition of sugar of milk and its utility.	
<b>Unit 5: Prescription</b>	<b>[5]</b>
Learning and preparing medicine according to prescription of physician.	
Explain prescription and mode of its writing.	
<b>Unit 6: Pharmacology</b>	<b>[5]</b>
Explain pharmacology	
Define Drug proving	
<b>Unit 7: Potentiation of Drugs</b>	<b>[13]</b>
Define potentiation and its scale.	
Define succession and trituration.	
Define different scales	
• Decimal scale	
• Centesimal scale	
• 50 millismal scale	
<b>Unit 8: Homoeopathic pharmaceutical instruments and appliances and their cleaning.</b>	<b>[8]</b>
8.1 Identify and use common pharmaceutical instruments.	
8.2 Familiarize the method of cleansing instruments and appliances.	
<b>Unit 9: External applications</b>	<b>[6]</b>
• Define lotion, liniment, ointment.	
<b>Unit 10: List of few remedies with common name.</b>	<b>[3]</b>
<b>Unit 11: Identification of important homoeopathic Drugs</b>	<b>[7]</b>
11.1 Identify Aconite	
11.2 Identify Arjuna	
11.3 Identify Arnica	
11.4 Identify Belladonna	
11.5 Identify Calendula	
11.6 Identify Capsicum	
11.7 Identify Rouwolfia serp	
11.8 Identify Syzygium jamb	
11.9 Identify Thuja .Occ	

**Text book:**

1. Mandal and Mandal pharmacy
2. Homoeopathic pharmacy, Dr .D.D Banergee
3. Text book of Homoeopathic pharmacy Dr. M.K. Sahani

## Homeopathic Pharmacy

<b>Practical</b>	<b>[78]</b>
1. Identification of homoeopathic pharmaceutical instruments and appliances.	[2]
2. Demonstration weighing method and measurement.	[10]
3. Learning method of potentisation, Succussion and Trituration	[10]
4. Estimation the size of globules medication of sugar of milk and distilled water making of dose[[9]	
5. Preparing method of liniment, lotion, ointment and Glycerol.	[5]
6. Identification of important homoeopathic drugs.	[10]
• Allium sativa	
• Apis mel	
• Arjuna	
• Belladonna	
• Calendula	
• Capsicum	
• Sepia	
• Sulphur	
• Syzygium	
7. Demonstration of common laboratory method	[5]
• Distillation	
• Sublimation	
• Filtration	
• Sedimentation	
8. Visit to a homoeopathic pharmaceutical to study manufacture homoeopathic drugs.	[10]
9. Writing of different types of prescription	[2]
• Superscription	
• Inscription	
• Subscription	
• Signature	
10. Collection of Drugs substances from vegetable, animal, and mineral kingdom	[10]
11. Preparation of mother tinctures of any 3 polycrest remedies.	[5]

## ***HEALTH EDUCATION AND PUBLIC HEALTH***

**Year: Second**

**Total hours: 5 / week  
Theory hour : 3 / week  
Practical hour :2 / week**

### ***Courses Description:***

This course teaches the public health education, which is an indispensable component for preventive health, a chief responsibility of the community as well as health post manager. The course teaches the components and theories of health behaviors and the procedure for planning, implementation and overall management of health education program. The aim of this course is to develop the necessary skill for effective application of health education program in the community.

### ***Course Objectives:***

After the successful completion of that course, the learner will be able to:

1. Describe the significance of health education in preventive, promotive, curative and rehabilitative health care.
2. Identify and apply the theories and principles of health behavioral sciences in the process health education.
3. Identify, select and utilize suitable health education methods and media for successful implementation of public health program.
4. Plan, implement and evaluate health education program.

### ***Course Content:***

#### **Unit 1: Introduction to health education [10]**

- 1.1 Define health, describe the factors influencing health, heredity, environment, Life style, socioeconomic condition, health services and related factors.
- 1.2 Define health education, scope, principles and significance of health education, persons responsible for health education. in preventive, curative and rehabilitative care.

#### **Unit 2: Fundamental factors of health [20]**

- 2.1 Define motivation, describe its importance's in health education, types and principles of motivation, Rosen stock's principle, Kurt Lewin's principle, Buchman's principle.
- 2.2 Define learning, describe its steps, factors affecting in learning, biological, physical, socio-cultural, psychological factors.
- 2.3 Describe the different ways of learning, by hearing, by seeing, by doing, by repetition, by imitation, and Ralph Gay's principal of learning
- 2.4 Define change process, describe ways of bringing change, by force, by identification, by internalization, resistances to change, and ways of overcoming the resistances.

#### **Unit 3: Method of health education [10]**

- 3.1 Explain the method of health education, describe advantage and of each method, individual method, group method, group discussion, demonstration, role play, field trip, mini class instruction, text book, handouts, group discussion, mass method, exhibition, campaign, criteria for selection appropriate methods.

- 3.2 Describe different types of health education media, audio aids, visual aids, advantage and disadvantage of each media, criteria for selection of media, process of preparing each media, measures to use each media effectively.

**Unit 4: Planning of health education programmes [10]**

- 4.1 Define planning; describe its importance in health education, steps of planning, collection of data, collection of data and information, identification of health and health need on priority basis; setting goal and objectives, development of contents.
- 4.2 Describe target group, selection of appropriate method and media of health education identification of necessary and available resources, development of detail plan for evaluation, time, criteria, and method of evaluation.

**Unit 5: Implementation of health education programs [10]**

- 5.1 Define implementation, describe its strategies, building commitment, training of manpower, mobilizing resource, organizing community, monitoring of the program, supervision of health education workers, recording and reporting.\
- 5.2 Define evaluation; describe its importance, stages of evaluation, criteria of evaluation, method of evaluation.
- 5.3 Describe different materials use in health education, poster, pamphlets, flip chart, planned graph and their resources, procedures for developing simple media.

**Unit 6: Public health and sociology [9]**

- 6.1 Define public health; describe the importance of health education on public health, method and media used in public health.
- 6.2 Define preventive, promotive, curative and rehabilitative health care in public health.
- 6.3 Define society; describe the components, characteristics of society, socialization, agents of socialization.

**Text Books:**

1. A textbook of Health Education, H.B. Pradhan, Educational Resources for Health, 1995.
2. Textbook of Preventive & Social Medicine, Park, J.E. and K., 18th ed.,
3. M/S Banarasidashers, 1167, Jabalpur, India, 2005.

**Reference Books:**

1. A short Book of Public Health: Muthu VK, Jaypee Brothers Medical Publishers (P)
2. Ltd.EMCA House, 23/23B Ansari Road Daryaganj, New delhi, India .
3. Social Primary Principal, C.N.Shankar Rao-S. Chanda and Company Ltd. 7361,
4. Ramnagar, New delhi-110055, 3<sup>rd</sup> review and enlarged edition, 2000.

## Health Education and Public Health

### Practical

[48]

#### Unit 1 Practice of health education method

[24]

1.1 Apply theory learn from previous lesson, counseling, group discussion, role play, demonstration, class room instruction, text book, hand outs, group discussion, exhibition. Identification of different materials used in health education.

#### Unit 2: Apply theory learned in previous lesson to health education program selected health problems:

[24]

2.1 Communicable diseases, i.e. Malaria, Tuberculosis, and different parasitic diseases, diarrhoea, acute respiratory infections, different method and materials of family planning, immunization, sanitation problems, alcoholism and drug abuse, STD & HIV AIDS, accidental prevention, health education during disasters and epidemics, school health.

## ***PREVENTIVE AND SOCIAL MEDICINE (PSM)***

**Year: Second**

**Total hours: 5 / week  
Theory hour : 3 / week  
Practical hour :2 / week**

### **Course Description:**

The course has been organised into seven units .The first unit provides an overview of basic concept about the epidemiology and communicable diseases .The second unit address the knowledge about community diagnosis and the diagnostic procedure of community related health problem. In the third unit principles and application of family planning are discussed. In the fourth unit major health issues of mother and child health are accounted .The fifth unit addresses current issues and concepts in nutrition .Unit six presents the foundations of applied population science and issues and final unit seven consists of principles and techniques for performing the skills of medical care at the Homoeopathic Health Assistant level in basic medical procedure.

### **Course Objectives**

Upon successful completion of course, students will be able to :

1. Describe the epidemiology and communicable diseases
2. Describe the Community diagnosis
3. Describe the Family planning
4. Describe the Maternal health and Child health
5. Describe the Nutrition
6. Describe the Population issues
7. Describe the Basic medical procedure

### **Course Content:**

#### **Unit 1: Epidemiology and communicable disease**

**[15]**

##### ***Sub-unit:1 concepts of disease***

- Define the term disease (simple concept of disease) and give examples
- Describe the spectrum of disease using examples
- Explain what is mean's by "ice berg phenomenon" of disease
- Concept of disease causation
- Explain the term "epidemiological triad"
- Define the term agent host and environment with examples
- Define the web of causation with example
- Define risk factors and risk groups with illustration
- Explain in brief the natural history of disease
- Describe briefly about concept of disease, control elimination eradications and surveillance
- List out the name of the diseases that are under the control, eradication, elimination and surveillance of Nepal governments current health program.

##### ***Sub-unit:2 Concepts and methods of epidemiology***

- Explain the concept of epidemiology
- List the scope of epidemiology
- State purpose/aim of epidemiology



- Describe the tools and common measurements used in an epidemiological study
- Explain about descriptive epidemiological study and its characteristics
- State the uses of descriptive epidemiology
- Define the concept of screening and prerequisites of a screening test
- List the names of common diseases target populations and tests used for screening

**Sub-unit:3 Infectious disease epidemiology**

- Define the terms infection and infectious diseases, epidemics endemic, sporadic, pandemic, exotic, opportunistic infections, source of infection, reservoirs of infection, iatrogenic infection and give example of them
- Outline the transmission cycle of disease (chain of infection)
- Describe the term reservoir in terms of human reservoir in non living things
- Differentiate between direct and indirect modes of transmissions with examples
- Explain the term incubation period and period of communicability in relation to a susceptible host
- Describe methods for controlling the reservoir interruption of transmission and protecting the susceptible host

**Sub-unit:4 Investigation and management of an epidemic**

- Describe the characteristic features of different types of infectious disease epidemics
- Describe with an example to illustrate the steps\process of investigation and management of an infectious disease epidemic

**Sub-unit:5 Communicable diseases**

- define the term communicable diseases with examples
- define different communicable diseases: chicken pox, measles, mumps, influenza, polio, viral hepatitis cholera, typhoid, malaria, taeniasis, rabies, tetanus, leprosy, AIDS

**Unit 2 Community Diagnosis**

**[15]**

**Sub-unit:1 Introduction of community diagnosis**

- Define community diagnosis
- Explain the objectives and steps of community diagnosis
- Describe the benefits of using the community diagnosis process
- Describe the components of a community diagnosis using a realistic example
- Differentiate between community diagnosis and clinical diagnosis

**Sub-unit:2 Data collection**

- Illustrate the characteristics of primary and secondary data with examples
- Differentiate between qualitative and quantitative data using examples
- Identify the purposes and characteristics of census and sample surveys
- Illustrate different sampling methods and explain the significance of sampling size
- Describe methods of sampling
- Prepare pre-test and re-write a survey instrument

**Sub-unit:3 Data processing**

- Explain each steps of data processing

- Apply data processing to a community diagnosis project in your field practice

***Sub-unit:4 Community presentations***

- Explain the aims and goals of the community presentation of a community diagnosis
- Conduct a community presentation
- Identify the steps of a community presentation

***Sub-unit:5 Micro health projects***

- List the three types of community health needs and give examples of each
- Describe how to prioritize the various health needs of a community
- Explain the concept of micro health project

***Sub-unit:6 Report writing***

- Explain the aims and benefits of project reports
- Describe the components of a project report

**Unit-3 Family planning**

**[15]**

***Sub-unit:1 Introduction of family planning***

- Definition of family planning stated by WHO
- Describe the scope of family planning services
- Discuss community and individual health benefits of family planning
- Define the term eligible couples
- Explain how family planning helps promote child women's health
- Explain how to calculate a contraceptive prevalence rate (CPR)
- Calculate the current statistics for CPR in Nepal

***Sub-unit:2 Counselling and informed choice***

- Describe the components of family planning counselling using the GATHER approach

***Sub-unit:3 Client assessments***

- State the criteria for determining exclusion of pregnancy
- Describe what questions to ask when assessing factors which affect the choice for family planning

***Sub-unit:4 Adolescent clients***

- Describe the reasons for the high rate of adolescent pregnancy in Nepal
- Explore ideas to reduce pregnancy among girls under age 20 years

***Sub-unit:5 Contraceptives methods, their uses, advantages and disadvantages, side effects and their managements***

- Condoms
- Foaming tables and spermicides
- Natural methods and coitus interrupts
- Hormonal contraceptives
- Intrauterine contraceptive device (IUCD)
- Voluntary surgical contraceptive
- Post partum contraception
- Emergency contraception

**Unit-4 Maternal and child health**

**[15]**

***Sub-unit:1 Introduction of maternal and child health***

- Define concept of maternal child health and its scope
- Explain why mother and baby are treated as one unit

- Identify the rate for maternal mortality in Nepal
  - Describe social causes of maternal death
  - List the medical causes of maternal morbidity
- Sub-unit:2 Safe motherhood**
- Concept of safe motherhood
  - Scope of maternity care
  - Describe antenatal, delivery, postnatal and newborn care at health post level as recommended by national maternity care guideline
- Sub-unit:3 Obstetric referrals**
- Explain when how to use requiring referral to higher center
  - Prepare an Obstetric referral slips
- Sub-unit:4 Reproductive Health**
- Discusses the concept of reproductive health
  - Explain the importance of reproductive health
  - Describe the activities of reproductive health at sub-health post health post/PHC level
- Sub-unit:5 Child mortality and morbidity in Nepal**
- Describe the current statistics for infant mortality on Nepal
  - List the major causes of child mortality and morbidity in Nepal
  - Discuss the role of the homoeopathic health assistant in reducing child mortality and morbidity
- Sub-unit:6 At risk babies**
- Discuss the criteria for “at risk babies”
  - Describe ways to teach mothers and traditional birth attendants about the criteria for at risk babies amnd the importance of making prompt referral
- Sub-unit:7 Child growth and development**
- Concept of growth and development physical/motor, psychosocial, intellectual
  - Identify assessments of growth by using growth and development
  - List major milestones of development of under five children
  - Identify assessments of growth by using growth monitoring chart
- Sub-unit:8 Infant feeding (breast feeding)**
- List out the advantages of breast feeding
  - Define exclusive breast feeding
  - Identify management of common problems related breast feeding
  - Describe frequency and duration of breast feeding
  - Explain the alternatives of breast feeding
- Sub-unit:9 Weaning**
- Define weaning
  - Identify time of weaning
  - Describe preparation of weaning recipes
  - List common problems related to weaning ant their management
- Sub-unit:10 Immunizations**
- Define immunization
  - Outline the national immunization schedule
  - Discuss effects on mortality/morbidity due to immunization efforts
  - Discuss strategies for vaccine procurement and supply maintenance
  - Describe doses, route of administration and common adverse effects
  - Describe consequences of improper vaccine storage

- Describe the principles and purpose of the “cold chain” procedure
- Sub-unit:11 Prevention and control measures for chilled morbidity and mortality**
- Discuss measures to reduce child mortality and morbidity, and explain how each contributes to child health
  - Discuss the role of the homoeopathic health assistant in preventing childhood mortality and morbidity.

**Unit :5 Nutrition**

**[15]**

**Sub-unit:1 Fats and carbohydrate**

- List the important saturated and unsaturated fatty acids.
- Explain the importance of unsaturated fatty acid in the prevention of heart disease
- Define essential fatty acids with examples
- Define the term hydrogenation
- List the food source of fat and daily requirement of it
- List fat deficiency disease
- Explain the function of fat and carbohydrate
- Tell the daily requirement of carbohydrate
- List out the disease cause by deficiency of carbohydrate

**Sub-unit:2 Vitamins**

- Define vitamin and classify them
- Describe the functions of vitamins: A, D, E, K, B1, B2, B3, B6, B12, folic acid and vitamin C
- Cite the daily requirement of above vitamins
- List out the diseases cause by above mention vitamins
- Tell the sources of above vitamins
- Identify the vulnerable populations for deficiency diseases

**Sub-unit:3 Minerals**

- List the names of minerals required for good health
- State the functions of calcium, iron, iodine and fluorine
- List the major sources of minerals listed above
- Cite the daily requirement of the minerals listed above
- List the deficiency disease of the minerals listed above
- Identify vulnerable (risk) groups for these deficiencies

**Sub-unit:4 Balanced diets**

- Define balanced diet
- Identify meal plans which ensure a balanced diet and which use locally available food stuffs
- State factors which diminish the nutrient value in food, such as overcooking

**Sub-unit:5 Assessment of nutritional status**

- Explain the methods for assessment of nutritional status
  - Clinical examination
  - Anthropometrical method
  - Biochemical method
  - Dietary survey

**Sub-unit:6 Under nutrition**

- Define what is meant by under nutrition or mal nutrition?
- Explain the vicious cycle of malnutrition
- Explain the effects of malnutrition

- Classify the malnutrition
- Describe ways to control and prevention of malnutrition in community
- Sub-unit:7 *Nutritional problems of public health***
  - Identify foetal abnormalities and maternal risks associated with malnutrition before and during pregnancy
  - Explain magnitude of problem, distribution and risk groups for the following conditions:
    - a. Low birth weight
    - b. PEM
    - c. Vitamin A deficiency
    - d. Nutritional anaemia
    - e. Iodine deficiency disorders
- Sub-unit:8 *Nutritional factors in selected diseases***
  - Describe the relationship between nutrition /diet cardiovascular diseases, diabetes, obesity and cancer
  - Describe the prevention and control of these diseases
- Sub-unit:9 *Nutritional education and food taboos and myths***
  - Define nutritional education and benefits of it
  - List the important features of nutritional education
  - Identify common food taboos or myths among Nepalese people that interfere for assist in taking a balanced diet

## **Unit-6 Population Issues**

**[15]**

### **Sub-unit:1 *Introduction of population science–population composition***

- Explain population science/demography
- List the names of demographic processes
- List common attributes and principal measurement used in the study of population composition
- Define the term “population pyramid “and construct a population pyramid of Nepal

### **Sub-unit:2 *Population distribution, population size***

- List principal measurements used in the study of population distribution
- Compare population growth between developed countries and Nepal
- Identify size and trend of population growth of Nepal

### **Sub-unit:3 *Population growth***

- Discuss the concepts of negative and positive population growth
- List out the components of population growth
- State the formula for assessing population doubling time
- Calculate annual population growth rate

### **Sub-unit:4 *Population projections***

- Discuss about the population projection

### **Sub-unit:5 *Demographic transitions***

- List factors related with demographic transition of developed countries
- Compare and contrast the demographic transition of developed and developing countries

### **Sub-unit:6 *Effects of population overgrowth***

- Explain causes and effect of population overgrowth
- Classify the population growth rate

### **Sub-unit:7 *Population growth control***

- Describe following approaches of population growth control

- Family planning services
- Women's employment
- Economic development
- Late marriage
- Economic rewards and penalties
- Regulation of migration
- Population education

***Sub-unit:8 Population educations in community***

- Explain the term “population education”
- Describe the important components of population education for community people

**Unit-7 Basic Medical Procedure**

**[16]**

***Sub-unit:1 Professional role***

- Discuss the consequences of unprofessional behaviour.
- Describe the hierarchy of authority within the Nepalese health care system.
- Identify the appropriate steps to follow when confronted with unethical or illegal behaviour of another health care worker.
- Explain why Homoeopathic health assistants have a responsibility to maintain current with continuing education.

***Sub-unit:2 Communication professionally***

- Discuss the process of sending-receiving, verbal, non-verbal, and written communication.
- Describe factors, which aid or interfere with clear communication.
- How to built rapport and trust between HHA and patient.
- Describe ways to respectfully direct, inform, or make requests to others, in your role as HHA.

***Sub-unit:3 Assessment of vital signs***

- State the indications and purposes for vital signs measurement.
- Identify factors which interfere with accurate measurement.
- Explain implications of abnormal findings
- Demonstrate proper techniques according to guidelines
  - Counting respirations
  - Taking temperature at three chief sites
  - Measuring blood pressure
  - Recording vital signs
  - Caring for vital equipment

***Sub-unit:4 History taking and physical examination***

- How to collect subjective and objective data about the patient.
- What things to assess for each category:
  - “General appearance”
  - “Chief complaint/history of chief complain”
  - “History of present illness”
  - “Past medical history”
  - “Family history”
  - “Social /personal history”
- How to inspect the patient visually, and through sounds ,smell ,touch
- What are the techniques for Percussion, Palpation and Auscultation of Chest and Abdomen?

- What are the techniques for assessing Jaundice, Anaemia, Lymph nodes, Cyanosis, Clubbing, Oedema
- How to examine all body system
- Describe how symptom patterns and symptom correlations direct the process of differential diagnosis.

***Sub-unit 5 Administration of oral and topical medicine***

- Describe the advantages and disadvantages of each mode of medicine administration.
- Explain how medicines are absorbed by the body from the GI tract, or Membranous tissues.
- Discuss ways to modify giving oral medicine when the patient is unable to co-operate with swallowing globules
- Describe the procedure for administering medicines into the eyes, ears and the skin.
- Discuss procedures for recording medication administration.
- What are the factors which increase or decrease the effect of oral and topical medications?
- Explain safe medication administration procedures: right patient, right medicine, right dose, right route, right time

***Sub-unit:6 Medical surgical asepsis***

- Define the implications of sterile, aseptic and non sterile.
- What are the procedures for application of principles of medical and surgical asepsis?
- Explain the principles and procedures for hand washing and sanitation.
- Demonstrate handling sterile instruments during a sterile procedure.

***Sub-unit:7 Invasive procedures***

- State the risks to a patient with each of these invasive procedures: urinary catheterization, intravenous insertion, naso gastric insertion.
- Explain what is meant by implied consent
- Explain the signs of complications for each of these invasive procedures.

***Subunit:8 Administration of IM/IV medicines***

- Explain the principles and procedures for parental medications.
- How to manage the used needles.
- Explain the risk of administering drugs directly into the vein.
- Explain the guide lines for administration of medicine via parental routes.

**Text Books:**

1. Park & Park's Textbook of preventive and social medicine. M/S Banarasidas, Bhanot, Jabalpur, India.
2. Essential preventive medicine, by O.P. Ghai, Piyush Gupta, Bikash publication house, India.

**Reference Texts:**

1. First Aid: The authorised manual of St. John's ambulance association (current edition)
2. Manual for primary health care, health learning materials center, 1999/2055
3. Fundamentals of nursing health learning materials center
4. Basic epidemiology. WHO publication.
5. An Introduction to the study of population by B.D. Misra, published by South Asian Publishers, New Delhi, India
6. Parke, D. J. P. Practical Epidemiology .ELBS Publications.

## Preventive and Social Medicine (PSM)

- (Practical)** [50]
- Unit 1: Epidemiology and communicable disease** [5]  
1.1 Visit to epidemiology division/DHO/DPHO/PHC/ HP to collect the epidemiological information and to know about the different communicable diseases.
- Unit 2 Community Diagnosis** [8]  
2.1 Prepare a community health diagnosis guideline  
2.2 Prepare work plan and develop a set of questionnaire for different type of information  
2.3 collection  
2.4 Prepare a project report based on your field experience
- Unit-3 Family planning** [7]  
3.1 Visit to family planning division/PHC /HP for collecting information about family planning and contraceptive device  
3.2 Demonstrate counselling of a couple who wants to use contraceptives devices
- Unit-4 Maternal and child health** [5]  
Visit to the public health / health post for the immunization of the child and mother
- Unit-5 Population Issues** [5]  
• Visit & collect the information about the current status and different educational status of men's and woman's from the ministry of population of the Nepal
- Unit-6 Basic Medical Procedure** [20]  
• Basic medical procedures  
• Demonstrate handling of sterile instruments  
• Demonstrate the procedures of urinary catheterization, IV and IM injections NG tube insertions for tube feeding, IV canulization  
• Examinations of vital signs  
• Demonstrate the physical examinations.  
• Demonstrate the systemic examination  
• Techniques for record keeping.



## ***HEALTH MANAGEMENT & ENVIRONMENTAL HEALTH***

***Year: Second***

***Total hours: 5 / week  
Theory hour : 3 / week  
Practical hour :2 / week***

### ***Course description:***

This course introduces the student to concept about management of health care services, as a Homoeopathic health assistant. This course teaches about the health care system in Nepal, fundamental principles of management, National health policy and health programmes, health manpower in Nepal, health related organizations and agencies, logistics management, leadership & personal management, health issues and professional practice.

This course introduces the student to the specialized skill & knowledge needed to provide environmental health services. It includes information about the relationship between environment and health, water resource management and conservation, waste management, food hygiene controls of rodents, arthropods & occupational health.

### ***Course objective:***

After the completion of the course the student will be able to:

1. Identify health care system in Nepal.
2. Explain the theories, principles and components of health management.
3. Explain various health programmes of the Department of health services.
4. Apply the principles of logistics management.
5. Apply the principles of supervision and leadership as a Homoeopathic health assistant.
6. Explain the goals & functions of the health related governmental organizations, non-governmental organization (NGO's), international non-governmental organization (INGO's) and international agencies which serve in Nepal.
7. Identify current national & international health issues.
8. Describe the relationship between the environment & health and show the impact of environment on health.
9. Describe water resources conservation & water quality management.
10. Explain proper waste management in urban and in rural areas.
11. Describe how to maintain food hygiene.
12. Describe methods of controlling rodents, arthropods and insect.
13. Identify occupational diseases & strategies for their prevention..

## Course Content

### A Health Management

#### Unit 1: Health care system in Nepal

[2]

##### *Sub unit:*

- Define "health care system" and state the purpose & characteristics of health care system.
- Describe Homoeopathic, Ayurvedic & Allopathic approaches to health care.
- Identify situations when the most appropriate type of treatment might be Homoeopathic care, Ayurvedic care & Allopathic care, Unani, tibetians, Naturopathy & Accupuncture

#### Unit 2: Fundamental of health management

[10]

##### *Sub Unit 1: Introduction to health management*

- Define management & health management
- Describe the function of management

##### *Sub unit 2: Planning of health service*

- Describe the process & purpose of planning
- Describe different type of planning.
- Explain the planning cycle.
- Describe the steps of planning.
- Explain the health planning system in Nepal.

##### *Sub unit 3: Organization of health service*

- Describe the process & purpose of organization
- Identify different types of health service organizations.
- Explain the different types of health service in Nepal.

##### *Sub unit 4: Principles of leadership*

- Discuss the characteristics and advantage/disadvantage of each of the leadership styles.
  - **Autocratic**
  - **Democratic**
  - **Laissez faire**
- Discuss ways that the Homeopathic health assistant build mutual respect & truth with other staff.
- Discuss strategies to increase staff motivation by applying theories of motivation.
- Apply the theories of changes to situation of high absenteeism among other staff.

##### *Sub unit 5: Staffing*

- State the purpose of using job description.
- Identify the elements of a job description.
- Identify the staffing pattern of different health insitutions Nepal.
- Explain why you support or disagree with the statement, "experienced staff are experts in their role"

##### *Sub unit 6: Directing*

- Describe the meaning & purpose of delegation of authority.
- Discuss the relationship between delegation and authority.

***Sub unit 7: Supervision***

- Describe the objectives & method of supervision.
- Identify different types of tools use in supervision .
- Describe method of monitoring & steps of a monitoring programme.

***Sub unit 8: Co-ordination***

- Define co-ordination in term of health management.
- Identify different types of co-ordination.
- Identify techniques & process of co-ordination

***Sub unit 9: Reporting/Recording***

- Discuss the introduction of reporting & recording.
- Describe the importance of recording/reporting.
- Describe the process of health reporting in Nepal.

***Sub unit10: Budgeting***

- Discuss the purpose for using a budget in health management.
- Identify & compare different types of budget.

***Sub unit11: Training***

- State the purpose & definition of training.
- Describe different types of training and explain the advantages & disadvantages of each.
- Describe how to plan, conduct & evaluate the training program of subordinate & volunteers.

***Sub unit12: Conduct staff meeting***

- Describe how to plan for an effective meeting.
- Discuss the importance of minuting the decisions made by the meeting.
- Describe how to formalize the minutes.

***Sub unit13: Financial management***

- Discuss the purpose & procedures for financial management.
- Explain how to maintain records of income & expenditure.
- Describe how to maintain a bank account.

***Sub unit14: Leave management***

- Identify different types of employee leaves.
- Describe the procedure for making a request for leave.
- Explain how to maintain records of staff leave.

***Sub unit15: Logistic management***

- Explain the purpose of logistic management.
- Describe the procedure for using the various records & forms of the LM/s

***Sub unit16: Inventory management***

- Differentiate between expendable and non expendable goods.
- Describe the procedure for cold-chain storage of medical supplies.
- Describe the process of calculating and demanding items for both regular and emergency needs.

***Sub unit17: Time management***

- Describe how to compute staff work load.
- Demonstrate how to prepare a timetable of health unit activities.
  - Weekly
  - Monthly
  - Quarterly
  - Yearly

***Sub unit18: Letter writing***

- Write selected officials letters based on a simulated examples.
- Identify different types of letters and discuss the purpose of each.

***Sub unit19: Health Management information system (HMIS)***

- Explain the purpose of the HMIS
- Identify the important benefits of this system.
- Explain the use of the different types of HMIS forms.

**Unit 3: Health related organization [2]**

***Sub unit11: NGOs & INGOs***

- Identify the activities & goals of NGO's & INGO's working in health sectors.
- Identify their role in promotion of the health care system.

**Unit 4: National health policy & health programs [2]**

***Sub unit1: Various health programs.***

- Identify the objectives and activities of national health programs.

**Unit 5: Health manpower in Nepal [6]**

***Sub unit 1: Development of human Resources in health (HRH) in Nepal.***

- Describe the purpose and activities of the various institutions involved in HRH development.

***Sub unit2: National health policy***

- Describe the current five-year plan.
- Describe Nepal's long term health plan.
- Describe potential barriers to successful achievement of these goals and ways to overcome such barriers. (for examples the barriers of insufficient health care manpower)

**Unit 6: Health issues & professional practice [5]**

***Sub unit 1: National health issues & situations.***

- Identify the most important health issues of Nepal.
- Compare the health situation of Nepal, as it was 20 years ago and as it is today.

***Sub unit 2: Professional practice***

- Explain the purpose of a code of conduct of Homoeopath health assistant.
- Describe the formation activities and functioning of the Nepal health professional council (NHPC)

## **B Environmental health**

### **Unit 1: Environmental health concept**

[6]

#### ***Sub Unit 1: Definition Define terminology***

Define: Environment

Environmental health  
Environmental sanitation  
Environmental pollution

#### ***Sub unit 2: Relation of environmental health***

- Describe the relationship between environment & health.
- Define terms: agents, host, environment.
- Give examples of agents, host & environment

#### ***Sub unit 3: Introduction of water***

- Define safe & wholesome water.
- Identify the uses of water.

#### ***Sub unit 4: Sources of water***

- Identify merits & demerits of different sources.
- Explain the relationship between deforestation & water shortages in Nepal.

#### ***Sub unit 5: Water Pollution***

- Define water pollution
- Describe causes of water pollution.
- Identify Important water borne diseases.

#### ***Sub unit 6: Purification of water***

- Describe different ways of purification of water.
- Describe the method of water purification on large scale.

### **Unit 2: Waste**

[6]

#### ***Sub unit 1: Introduction of Waste***

- Define waste
- Give examples of solid & liquid waste & their sources.

#### ***Sub unit 2: Solid waste management***

- Describe the disposal of waste in urban areas in Nepal & other countries.
- Describe the disposal of waste in rural areas.
- Identify the advantages & disadvantages of each method of solid waste disposal.

#### ***Sub unit 3: Hazards of solid waste***

- Describe both health hazards and environmental hazards created by solid waste mismanagement.
- Identify an example of solid waste mismanagement in your own community.

#### ***Sub unit 4: Excreta disposal in the community***

- Describe method of excreta disposal using a pit latrine.
- Describe the advantages & disadvantages of different types of pit latrines.
- Describe the features of a water sealed latrines.

#### ***Sub unit 5: Liquid waste management***

- List sources of liquid waste.
- Describe the management of liquid waste in household (small scale) & urban areas.

***Sub unit 6: Concept of food hygiene***

- Define food hygiene
- Explain importance of food hygiene.
- Identify different food hygiene methods.

***Sub unit 7: Food borne disease***

- Discuss the incidence of food poisoning.
- Identify common food borne disease.
- Give examples of bacterials, plant and chemical poisons, which are ingested with food.

***Sub unit 8: Food additives, food fortification & food adulteration***

- Define food fortification
- Explain importance of food fortification.
- Define food additives & describe different types of food additives.
- State the hazards of using food additives.
- Define food adulteration & discuss its hazards.
- Describe different food adulteration practices.

***Sub unit 9: Milk hygiene***

- State what is meant by milk hygiene.
- Identify milk borne disease.
- Describe the processes of milk hygiene.

**Unit 3: Air**

[4]

***Sub unit 1: Introduction of air pollution***

- Define air pollution.
- Describe sources air pollution.
- Describe affects of air pollution in health and society.

***Sub unit 2: Major issues in air pollution***

- Describe the theory of the green house effects, its theory of the green house effects, its cansation & effects.
- Describe the current situation of ozone depletion, its cansation & effects.

**Unit 4: Rodentology**

[3]

***Sub unit 1: Rodents their effects & control measures***

- Define rodentology
- Identify the disease potentials created by the presence of rat population in a community.
- Describe rodent control measures.

**Unit 5: Entomology**

[5]

***Sub unit 2: Introduction of Entomology***

- Define entomology & medical entomology
- Describe the transmission of each of the common arthropel/indect borne diseases.

***Sub unit 3: Arthropod borne diseases***

***Sub unit 4: Arthropod control***

- Describe principles of arthropod control
- Identify diseases caused by mosquito, housefly, bed bug, hand tics, soft ticks, itch, mites, cycleps, cockroached, louse, flears

**Unit 6: Occupational health**

[2]

***Sub unit 1: Occupational diseases***

- Describe the common occupational diseases in Nepal.
- Describe the clinical features & causes of these occupational diseases.
- Analyze different occupational hazards which occur in your own community.

**Text book:**

1. A Guide to management in primary health care W.H.O. current edition.
2. Dixit, H. the Quest for health Educational Enterprise (P) Ltd. Kathmandu 1999
3. Pradhananga, Y. health management council for technical Education & Vocational Training, Shaktapur, Nepal. 2055 B.S.
4. Kamala, T. & Bishnu, R. leadership and Management for Nurses. Health learning materials centre, T.U. Kathmandu. 1990

**Reference Texts**

1. Shrestha, B.M. Basic Principles of management. Akshyalok Publication, Nepal. 2039 B.S.
2. Modern Management Methods and the organization of health services, public health papers # 55 WHO. 1974.
3. Inventory control and Basic Logistics procedure Mannal on Store management for PHC/HP and SHP personnel. HMG/JSI 2054 B.S.
4. Health Logistics procedure Manual. NHTC/LMD/USAID JSI, Nepal 2057.
5. Monre T. Morgah, Environmental health, East Tennessee state university Borwh & Behchmark publication 1993, USA.
6. H.L.M.L. community Nursing, Institute of Medicine, T.U., 1995, Kathmandu.
7. Bhatta I.D., An Introduction to malaria, mosquito & malaria control 2055, Pokhara.
8. World Health Organization, Malaria in the south East Asia Region, WHO, 1997, New Delhi.
9. राष्ट्रिय योजना आयोग/ विश्व संरक्षण संघ, वातावरण शिक्षा श्रोत संगालो २०५०, काठमाण्डौ ।
10. SN Calary, Vinod Vyasulu, Environmental Management, <achmillan India Limited 2000.
11. RR Saxena, Socail & preventive medicine publisher stish kumar jain for CBS publisher 1190

## Health Management & Environmental Health

### Practical

[25]

1. Family planning [6]
  - Educate people about family planning, types of family planning, and its importance to make happy family
  - Educate people about the means of family planning and their uses
  - Demonstrate temporary means of family planning
    - Condoms
    - Depo-Provera
    - OCP
    - Copper –T
    - Diaphragm
2. Child health [3]
  - Measure the height
  - Measure the weight
  - Measure the PEM
  - Measure the UACM (upper arm circumference Measurement)
  - Measure the nutritional status by Sakir tape
3. Visit MOHP for [5]
4. Visit of dumping site, field visit of safe & wholesome water [5]
5. Prepare the project for sound pollution [2]
6. Interpret the organization chart of Health and Population Ministry (MOHP) [1]
7. Control pollution [3]
  - Educate people about pollution, types of pollution, and importance to control pollution control
  - Educate people about the means of family planning and their uses
  - Demonstrate temporary means of family planning
    - Waste
    - Water
    - Sound



## ***FIRST AID AND MEDICAL EMERGENCY***

**Year: Second**

**Total hours: 5 / week**  
**Theory hour : 3 / week**  
**Practical hour :2 / week**

### **Course Description**

This course provides the principles and techniques for performing the skills of medical care at the homeopathic health assistant level and includes a first aid course. The skills include basic history taking and physical examination, procedures for administering medications, wound care, performing invasive procedures and simple suturing. The first aid course includes procedures for bandaging, CPR and choking etc.

### **Course objectives**

Upon completion of the subject the students will be able to

1. Respond appropriately to first aid situations
2. Identify first aid situation which require referral to a higher level facility
3. Perform a basic history taking and physical examination of the patient efficiently and thoroughly
4. Perform selected basic invasive procedures and wound care according to guidelines
5. Administer medications by each route safely and efficiently
6. Maintain medical or surgical asepsis during procedures needed
7. Maintain hygienic conditions within the health post

### **Course Content**

- |               |  |            |
|---------------|--|------------|
| <b>Unit 1</b> | <b>Basic Medical Procedures</b>  | <b>[7]</b> |
| 1.1           | Describe ways to respectfully direct, inform or make requests to others in your role as HHA  |            |
| 1.2           | Explain the indication, purpose, significance, and factors influencing the vital signs.  |            |
| 1.3           | Explain about history taking skills  |            |
| 1.4           | Explain about the technique of administering the oral and topical medicines  |            |
| 1.5           | Explain about the administration procedure of IM and IV medicines  |            |
| 1.6           | Explain about medical-surgical asepsis   |            |
| 1.7           | Explain about the procedure and risk of invasive procedures like urinary catheterization, intravenous insertion, nasogastric insertion etc |            |
| <b>Unit 2</b> | <b>Principles of First Aid</b>   | <b>[5]</b> |
| 2.1           | Discuss the aims of first aid and responsibility of first aider  |            |
| 2.2           | Describe the initial action of first aider   |            |
| 2.3           | List the essential principles of first aid   |            |
| 2.4           | Describe the steps, assessment, management and disposal of the casualty case   |            |
| <b>Unit 3</b> | <b>Thermal Injuries</b>  | <b>[6]</b> |
| 3.1           | State examples of when persons might be at risk for dehydration, heat reaction, altitude sickness, hypothermia, frostbite                  |            |
| 3.2           | Describe the sign and symptoms of dehydration, heat reaction, altitude sickness, hypothermia frostbite                                     |            |
| 3.3           | Describe the recommended immediate treatment and indications for immediate referral to higher level facility                               |            |

- Unit 4    Animal Bites, Stings** **[6]**
- 4.1    Describe the appropriate management for cases of animal bites, stings or poisoning
- 4.2    Discuss why a tourniquet is no longer used for snakebite and describe the recommended management
- 4.3    Tell when vomiting is not an appropriate way to manage poisoning
- 4.4    Describe the recommended use of emergency medications for bites, stings and poisons
- Unit 5    Fractures, Splints** **[6]**
- 5.1    Describe types of fractures
- 5.2    Differentiate dislocation and fractures
- 5.3    Describe the ways to immobilize selected fractures
- 5.4    Describe why all fractures should be referred to a higher level facility for management
- Unit 6    Wound, Burns, Bandaging** **[6]**
- 6.1    Describe the types of wound and their management
- 6.2    Demonstrate selected types of bandaging procedures
- 6.3    Describe the procedures for controlling hemorrhage, pressure dressing, pressure point constriction
- 6.4    Tell indications for butterfly taping and suturing
- 6.5    Describe types of burns and their management
- Unit 7    Hemorrhage, Breathlessness, Heart Attack** **[9]**
- 7.1    Describe the appropriate interventions for severe hemorrhage from an extremity, abdominal wound, scalp wound, neck laceration etc and the management
- 7.2    Identify and describe the common causes of breathlessness and measures available at the health post to relieve breathlessness
- 7.3    Describe the pathophysiology of Myocardial infarction with its management at health post level and differentiate it with Angina pectoris
- Unit 8    Epileptic Seizure, Cva, Unconsciousness** **[7]**
- 8.1    Explain the causes and clinical features of epileptic seizure and differentiate it with hysterical fits
- 8.2    describe the causes and types of concussion
- 7.3    Describe the patho-physiology of CVA (cerebro vascular accident) and its immediate management
- 8.4    Describe the common causes and signs of unconsciousness and its management
- Unit 9    Choking, Cpr, Multiple Injuries** **[8]**
- 9.1    Identify and describe the common causes for airway obstruction and clinical manifestations with possible immediate management
- 9.2    Identify the conditions requiring CPR and differentiate between dry and wet drowning
- 9.3    Define the concept of triage, and discuss the factors which may influence the decisions about which measures should be taken first.

**Text books:**

1. First aid: the authorised manual of St John's Ambulance Association
2. Manual for primary health care, health learning materials center

## First Aid and Medical Emergency

### Practical

1. Demonstrate through role play : [9]
  - a) Introducing self to co-workers
  - b) Establishing trust with the patient
  - c) Requesting sensitive information from a patient
  - d) Giving bad news to a patient
  - e) Directing or correcting a subordinate
  - f) Making request to your supervisor
2. Demonstrate proper techniques according to guidelines : [8]
  - g) Palpating pulses at six chief sites
  - h) Counting respiration
  - i) Taking temperature at 3 chief sites
  - j) Measuring blood pressure
  - k) Recording vital signs
  - l) Caring for VS instruments
3. Demonstrate the procedure for administering medicines into the eye, ear, nose, rectum, vagina or onto the skin [5]
4. Demonstrate the procedures for administering IM and IV medicines or beginning IV fluids according to guidelines [5]
5. Demonstrate handling sterile instruments during sterile procedures [5]
6. Demonstrate urinary catheterization, IV insertion, Nasogastric insertion [5]
7. Demonstrate the procedure of CPR [5]
8. Demonstrate the procedures of bandaging [5]
9. Demonstrate the procedures of immobilizing a fractured part [5]
10. Demonstrate the procedure of abdominal thrust [5]

# Third Year

## ***ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY II***

**Year: Third**

**Total hours: 5 / week  
Theory hour : 4 / week  
Practical hour :1 / week**

### **Course description:**

To make the students understand the principles and practice of homoeopathy, its philosophy to understand the process of cure, disease and application of law of similar

### **Course Objectives**

Upon successful completion of course, students will be able to:

Take case

Understand the process of Drug Proving

Understand the management of cases

Understand the process of administration of medicine

### **Course Content :**

- |               |  |             |
|---------------|--|-------------|
| <b>Unit 1</b> | <b>Acquiring the Knowledge of Medicine</b>                               | <b>[20]</b> |
|               | 1.1 Describe the process of Drug Proving                                 |             |
|               | 1.2 Understand the guidelines for conducting drug proving                |             |
| <b>Unit 2</b> | <b>Case Management</b>   | <b>[32]</b> |
|               | 2.1 Explain medical treatment and regimen                                |             |
|               | 2.2 Describe fifty millesimal potency                                    |             |
|               | 2.3 Understand what to do when a remedy doesn't work                     |             |
|               | 2.4 Determine whether a case is getting better or not                    |             |
|               | 2.5 Describe Kent's 12 Observations                                      |             |
|               | 2.6 Define the recommended regimen for acute and chronic diseases        |             |
|               | 2.7 Explain the Hering's law of cure                                     |             |
| <b>Unit 3</b> | <b>Process of Administration of Medicine</b>                             | <b>[26]</b> |
|               | 3.1 Explain about administration of Single simple medicine               |             |
|               | 3.2 Describe how to choose the best size of dose                         |             |
|               | 3.3 Explain about the treatment with fifty millesimal potency            |             |
|               | 3.4 Explain about the alternative methods for administration of medicine |             |

### **Textbooks :**

1. Organon of Medicine Dr. Samuel Hahnemann
2. Homoeopathic Philosophy by Dr. J.T Kent

### **References :**

1. Text book of organon of medicine by A.K Das
2. Philosophy of H A Roberts
3. Genius of Homeopathy Stuart Close. etc.

## ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY II

### Practical

[20]

1. Perform case taking of the patient [10]
2. Determine the types of symptoms [10]

## ***HOMEOPATHIC MATERIA MEDICA II***

**Year: Third**

**Total hours: 7/ week  
Theory hour : 6 / week  
Practical hour :1 / week**

### **Course description:**

This course has been divided into 6 units. Each unit provides skills of knowledge, attitude and practical knowledge in Homeopathic Materia Medica. This course will provide the comparative study of drugs like polychrest complementary, inimical, antidotal and concomitant remedies with their therapeutic applications.

### **Course objective:**

After the completion of the course the student will be able to:

1. Apply the Homeopathic Medicine according to sign and symptom of drug and symptomatology of the patient.
2. Describe the relationship of drug.
3. Identify the pathogenesis of different drug.
4. Describe the duration and action of different drugs.
5. Identify the nature and temperament of drugs e.g. Hot and Cold.
6. Efficient Homeopathic medical practitioner.

### **Course content:**

<b>Unit- 1</b>	<b>Vegetable kingdom:</b>	<b>[20]</b>
	1.1 Apply the medicine in preventive and curative purposes.	
	1.2 Differentiate the vegetable sources of homoeopathic drugs which includes fungus, mushroom, weeds etc	
<b>Unit-2</b>	<b>Animal kingdom:</b>	<b>[20]</b>
	2.1 Define the pathological and physiological action of the drugs.	
	2.2 Differentiate the drugs of animal kingdom such as insect, snake and whole animals etc.	
<b>Unit 3</b>	<b>Mineral Kingdom</b>	<b>[20]</b>
	3.1 Describe the mineral oil and coal tar distillation.	
	3.2 Describe the Mineral spring water and its application.	
	3.3 Describe the dry distillation wood camphor & organic mixture.	
<b>Unit 4</b>	<b>Nosode:</b>	<b>[20]</b>
	4.1 Explain this nosode upon human being according to symptomatology.	
	4.2 Describe its action, duration of nosode product.	
<b>Unit 5</b>	<b>Sarcode:</b>	<b>[20]</b>
	5.1 Described the symptomatology of the sarcode group.	
<b>Unit 6</b>	<b>Impondebrilia:</b>	<b>[20]</b>
	6.1 Describe the impondebrilia drug extract acted from light, magnet and rays.	
	6.2 Describe the impondebrilia medicines for appropriate disease.	

## List of the Medicine

1. Actea Racemosa	2. Kreosotum
3. Aethusa.Cynapium	4. Petrolium
5. Agaricus Mus	6. Mag. Phos
7. Ambra Grisea	8. Antimonium Tart
9. Argentum nitricum	10. Staphysagria
11. Aur Metallicum	12. Medorrhinum
13. Helleborus	14. Stannum met.
15. Berb Vulgaris	16. Natrum Sulph
17. Borax	18. Nitric-Acid
19. Bromium	20. Syphilinum
21. Cactus G	22. Opium
23. Veratrum	24. Pyrogenium
25. Carcinocinum	26. Podophylum
27. Hyoscyamus	28. Psorinum
29. Cina	30. Fluoric Acid
31. Formica rufa	32. Phytolacca
33. Iodium	34. Rhododendron
35. Ipecac	36. Thuja occidentalis
37. Stramonium	38. Ferrum phos
39. Zincum Met	

### Text Book:

- Allen's Key Notes of Homeopathic Materia Medica
- Homeopathic Materia Medica of Homeopathic Medicine by Dr. S.R. Phatak

### Reference Book:

- Boericke's Homeopathic Materia Medica
- Comparative Materia Medica E.A. Farrington
- R. Hudge- Pharmacodynamic of Materia Medica
- Clark's Dictionary of practical materia medica
- George Vithoukus Essence of homeopathic materia medica
- Practical materia medica for consulting Room Dr. Tinus Smit
- Kent's Homeopathic Materia Medica



## MATERIA MEDICA II

### **Practical**

**[15]**

1. Perform bedside case taking & cross questioning

**[10]**

2. Keep record

**[5]**

## ***HOMEOPATHIC REPERTORY II***

**Year: Third**

**Total hours: 6 / week**

**Theory hour : 2 / week**

**Practical hour :4 / week**

### **Course description:**

Now we have in homeopathy more than 4000 remedies. Some are in use very often and some are less. And one single remedy has thousands of symptoms. It is virtually impossible to remember all these symptoms. And not only are those new remedies invented. So the number of remedies is ever increasing. To assist the study of Homeopathic Materia Medica the concept of Repertory was developed by Dr Samuel Hahnemann .So Repertory is the logical index of symptoms of homeopathic materia medica in the form of rubrics with corresponding remedies, to facilitate the search of desired remedy.

### **Course objectives-**

Upon the completion of course the students will be able to:

1. Explain the philosophy, plan, construction and content of Repertories.
2. Perform the case taking
3. Perform the Steps, Methods and techniques of Repertorization

### **Course Content:**

#### **Unit 1      Steps, Methods and techniques of Repertorization**

##### ***Sub unit1: Steps***

**[13]**

- 1.1 Perform the case taking
- 1.2 Record and interpret the case
- 1.3 Define the problem
- 1.4 Perform analysis of the symptoms (classification and evaluation of symptoms)
- 1.5 Construct totality of symptoms
- 1.6 Convert the Symptoms into appropriate rubrics
- 1.7 Select the repertory and repertorize
- 1.8 Explain about the reportorial result
- 1.9 Explain about the analysis of reportorial result and prescribe the remedy

##### ***Sub unit 2: Methods***

**[12]**

- Perform the Boenninghaussen's method of repertorization
- Perform the Kent's method of repertorization
- Perform the Clinical method of repertorization

##### ***Sub unit 3: Techniques***

**[12]**

- 3.1 Perform the old method of repertorization (using plain paper sheet)
- 3.2 Perform the modern method of repertorization (using repertorial sheet)

- Total addition process
- Eliminating process
- Perform the method of computer repertorization.
  - Radar
  - Hompath
  - Cara

**Text Books:**

1. Essentials of Repertorization by Shashikant Tiwari
2. A reference to Repertories for Homeopathic students by Siju P. V

**Reference Books**

1. Repertory of the Homeopathic Materia Medica by J T Kent
2. Boeger Boeeninghassen's Therapeutic Pocket book
3. BBCR
4. Synthesis Repertory By Fredrik Schroyens
5. Synthetic Repertory
6. Complete Repertory .etc.
7. Homeopathic Medical Repertory by Dr. Robin Murphy

## Homeopathic Repertory II

<b>Practical</b>	<b>[80]</b>
3. Perform the repertorization through	<b>[20]</b>
• Kent's methods	
• Boenninghaussen's methods	
• Clinical methods	
4. Perform the old method of repertorization in plain paper sheet	<b>[10]</b>
5. Perform the modern method of repertorization in repertorial sheet	<b>[25]</b>
• Elimination process	
• addition process	
6. Perform the computer method (Radar, Hompath) of repertorization	<b>[25]</b>

## ***BASIC SURGERY***

**Year: Third**

**Total hours: 6 / week  
Theory hour : 4 / week  
Practical hour :2 / week**

### **Course Description**

This course introduces the student to basic knowledge and skills necessary to identify and manage simple surgical conditions at the health post level. The content includes wound care and abdominal respiratory genitourinary, skeletal and malignant conditions, the student will learn to recognize conditions that require surgical interventions at a higher level facility, to stabilize such cases and manage the referral.

### **Course objectives**

On completion of the course, the student will be able to:

1. Identify and use common surgical instruments
2. Perform simple suturing for skin approximation
3. Perform simple incision and drain of a superficial abscess
4. Identify and manage the different kinds of shock
5. Identify and manage cysts, fistulas, sinus cavities
6. Evaluate and manage poor wound healing, gangrene and necrosis
7. Identify, manage and make referrals as necessary for abdominal disorders, potentially malignant conditions, ano-rectal conditions, genitourinary conditions, brain or spinal cord injury, chest injuries, fractures and osteomyelitis
8. Identify common types of anesthesia, the precautions for each, methods of administration, and principles for selection

### **Course Content:**

- |               |   |            |
|---------------|---|------------|
| <b>Unit 1</b> | <b>Emergency Treatment</b>  | <b>[8]</b> |
|               | 1.1 Describe the steps for evaluating the patient's condition in emergency situations   |            |
|               | 1.2 Describe how to manage primary emergency case to stabilize the patient  |            |
|               | 1.3 Explain the indications for immediate transfer of patient to higher level facility  |            |
|               | 1.4 Explain the measure to use to maintain the life of the patient during transport to Hospital                               |            |
|               | 1.5 Explain the Shock and it's types  |            |
|               | 1.6 Describe the recording of fluid intake and output   |            |
|               | 1.7 Describe how to conduct the appropriate treatments for shock in order to stabilize the patient                            |            |
| <b>Unit 2</b> | <b>Fluid and Electrolyte Therapy</b>  | <b>[6]</b> |
|               | 2.1 Describe the ways the body maintains fluid and electrolyte balance  |            |
|               | 2.2 Demonstrate the methods for assessing hydration   |            |
|               | 2.3 State the principles which guide the HHA in deciding which parenteral fluid to administer, by what route and at what rate |            |
| <b>Unit 3</b> | <b>Surgical Procedures</b>  | <b>[8]</b> |
|               | 3.1 Identify and explain the function of selected surgical instruments  |            |

- 3.2 Explain the methods of sterilization of different surgical instruments
- 3.3 Describe pre-operative site preparation
- 3.4 Demonstrate local anaesthesia techniques
- 3.5 Perform I and D for abscess, benign skin tumor excision, correction for ingrowing toe nail
- 3.6 Explain the types of wound (simple and compound, clean and dirty)
- 3.7 Demonstrate the ways to approximate the edges of a wound
- 3.8 Demonstrate how to put on sterile gloves without contaminating them
- 3.9 Describe ways to clean a dirty wound of debride a necrotic wound
- 3.10 Describe different methods of suturing
- 3.11 Demonstrate the technique for manual and surgical procedure for uncomplicated cases of phimosis and paraphimosis

**Unit 4      Dermatology** **[8]**

- 4.1 Describe the causes and clinical features of common skin inflammatory disorders and their treatment
- 4.2 Explain the types of skin ulcers and appropriate treatments
- 4.3 Explain the difference between gas gangrene and dry gangrene
- 4.4 Describe the Bed sore
- 4.5 Differentiate between the burns and scalds
- 4.6 Discuss the common causes of burns in Nepal
- 4.7 Describe how to estimate the prognosis by burn depth and extent
- 4.8 Describe the procedures for primary burn wound treatment
- 4.9 Describe the indications for fluid therapy and type of fluid therapy required for selected burn cases.

**Unit 5      Thoracic Conditions** **[6]**

- 5.1 Describe the normal and abnormal heart sounds
- 5.2 Classify the chest injuries and explain their patho physiological dynamics
- 5.3 Explain the causes, manifestations and management of lung abscess and empyema
- 5.4 Explain the causes, manifestations and management of lung cancer

**Unit 6      Abdominal Conditions** **[6]**

- 6.1 Describe the causes, manifestations and management of acute abdomen
- 6.2 Explain the clinical features of liver rupture in abdominal trauma

**Unit 7      Genitourinary Conditions** **[8]**

- 7.1 Describe the procedure of vasectomy and potential complications
- 7.2 Describe common causes of hematuria and dysuria
- 7.3 Differentiate between the clinical features of UTI and urinary stones Identify the causes and clinical features of urinary retention
- 7.4 Identify the clinical features of benign prostatic hypertrophy
- 7.5 Describe the causes, clinical features and management for rectal bleeding and other common rectal disorders

**Unit 8      Malignant And Non Malignant Masses** **[6]**

- Differentiate between the benign and malignant tumors
- Describe the different types of malignant skin lesions
- Describe the clinical features of gastro-intestinal tumors
- Differentiate between mastitis and breast abscess

- Unit 9      EENT** **[18]**
- 9.1 Identify and describe the causes, clinical features and management of the common lid diseases : Chalazion, stye, blepharitis, entropion, ectropion and trichiasis.
  - 9.2 Describe the causes, signs and symptoms and management of conjunctivitis
  - 9.3 Describe the causes, signs and symptoms and management of trachoma
  - 9.4 Describe the causes, signs and symptoms and management of xerophthalmia
  - 9.5 Describe the causes, signs and symptoms and management of cataract
  - 9.6 Describe the causes, signs and symptoms and management of glaucoma
  - 9.7 Describe the causes, signs and symptoms and management of pterygium
  - 9.8 Describe the causes, signs and symptoms and management of refractive errors
  - 9.9 Describe the causes, signs and symptoms and management of foreign body in eye
  - 9.10 Describe the causes, signs and symptoms and management of CSOM
  - 9.11 Describe the causes, signs and symptoms and management of common nasal conditions like DNS, nasal polyp, sinusitis, atrophic rhinitis, allergic rhinitis
  - 9.12 Describe the causes, signs and symptoms and management of tonsillitis, pharyngitis, laryngitis, epiglottitis,

- Unit 10      Dentistry** **[6]**
- 10.1 Describe the causes, types and prevention of dental plaque and calculus
  - 10.2 Describe the causes, signs and symptoms and management of gingivitis
  - 10.3 Describe the causes, signs and symptoms and management of periodontitis
  - 10.4 Describe the causes, signs and symptoms and management of oral cancers
  - 10.5 Describe and discuss the clinical features and management of temporomandibular joint dislocation

**Text Books:**

Manipal's Manual of Surgery

**Reference Books**

Text book of surgery by Dr. Das

Text book of surgery by Love & Baily

## Basic Surgery

### Practical

[37]

1. Identify selected surgical instruments
2. Perform selected simple surgical procedures: incision and drainage for abscess, benign skin tumor excision, etc.
3. Perform catheterization
4. Evaluate the visual acuity
5. Describe the process remove a foreign body from the conjunctiva
6. Describe the process rinse the eye when chemical trauma has occurred
7. Demonstrate the process assess the hearing acuity
8. Demonstrate the process perform examination of the larynx, pharynx, eye, nose and ear.
9. Perform IV canulation
10. Perform injection : S/C, I/M etc.
11. Perform Suturing



# ***PRACTICE OF MEDICINE***

**Year: Third**

**Total hours: 9 / week  
Theory hour : 6 / week  
Practical hour : 3 / week**

## **Course description**

This course begins with an in depth presentation on the diagnostic process applied to the history and physical examination of the patient and includes assessments specific to each system. For each disease or condition this course examines etiologies, clinical features, differential diagnosis, management at health assistant level, indication for referral and preventive measures.

## **Course objectives**

On completion of the course the learner should be able to:

1. Perform a thorough history and physical examination and analyze and interpret the findings to make a rational provisional diagnosis
2. Identify the etiologies, pathology and clinical features of common systemic disorders
3. Describe the management for common systemic disorders and communicable diseases
4. Identify indications that a case requires referral to a higher level

## **Course Content:**

- |               |   |             |
|---------------|---|-------------|
| <b>Unit 1</b> | <b>Clinical Methods</b>   | <b>[8]</b>  |
| 1.1           | explain the importance of establishing trust with the patient/attendant by making introduction, showing respect, listening attentively and remaining unprejudiced |             |
| 1.2           | Explain why it is essential to ask about and examine all systems of the patient, rather than only the system with chief complaint                                 |             |
| 1.3           | Explain the process of Data Analysis and give examples  |             |
| 1.4           | Explain how to use a diagnostic decision diagram to develop a provisional diagnosis   |             |
| 1.5           | Explain the purpose of Investigation, and explain what is false positive and false negative findings  |             |
| <b>Unit 2</b> | <b>Haematology</b>  | <b>[8]</b>  |
| 2.1           | Discuss in detail about anaemia, its types, causes, symptoms, complications, investigation, management and treatment.   |             |
| 2.2           | Discuss in detail about leukaemia, its types, causes, symptoms, complications, investigation, management and treatment.   |             |
| 2.3           | Discuss in detail about haemostatic disorders(thrombosis, embolus), its types, causes, symptoms, complications, investigation, management and treatment.          |             |
| <b>Unit 3</b> | <b>Cardio Vascular System</b>   | <b>[10]</b> |
| 3.1           | Discuss the causes and incidences of angina, myocardial infarction, cardiac arrhythmia, valvular disorders  |             |
| 3.2           | Define hypertension, explain the cardinal signs and explain the different classification  |             |
| 3.3           | Discuss in detail about congestive cardiac failure, its causes, symptoms, complications, investigation, management and treatment.                                 |             |

- Unit 4      Respiratory System      [10]**
- 1.1 Define bronchitis, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.2 Define pneumothorax, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.3 Define COPD, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.4 Define pleural effusion, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.5 Define pneumonia, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.6 Define Asthma, explain the cardinal signs and discuss the aetiology, and clinical features
  - 1.7 Define Pulmonary TB, explain the cardinal signs and discuss the aetiology, and clinical features
- Unit 5      Gastro Intestinal      [10]**
- 5.1 Define peptic ulcer disease, explain the cardinal signs and discuss the aetiology, and clinical features
  - 5.2 Distinguish between gastritis, gastric ulcer, duodenal ulcer and esophageal ulcer
  - 5.3 Define Abdominal tuberculosis, explain the cardinal signs and discuss the aetiology, and clinical features
  - 5.4 Define Cirrhosis of liver, explain the cardinal signs and discuss the aetiology, and clinical features
  - 5.5 Define Ascites, explain the cardinal signs and discuss the aetiology, and clinical features
  - 5.6 Define Amoebic Liver Abscess, explain the cardinal signs and discuss the aetiology, and clinical features
  - 5.7 Define Hepatitis, explain the cardinal signs and discuss the aetiology, and clinical features
- Unit 6      Endocrinal Disorder      [8]**
- 6.1 Identify the cardinal signs of type I and type II DM
  - 6.2 Describe the pathophysiology, differentiate the manifestation and discuss the incidence in Nepal of both the type
  - 6.3 Define Hypo and hyper thyroidism, explain the cardinal signs and discuss the aetiology, and clinical features
- Unit 7      Nervous System Disorders      [8]**
- 7.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of tetanus with investigations and differential diagnosis.
  - 7.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Meningitis and Encephalitis with investigations and differential diagnosis.
  - 7.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of CVA (cerebro-vascular accident) with investigations and differential diagnosis.
  - 7.4 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Head injury with investigations and differential diagnosis.

- Unit 8 Musculo-Skeletal Disorders [8]**
- 8.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of osteo-arthritis with investigations and differential diagnosis.
  - 8.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Rheumatoid Arthritis with investigations and differential diagnosis.
  - 8.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Gout with investigations and differential diagnosis.
- Unit 9 Urinary System Disorders [6]**
- 9.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Acute renal failure with investigations and differential diagnosis.
  - 9.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of chronic renal failure with investigations and differential diagnosis.
- Unit 10 Paediatric [12]**
- 10.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of measles with investigations and differential diagnosis.
  - 10.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of chicken-pox with investigations and differential diagnosis.
  - 10.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Rubella with investigations and differential diagnosis.
  - 10.4 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Whooping cough with investigations and differential diagnosis.
  - 10.5 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Mumps with investigations and differential diagnosis.
  - 10.6 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Diphtheria with investigations and differential diagnosis.
  - 10.7 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Rheumatic Fever with investigations and differential diagnosis.
  - 10.8 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Poliomyelitis with investigations and differential diagnosis.
- Unit 11 Dermatology [11]**
- 11.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of fungal infection of skin with investigations and differential diagnosis.
  - 11.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of bacterial infection of skin with investigations and differential diagnosis.
  - 11.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of viral infection of skin with investigations and differential diagnosis.
  - 11.4 Discuss the incidence, cause, pathology, cardinal signs and clinical features of parasitic infection of skin with investigations and differential diagnosis.
  - 11.5 Discuss the incidence, cause, pathology, cardinal signs and clinical features of leprosy with investigations and differential diagnosis.
  - 11.6 Discuss the incidence, cause, pathology, cardinal signs and clinical features of urticaria with investigations and differential diagnosis.
  - 11.7 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Acne, psoriasis, vitiligo with investigations and differential diagnosis.

**Unit 12 Psychiatry [8]**

- 12.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of psychosis with investigations and differential diagnosis.
- 12.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of anxiety disorders with investigations and differential diagnosis.
- 12.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of neurosis-depressive disorders with investigations and differential diagnosis.
- 12.4 Discuss the incidence, cause, pathology, cardinal signs and clinical features of alcohol and drug abuse with investigations and differential diagnosis.
- 12.5 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Epilepsy with investigations and differential diagnosis.

**Unit 13 Sexually Transmitted Diseases [8]**

- 13.1 Discuss the incidence, cause, pathology, cardinal signs and clinical features of gonorrhoea and chlamydia with investigations and differential diagnosis.
- 13.2 Discuss the incidence, cause, pathology, cardinal signs and clinical features of syphilis and chancroid with investigations and differential diagnosis.
- 13.3 Discuss the incidence, cause, pathology, cardinal signs and clinical features of HIV/AIDS with investigations and differential diagnosis.
- 13.4 Discuss the incidence, cause, pathology, cardinal signs and clinical features of Veneral warts/Herpes with investigations and differential diagnosis.

**Text Books:**

Principle and practice of Medicine by Davidson  
Hutchinson's clinical Manual

**Reference Books**

Practice of Medicine by A.M.F. Hossain  
Internal medicine by Harrison

## **PRACTICE OF MEDICINE**

### **Practical**

1. Handle 10 cases [20]
  - history taking
  - physical examination
  - provisional diagnosis
  - case management details
2. Examine System with regard to Inspection, Palpation, Percussion and Auscultation [40]
  - Digestive
  - Respiratory
  - Nervous
  - Genito urinary
  - Integumentary
  - Endocrine
  - Cardio vascular
  - Lymphatic
  - Musculo skeletal

## ***MEDICAL JURIS-PRUDENCE***

**Year: Third**

**Total hours: 3 / week**

**Theory hour : 3 / week**

**Practical hour :0 / week**

### **Course description:**

The course is aimed at making the students well acquainted with the medico-legal procedures, about legal aspects of different medical mishaps and diseases.

However, there are many topics which deal directly with the duty of a registered doctor; this course at this level aims the homeopathic health assistant to get the knowledge of referral to a registered doctor or informing legal authority.

### **Course objective:**

After the completion of the course the student will be able to:

1. Define relationship of Law and Medicine
2. Define legal procedures
3. Describe Medical Law and Ethics
4. Know post mortem changes
5. Explain Mechanical injuries

### **Course Content**

<b>Unit-1</b>	<b>Introduction</b>	<b>[2]</b>
	1.1 Define Forensic or Legal Medicine	
	1.2 Define Medical jurisprudence	
	1.3 Define Forensic pathology	
	1.4 Define Medical Ethics	
	1.5 Explain Medical Etiquette	
<b>Unit-2</b>	<b>Legal Procedures</b>	<b>[6]</b>
	2.1 Define criminal, civil and common law	
	2.2 Explain Inquests	
	2.3 Explain about the courts of law	
	2.4 Define Subpoena or summons	
	2.5 Explain Medical Evidence	
	2.6 Define Conduct money	
	2.7 Define Dying declaration, Oral evidence, chain of custody	
	2.8 Explain Witness, and record of evidence	
<b>Unit-3</b>	<b>Medical Law And Ethics</b>	<b>[17]</b>
	3.1 Explain about Nepal Medical Council and Nepal Health Professional council	
	3.2 Describe about the Professional misconduct	
	3.3 Describe about Duties of Medical Practitioners	
	3.4 Define what is privileged communication	
	3.5 Describe about the professional Negligence	
	3.6 Define Therapeutic Misadventure	
	3.7 Define Vicarious Liability	
	3.8 Define the essence of Medical Records	
	3.9 Explain about Euthanasia	
	3.10 Describe about Consent in Medical Practice	

	3.11	Define Exhumation	
<b>Unit 4</b>		<b>DEATH AND ITS CAUSES</b>	<b>[9]</b>
	4.1	Describe about the cause of Death	
	4.2	Describe asphyxia, Strangulation, Smothering , Drowning and syncope	
	4.3	Explain sudden Death	
<b>Unit 5</b>		<b>Post Mortem Changes</b>	<b>[7]</b>
	5.1	Explain about the signs of death and changes following it.	
	5.2	Describe Rigor Mortis	
	5.3	Describe Decomposition	
	5.4	Describe Mummification	
	5.5	Describe about the methods of preserving the body	
<b>Unit 6</b>		<b>Mechanical Injuries</b>	<b>[10]</b>
		Define injuries	
		Explain about Mechanical injuries	
		Explain about Burns, Define Rule of Nine	
		Explain about head injuries	
		Explain about Intracranial haemorrhage	
<b>Unit 7</b>		<b>Medico-legal Aspects of Wound</b>	<b>[6]</b>
	2.1	Explain about Homicide and Murder	
	2.2	Explain about grievous injury and Torture	
	2.3	Explain the causes of death from wounds	

**Text Books:**

1. The Essentials of Forensic Medicine (K.S.N. Reddy)
2. Fundamentals of Forensic Medicine and Toxicology(R Basu)

**Reference Books**

1. Medical jurisprudence and toxicology (Modi)
2. Forensic medicine and toxicology, 2 Vol. (Mukharjee)
3. Medical jurisprudence and toxicology (Glaister)
4. Gradwhol's Legal Medicine
5. Hand Book of Forensic Pathology (Fetch). Etc

## ***OBSTETRICS AND GYNAECOLOGY***

**Year: Third**

**Total hours: 4 / week  
Theory hour : 3 / week  
Practical hour : 1/ week**

### **Course description:**

The Obstetric component of this course prepares the student to manage cases of normal pregnancy: antenatal care, labor and delivery, and postnatal care of mother and newborn.

Additionally, the student is prepared to manage basic complications of these periods and to identify, stabilize and transport cases requiring referral for expert management. The Gynaecology component prepares the student of identify and manage common uncomplicated cases of female genitourinary conditions and to recognize indications for referral to higher level health care facilities.

### **Course Objectives:**

On completion of the course the student will be able to:

1. Perform a thorough gynecological and obstetrical history taking.
2. Perform a bimanual pelvic exam and identify abnormal conditions.
3. Perform antenatal examinations to identify normal/abnormal progress of pregnancy.
4. Counsel pregnant women regarding safe motherhood practices.
5. Manage common uncomplicated pregnancy related and gynecological conditions.
6. Perform a normal delivery and provide antenatal care to mother and newborn.
7. Identify indications that a pregnancy is high risk or requires expert management and make appropriate referral.
8. Identify abnormal conditions of labor, delivery and neonate and manage the cases using health post resources when necessary.
9. Identify complications which require immediate referral; stabilize and transport such cases to higher level facility.
10. Implement the policies of the National Guidelines for Maternity care.
11. Counsel mothers to use safe motherhood practices.
12. Provide community education which promotes safe motherhood.

### **Course Contains:**

#### **Unit: 1 Gynaecology**

##### **Sub unit 1 Anatomy and physiology**

**[4]**

- 1.1 Describe the function of each component of the female reproductive system and lower urinary system.
- 1.2 Describe the process of normal ovulation, menstruation, menopause and conception.
- 1.3 Identify the role of each of female hormones.
- 1.4 Explain the common causes for female infertility.
- 1.5 Discuss hygiene and cultural believes relating to the menstrual process.



**Sub unit 2 Gynecological history and physical exam. [4]**

- 2.1 Discuss how a Nepali woman may be affected by the experience of a gynecological examination because of her cultural habit and values.
- 2.2 Describe ways to promote the comfort of the patient during the gynecological exam.
- 2.3 State the information taken during the gynecological history.
- 2.4 Describe the procedure for breast exam.
- 2.5 Describe the procedure for bimanual pelvic exam.
- 2.6 State the normal and abnormal findings of pelvic exam.

**Sub unit 3 Menstruation disorders [4]**

- 3.1 Explain the symptoms treatment for dysmenorrhea, endometriosis and premenstrual syndrome.
- 3.2 Discuss the common causes for menstrual irregularity.
- 3.3 Identify causes of abnormal vaginal bleeding which are unrelated to pregnancy.
- 3.4 Tell how to differentiate and treat the causes of vaginal bleeding (Unrelated to pregnancy).
- 3.5 Describe the common disorders associated with menopause and the treatment for each.
- 3.6 Discuss the factors which indicate that a woman should be referred to expert treatment.

**Sub unit 4 Disorders of the breast. [4]**

Describe the function of each components of the female breast.  
Describe the breasts changes that occur during pregnancy and lactation.  
Discuss the causes and treatments for nipple problems related to breast feeding  
Recommended remedies for nipple problems. Puls, lac.can, sepia  
Discuss the causes and treatments for mastitis.  
▪ Recommended remedies for mastitis  
Hepar.sul, Cal.fl, Sil, Merc.sol  
Differentiate between breast abscess and simple mastitis.  
Describe the causes symptoms and treatment of eczema of the breast.  
▪ Recommended remedies for eczema of the breast.  
Graph, Merc. sol, Sulph etc.  
Describe the steps in breast self examination.  
List indications for referral of woman with abnormal breast symptoms.

**Sub unit 5 Diseases of the vagina, vulva and cervix. [4]**

- 5.1 Describe common infections of the vagina, vulva treatment for it.  
▪ Recommended remedies for infections of vagina and vulva.  
Caladium, Calendula, psorinum, Sulph.
- 5.2 Discuss how to use the national STD management guidelines for diagnosis by symptoms.
- 5.3 Describe variations in vaginal discharge that characterize vaginal infections (color volume, odor, and consistency).
- 5.4 Describe the signs and symptoms of the sexually transmitted infections/ diseases (STD, STI).
- 5.5 Explain the complication of STDs.

- 5.6 Explain the relationship between STDs and cancer of the reproductive organs.
- 5.7 Describe signs of cancerous conditions of the vulva, vagina and cervix.
- 5.8 State the signs of Bartholin's cyst.
- 5.9 Explain the treatment of Bartholin's cyst, cancer or infections non responsive to treatment should be referred for higher level care.
  - Recommended remedies for Bartholin's cyst and cancer.  
Baryta.arb, Merc.sol, Bell, Puls, Radium. Brone, Cal.fl.

**Sub unit 6 Disorders of the uterus, ovaries and fallopian tubes. [4]**

- 6.1 Identify the symptoms and treatments of endometriosis, endometrial fibroids, uterine or ovarian tumors.
  - Recommended remedies,  
Chamo, Plat, sepia, lach and puls
- 6.2 Identify the symptoms and deferential diagnosis of pelvic inflammatory disease.
- 6.3 Discuss the causes and treatment for PID.
  - Recommended remedies  
Lach, sil, sabin
- 6.4 State indication which requires referral of the patient for higher level care.

**Sub unit 7 Female urinary tract infections. [4]**

- 7.1 Differentiate between upper urinary tract infection (UTI) and lower urinary tract infection.
- 7.2 Describe the treatment for UTI.
  - Recommended remedies  
Ars.alb, Can.ind, Canth, Ber
- 7.3 Describe the diagnosis and treatment of Chlamydia and gonorrheal UTI
  - Recommended remedies  
Med, thuja
- 7.4 State the signs cystocele and prolapsed uterus.
- 7.5 Describe the management of cystocele and prolapsed uterus.
- 7.6 Discuss the causes and treatment of stress incontinence and urinary retention.
- 7.7 Identify the indication for referral to higher level care.

**Sub unit 8 Sexual assault and abuse. [4]**

- 8.1 Define the various forms of sexual abuse and sexual assault, trafficking, incest and sexual abuse.
- 8.2 Discuss factors that may contribute to the incidence of sexual assault, incest, sexual abuse.
- 8.3 Identify the signs which alert the H. A. that a patient may be the victim of sexual assault, incest, and sexual abuse.
- 8.4 Explain how the H. A. would modify the gynecological history taking and physical exam to be sensitive to the feelings of the abused person.
- 8.5 Describe the ways that the H. A. can do health education to prevent sexual assault, incest, sexual abuse and to encourage reporting of victimization.
- 8.6 Describe the time limitations and procedure of post-coital contraception (emergency contraception).

**Unit: 2    Obstetric**

**Sub unit 1    Fetal Development**

**[5]**

- 1.1 Describe fertilization and implantation of the zygote.
- 1.2 Explain the formation of monozygotic and dizygotic twins.
- 1.3 Discuss embryonic development, 0-8 weeks.
- 1.4 Describe placenta development and function.
- 1.5 Describe fetal circulation.
- 1.6 Describe fetal development from the Second to nine months.
- 1.7 Explain why the embryo/fetal is especially at risk from teratogens during the first 3 months of development.
- 1.8 Describe the effect of alcohol, tobacco, anemia, protein deficiency, vitamin or mineral deficiency on the physical and mental development of the fetal.
- 1.9 Discuss when fetal movement and fetal heart sounds can first be observed.
- 1.10 Describe the positions assumed by the fetus during pregnancy.

**Sub unit 2    Normal pregnancy**

**[5]**

- 2.1 Identify signs and symptoms indicating pregnancy.
- 2.2 Tell how to calculate EDD.
- 2.3 Describe the progressive changes to mother and fetus during each month of pregnancy.
- 2.4 Describe common minor health condition of pregnancy and method to reduce these problems.
- 2.5 Tell the nutritional advice to give a pregnant woman.
- 2.6 Discuss the role of vitamin A supplement in preventing night blindness and the risks related to night blindness.
- 2.7 List factors which may cause abnormal fetal development
- 2.8 Describe the schedule of antenatal immunizations.
- 2.9 State important warning signs which a woman should report to the health worker.

**Sub unit 3    Complications of pregnancy**

**[3]**

- 3.1 Identify the factors or symptoms which indicate a risk for pregnancy complications requiring the referral for expert management.
- 3.2 Identify the symptoms of threatened abortion and tell what to advice for preserving the pregnancy.
- 3.3 Describe the various types of abortion which require referral for expert treatment.
- 3.4 Differentiate between the various caused of vaginal bleeding.
- 3.5 Differentiate between the symptoms of pre-eclampsia and eclampsia.
- 3.6 Describe the advice and treatment for pre-eclampsia.

**Sub unit 4    Normal labor and delivery**

**[5]**

- 4.1 Describe the confirmation of labor.
- 4.2 Describe the stages of normal labor and delivery for primipara and multipara woman.
- 4.3 Describe the assessment of the progress of labor cervical changes, effacement, dilation mucus show, amniotic release, crowning, duration and frequency of contraction, desire to push.
- 4.4 Describe the use of the pantograph assisting the progress of the three stages of labor.
- 4.5 Describe measures to promote comfort and the progress of labor.

- 4.6 Describe the assessment of the presentation, rotation and descent of fetal occiput both vaginally and externally.
- 4.7 Describe the procedures for the management of second stage labor.
- 4.8 Describe procedure for the active management of third stage labor.

**Sub unit 5 Complications of labor and delivery [3]**

- 5.1 List the symptoms & causes for complications of labor & delivery
- 5.2 Describe the treatment for premature labor.
- 5.3 List the signs and symptoms of prolonged labor/fetal distress/maternal distress.
- 5.4 Describe how to assess the need for performing episiotomy.
- 5.5 Discuss the criteria for referral of patient with prolonged labor to higher level care centre.
- 5.6 Describe the process of assessment and treatment of retained placenta, cervical or vaginal tears, and uterine atony.
- 5.7 Describe how to differentiate the causes of postpartum hemorrhage tell the treatment for each.

**Sub unit 6 Newborn Cares [3]**

- 6.1 Explain the reason for putting the newborn to breast immediately after birth.
- 6.2 Describe the procedure for clamping, tying and cutting the umbilicus.
- 6.3 Describe suctioning of the nose and mouth.
- 6.4 Describe stimulation and resuscitation of the non-breathing new born.
- 6.5 State normal range for weight, length, cardiac rate, and respiratory rate.
- 6.6 Discuss the risk of hypothermia/ hyperthermia and ways to maintain normal body temperature of the new born.
- 6.7 Perform a new born exam according to guidelines.
- 6.8 Identify ways to determine the learning needs and learning readiness of the new mother.
- 6.9 Counsel the new mother about care of the newborn.
- 6.10 Describe the health post management of newborn infections; umbilicus sepsis, conjunctivitis, candidacies and septicemia.
- 6.11 Identify conditions that require referral to higher level health care.

**Sub unit 7 Postnatal Care [2]**

- 7.1 State aims of postnatal care.
- 7.2 Discuss the things to assess when examining the postpartum patient.
- 7.3 List the postpartum danger sings to teach the new mother.
- 7.4 Discuss the symptoms and management of postpartum complications.

**Sub unit 8 Postpartum Teaching [2]**

- 8.1 List the topics to include when counseling the newborn mother and family
- 8.2 Describe the characteristics, which show that a new mother is readiness for learning
- 8.3 Discuss cultural beliefs and values, which may promote or interfere with new mother teaching.
- 8.4 Identify the health benefits of exclusive breast feeding.
- 8.5 Demonstrate the steps in teaching the new mother to breast feed
- 8.6 State the common reasons for failure in breastfeeding, along with prevention strateies.
- 8.7 Describe the increased nutritional need for the lactating mother.

- 8.8 State the reasons for postponing pregnancy for 3-4 yrs after delivery.
- 8.9 Tell the immunization schedules for infants and reasons for immunizations.
- 8.10 Discuss the reasons a family should take extra care with hygiene following the birth of a baby.
- 8.11 Describe symptoms which require a mother to bring her baby for health care.

**Text Books:**

Text book of obstetrics by Dutta  
Text book of Gyneacology by Dutta

**Reference Book:**

Shaws text book of obstetrics  
Shaws text book of Gyneacology

**Obstetric/Gynaecology**

**Practical**

**[18]**

**A Gynaecology**

**[10]**

1. Identify and demonstrate anatomy of female reproductive organs
2. Identify and demonstrate lower urinary tract.
3. Demonstrate the technique for the use of the vaginal speculum in a simulated object.
4. Demonstrate the technique for pelvic examination (PV)
5. Demonstrate anatomy and physiology of the breast.
6. Demonstrate breast self examination.
7. Identify and treat for common disorders (Trichomonal, gonococcal & Bacterial infections).
8. Demonstrate internal reproductive organs.

**B Obstetrics**

**[8]**

- 1 Demonstration of anatomical relationship of difficult child birth inadequate support of the uterus and bladder.
- 2 Practice of delivery which reduces the occurrence of cystocele and prolepses uterus.
- 3 Demonstration of muscle exercise and treatment for urine leakage.

# **Health Assistant Program Certificate in Health Science (Homeopathy)**

## **Comprehensive Clinical Practice Objectives Third Year**

### **General Clinical Procedures. (6 weeks)**

Upon successful completion of the period the student will be able to :

#### **A. History taking and Physical Examination :**

1. Take the History :
  - a) Establish trust with the patient / attendant
  - b) Elicit the complete data : Chief complaint, associated complaints, personal, family and social history, immunization history, demographic data etc.
2. Perform Physical Examination :
  - a) Vital signs per guidelines
  - b) Assess JALCCO symptoms
  - c) Assess hydration status
  - d) Evaluate mental status, cognition and mood
  - e) Recognize normal, abnormal growth and development
  - f) Identify normal, abnormal conditions of the body systems through
    - i) inspection
    - ii) Auscultation
    - iii) Percussion
    - iv) Palpation of the heart and lungs, abdomen, nervous system, integumentary, renal, gastro intestinal, circulatory, lymphatic, musculo skeletal system etc.
- 3) Use abstract reasoning to correlate the abnormal findings with provisional / differential diagnosis.
- 4) Identify the appropriate laboratory test for confirmed diagnosis.
- 5) Select appropriate response for the emerging case in hand : treatment of simple conditions and referral of complex ones.

#### **B) Asepsis of Sterile Techniques :**

- 1.) Identify the activities requiring sterile or aseptic techniques
- 2) Apply the principle of asepsis, sterile techniques appropriately
- 3) Sterilize instruments and other materials as per protocol
- 4) Implement appropriate measures to control contagious diseases

#### **C) Wound Care:**

- 1) Clean, Debride, drain wounds as per protocol
- 2) Suture wounds and remove stitches as needed
- 3) Apply suitable type of aseptic and sterile dressings, compresses and bandages.

#### **D) Invasive Procedures:**

- 1) Pass a feeding tube and administer tube feeding
- 2) Give Enemas as per requirement
- 3) Safely administer medications via IM, IV, intra-dermal, sub-coetaneous routes as required.
- 4) Draw blood for specimens
- 5) Start IV infusions if needed

E) Emergency and First Aid

- 1) Identify and respond to interferences with patient's ABC (Airway, Breathing, and Circulation)
- 2) Identify and treat impending shock according to protocol
- 3) Identify and respond to epileptic seizure according to protocol
- 4) Control Hemorrhage
- 5) Administer blood transfusion according to protocol
- 6) Immobilize the patient with partial fracture
- 7) Identify and respond to ingestion of toxic substances
- 8) Identify protocol for treatment of injury, bites of snakes, insects, etc.
- 9) Stabilize and make arrangement for transportation of complex cases to the higher care centers



## **Health Assistant Program Certificate in Health Science (Homeopathy)**

### **Homeopathic approach to different clinical conditions (6 weeks)**

Upon successful completion of the period students will be able to:

- A) Observe, assist and apply the homeopathic measures for the treatment of different clinical conditions belonging to:
- a) Psychiatry
  - b) Dermatology
  - c) Paediatrics
  - d) Ophthalmology
  - e) ENT
  - f) Dentistry
  - g) Obstetrics and Gynaecology
  - h) Gastro-enterology
  - i) Arthrology etc.
- B) Identify the cases for referral to higher and specialized centers

### **Comprehensive Community Field Practice Objectives (12 weeks)**

Upon completion of this period the students will be able to:

A) Primary Health care Services:

- 1) Provide competent middle-level health care: diagnosis and treatment for uncomplicated mental and physical, acute and chronic health problems
- 2) Perform a complete history taking and physical examination on children and adults to identify abnormal conditions
- 3) Make home visits to fully assess the health care needs of the family situation.
- 4) Identify and respond to the needs of vulnerable populations(children, poor, persons without family, mentally disturbed, aged etc.)
- 5) Intervene with the trafficking of vulnerable persons
- 6) Identify the constraints, limitations and potentials of the health post situation when giving primary health care.
- 7) Use problem solving and adaptation to meet the health care needs of individuals or families.
- 8) Identify indications for referral to a higher level health care facility.

B) Community diagnosis

- 1) Develop a project timetable which sets the schedule for a community diagnosis project
- 2) Develop and pretest a community survey questionnaire for the community diagnosis project
- 3) Establish good rapport with the community members for the target population
- 4) Create a geographic map of the selected community
- 5) Collect data using a representative sample and appropriate techniques (Questionnaire, interview, observation, others)
- 6) Process the data and perform an interpretation and assessments
- 7) Present the community with an analysis of the problem
- 8) Design and implement solution in partnership with the community (Micro Project)
- 9) Evaluate the effectiveness of the solutions of the problem
- 10) Develop a written report and give an oral presentation on the project

C) Environment Health

- 1) Promote public responsibility for environmental sanitation through health education
- 2) Identify and resolve contamination of drinking water within the community
- 3) Promote the construction of pit latrines

- 4) Counsel individuals and community to promote personal hygiene habits
- 5) Identify and advise individuals and community about hygienic methods for maintaining domestic animals
- 6) Identify occurrences of threats to the eco system of the community and promote public support for sound environmental management
- 7) Apply environmental sanitation principles in controlling communicable diseases.

D) Health Education

- 1) Identify and prioritize community health needs based on data collection
- 2) Plan and implement health education program that promote wellness, prevent illness and teach curative and rehabilitative health care
- 3) Use health education methods and media appropriately, creatively and effectively
- 4) Monitor the implementation of health education programs
- 5) Evaluate the effectiveness of health education programs and modify them as needed

E) Family Health

- 1) Implement motivational strategies for selection of suitable family planning methods by individuals and couples
- 2) Provide family planning materials, education and follow-up care
- 3) Implement national guidelines for the care of mothers and children
- 4) Provide for antenatal, perinatal, postnatal care to mothers and infants
- 5) Promote and provide the recommended immunization for children and mother
- 6) Promote healthy nutrition among all family members
- 7) Identify, treat and resolve the problem of childhood malnutrition among community children
- 8) Identify, treat and prevent the common diseases of young children

F) School Health

- 1) Identify and analyze the occurrence of health problems among school age children
- 2) Identify and analyze environmental health problems of the schools
- 3) Present a data based needs analysis of school health problems to school authorities
- 4) Implement solutions to school health problems
- 5) Provide health instructions to students including nutrition, sex education and prevention of communicable diseases
- 6) Provide regular health check-ups to school childrens

G) Health Post Management

- 1) Describe the functions of the national public health care agencies, public health NGOs' and INGOs' and tell how the health post co-operates with each
- 2) Analyze and describe community dynamics as they relate to community health
- 3) Promote community partnership in health post activities
- 4) Take appropriate measures to prevent/control communicable diseases
- 5) Maintain accurate records of health post activities
- 6) Submit reports accurately and promptly
- 7) Supervise and direct the health post staff
- 8) Maintain communications with all coordinating agencies
- 9) Maintain health post supplies, inventories and logistics
- 10) Promote quality assurance principles in health post activities
- 11) Maintain a safe and pleasant health post environment.

**Structure finalization team**

1. Dr. Abubakar Khan
2. Dr. Ambika Prasad Gyawali
3. Dr. Binaya Kumar Yadav
4. Dr. Buddhi khalal
5. Dr. Chet Raj Pant
6. Dr. Krishna P. Subedi
7. Dr. Lalit Kumar Mishra
8. Dr. Prem Narayan Shrivastava
9. Dr. Rajendra Manandhar
10. Dr. Ram Kumar Adhikari
11. Dr. Saron Tiwari
12. Dr. Shabbir khan
13. Dr. Sushil Devkota
14. Dr. Tilak Man Singh Pradhan

**Subject writing team for 2<sup>nd</sup> year**

<b>S. No</b>	<b>Subjects</b>	<b>Writer team</b>
1	Organon of Medicine & Homeopathic Philosophy I ,	Dr. Ambika Prasad Gyawali Dr. Sushil Devkota
2	Homeopathic Materia Medica I,	Dr. Tilak Man Singh Pradhan Dr. Shabbir khan
3	Homeopathic Repertory I	Dr. Ambika Prasad Gyawali Dr. Lalit Kumar Mishra Dr. Sushil Devkota
4	Clinical Pathology & Microbiology	Dr. Ram Kumar Adhikari Dr. Binaya Kumar Yadav
5	Homeopathic Pharmacy	Dr. Prem Narayan Shrivastav Dr. Abubakar Khan
6	Health Education & Public Health	Dr. Krishna Prasad Subedi
7	Preventive & Social Medicine (PSM)	Dr. Buddhi khalal Dr. Rajendra Manandhar
8	Health Management & Environmental Health,	Dr. Buddhi khalal Dr. Rajendra Manandhar
9	First Aid & Medical Emergency	Dr. Chet Raj Pant Dr. Ambika Prasad Gyawali Dr. Sushil Devkota

<b>S. No</b>	<b>Subjects</b>	<b>Writer team</b>
1	Organon of Medicine & Homeopathic Philosophy II ,	Dr. Ambika Prasad Gyawali Dr. Sushil Devkota
2	Homeopathic Materia Medica II,	Dr. Tilak Man Singh Pradhan Dr. Shabbir khan
3	Homeopathic Repertory II	Dr. Ambika Prasad Gyawali Dr. Lalit Kumar Mishra
4	Basic Surgery	Dr. Sushil Devkota
5	Practice of Medicine	Dr. Sushil Devkota
6	Medical Jurisprudences	Dr. Sushil Devkota
7	Obstetrics & Gynecology	Dr. Saron Tiwari
8	Comprehensive Clinical Practice	Dr. Ambika Prasad Gyawali Dr. Sushil Devkota

**Homeopathic Technical Committee**

1. Mr. Shiva Shankar Ghimire
2. Dr. Shabbir khan
3. Dr. Sushil Devkota
4. Dr. Tilak Man Singh Pradhan
5. Dr. Ambika Prasad Gyawali
6. Mr. Jeeban Chandra Dahal
7. Mr. Sagar Mani Lamsal