

# **Nursing Program Specification**

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**2016**

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## Academic Program Specification

University: 21 September Faculty: Nursing

### 1. Basic Information about the program

Programme Title	Bachelor of Nursing
Awarding the institution	21 September University
Institution responsible for the program	College of Nursing
Program type	Single
Language of study	English
Year of study in the program	2016-2017
Mode of delivery	Regular, minimum attendance 75%
Teaching institution	Faculty of Nursing
System of study	Semester system (full-time)
Duration of study	The study of the program shall be of four years (8 semesters) and summer semesters as semester pattern of examination including integrated practice (Internship 6 months). Each academic year shall be two academic semesters and each semester is composed 16 weeks "including exams period".
Final award/s available	Bachelor
Award title	Bachelor of Nursing
Qualification for admission to the program	Secondary scientific education
Grade for admission to the program	As per the admission rules made by ministry of higher education and scientific research-Yemen Republic
Other requirements	Satisfactory outcome of an interview evaluating background and suitability for a Nursing Specialist.
Coordinator	Associate professor Abdulsalam Mohammed Dallak, Dr. Abdulhameed althafani
Data of programme specification (New program)	2016

## 2. رؤية ورسالة وأهداف الكلية:

### رؤية الكلية:

أن تكون كلية التمريض مركزاً للتميز والريادة بين كليات التمريض محلياً وإقليمياً وأن تصبح احد اعمدة مراكز البحث العلمي في الجامعة.

### رسالة الكلية:

اعداد خريج على درجة عالية من الجودة قادر على تقديم الرعاية التمريضية الشاملة وملبيا لاحتياجات سوق العمل وقادرا على المشاركة المجتمعية واجراء البحوث العلمية الموجهة لخدمة المجتمع.

### أهداف الكلية:

1. تطوير الكلية لتكون مركز علمي في عمليات التعليم والتعلم في مجال التمريض.
2. تقديم خريج متميز معرفياً ومهارياً مؤهل لسوق العمل المحلي والإقليمي
3. أن تكون الكلية مؤسسة بحثية متميزة في مجال التمريض على المستويين المحلي والإقليمي.
4. تفعيل المشاركة المجتمعية من خلال تقديم خدمات متميزة في مجال التمريض.
5. المشاركة في تحسين الوضع الصحي في المجتمع والعمل على حل مشكلاته من خلال اجراء البحوث الصحية وتقديم الخدمات الاستشارية.
6. تعزيز القيم الأخلاقية لدى الطلبة والتزامهم بالقوانين المهنية ومشاركتهم في خدمة المجتمع

### رؤية البرنامج

يسعى البرنامج إلى التميز والريادة في موضوع جودة التعليم التمريضي وأن يسهم في خدمة المجتمع من خلال رفده بكادر تمريضي مؤهل تأهيلاً عالياً.

### رسالة البرنامج

تخريج كوادر تمريضية على درجة عالية من الجودة قادر على تقديم الرعاية التمريضية الشاملة طبقاً للمعايير الدولية وعلى المشاركة المجتمعية و اجراء البحوث العلمية الموجهة لخدمة المجتمع.

### 3. Program Objectives

On completion of B.Sc. Nursing program the graduates will be able to:

1. Prepare an informed, caring, compassionate and reflective nursing graduate skilled in the delivery of nursing care in collaboration with other health care professionals.
2. Teach both formally and informally in clinical nursing situations and in nursing education programs.
3. Conduct assessments and nursing diagnosis for individuals, families, groups, and communities as the basis for planning, delivering and evaluating of care.
4. Integrate knowledge of general education, liberal arts, research, evidence-based practice, theory, and technological tools to implement the professional nursing roles with and in a complex adaptive system.
5. Demonstrate adequate management and supervisory skill to coordinate the proper functioning of various personnel in the ward, outpatient clinic and in the community.
6. Conduct need based research studies in various settings and utilize the research findings to improve the quality of care.
7. Use of problem based learning as an approach to discover and deliver nursing care.
8. Demonstrate effective communication and collaboration skills with patients and inter-professional teams to improve healthcare outcomes.
9. Practice within the framework of code of ethics and professional conduct and acceptable standards of practice within the legal boundaries.

### 4. Intended learning outcomes (ILOs) of the programme

#### Basic Intended learning outcomes (ILOs)

#### ILOs of Knowledge and Understanding

By the end of the program, the students will be able to:

- A1. Describe the structure and function of the human body so as to permit students to appreciate aberrations from normal and their consequences.
- A2. Recognize concept, principles and procedures of fundamental of nursing.
- A3. Discuss medical-surgical and critically ill disorders affecting patient and management and its nursing care plan.
- A4. Describe maternal and child health problems and management and its nursing care plan.
- A5. Identify most community health and mental health problems and its prevention and control methods according to nursing process.
- A6. Delineate principles of educational, research methodology and statistics in nursing practices.

#### ILOs of Intellectual Skills

By the end of the program, the students will be able to:

- B1. Drive knowledge from nursing, medical, art, humanities, and basic sciences during

nursing practice.
B2. Demonstrate need based research studies in various settings and utilize the research findings to improve the quality of care.
B3. Evaluate the implications of policy on issues of access, equity, affordability, and social justice in healthcare
B4. Interpret evidence based on the sciences, humanities, and research to guide nursing practice across the health-illness continuum in a variety of healthcare settings.
<b>ILOs of Professional skills and practices</b>
By the end of the program, the students will be able to:
C1. Carry out basic nursing procedures for the care of the patients with an understanding of the scientific principles involved.
C2. Provide nursing care plan according to nursing process to patients with common health conditions in different health setting and in all age groups.
C.3. Teach both formally and informally in clinical nursing situations and in nursing education programs.
C4. Demonstrate skill in medico-social work, community diagnosis and in delivery of community nursing services in accordance with the national health care system.
C5. Provide promotive, preventive, curative and restorative health services in line with the national health policies and programs.
<b>ILOs of General and Transferable</b>
By the end of the programme, the students will be able to
D1. Use concepts and principles of management/leadership and information systems to provide high quality healthcare.
D2. Maintain continue education for growth and professional competence.
D3. Demonstrate proper conduct and interpersonal skills with physicians, nurses, other health care professionals, patients and their family members, and the public.
D4. Demonstrate ethical and legal aspects of practice.

<b>5. Intended learning outcomes (ILOs) of the program</b>
<b>Subsidiary Intended Learning Outcomes of the Program</b>
<b>ILOs of Knowledge and Understanding</b>
<b>On completion of this program the successful student will be able to:</b>
A1. Delineate different procedures and techniques and its applications in different nursing practices.
A2. Describe the anatomical and biochemical structures so as to explain the physiological functions of human body and factors, which may disturb these, and mechanism of such disturbances.
A3. Explain the causes, pathology, signs and symptoms and treatment of common medical, surgical, critically ill, mental, maternal and child conditions affecting various systems of the body.

A4. Recognize nursing care plan to various health problems of patient in different health setting and in all age groups.

A5. Describe various groups of drugs acting on different systems of the body and dose, route of administration, side effects and the toxic symptoms related to common drugs and poisons.

A6. Recognize communicable and non-communicable diseases affecting individual, family and community and its methods of control and prevention.

### ILOs of Intellectual Skills

**On completion of this program the successful student will be able to:**

B1. Integrate knowledge from nursing, humanities, applied sciences and other basic sciences to make judgments relative to the practice of nursing that is based on research findings and evidence.

B2. Analyze different research and statistical methods and epidemiological concepts to identify determinants of health affecting individuals, families and communities.

B3. Critically and accurately assess, diagnose, plan, intervene, and evaluate patients' problems within healthcare settings.

B4. Assess nutritional status and their prevention and plan therapeutic diets for various disease conditions.

### ILOs of Professional skills and practices

**On completion of the program the successful student will be able to:**

C1. Carry out different procedures and techniques during nursing practices.

C2. Provide nursing care plan to patients with medical-surgical and critically ill conditions.

C3. Conduct nursing care plan to patients with maternal and child health disorders.

C4. Administer nursing care plan to patients with psychological conditions.

C5. Implement nursing care plan to patients with psychological disorders.

C6. Implement prevention and control methods according to nursing process to most communicable and non-communicable diseases affecting individual, family and community.

C7. Use different methods of learning and teaching in implementing educational activities to individual, family and community.

### ILOs of General and Transferable

**On completion of this program the successful student will be able to:**

D1. Use knowledge and skills in leadership, quality improvement and patient safety to provide high quality healthcare.

D2. Communicate and collaborate effectively with individuals, families, communities and with members of the healthcare team, and in documentation of data in the delivery of quality patient-centered care.

D3. Use appropriate spoken and written Arabic and English languages.

D4. Use information technology in practice.

D5. Function within appropriate ethical and legal requirements as a registered professional nurse, accepting responsibility and accountability for his or her practice.

## 6. Reference Points of the program

The design of the BSc. Nursing program has been developed with reference to a number of key guidelines, policies and strategies:

1. Nursing and Midwifery Council (2010) Standards for Pre-registration
2. A guide to nursing and midwifery education standards. WHO, Regional Office for the Eastern Mediterranean; (2015).
3. Nursing education in the Eastern Mediterranean Region: guidelines on future directions. Alexandria: WHO, Regional Office for the Eastern Mediterranean; 1998.
4. Global standards for the initial education of professional nurses and midwives. Geneva: WHO; 2009.
5. Faculty of medicine and health sciences, nursing department. Sana'a University.
6. College of nursing, Jordan University.
7. College of nursing, Cairo University.

## 7. Assessment Strategies

To evaluate the student's knowledge attaining and skill acquirement, the following assessment methods will be applied:

(i) For courses involving no practical part

Item	Marks Distribution	Schedule
Attendance	5	1 <sup>st</sup> -15 <sup>th</sup> week
Quiz	5	4 <sup>th</sup> - 12 <sup>th</sup>
Assignment	10	5 <sup>th</sup> - 12 <sup>th</sup> week
Mid-term exam	20	7 <sup>th</sup> or 8 <sup>th</sup> week
Final-exam	60	16 <sup>th</sup> -17 <sup>th</sup> week
<b>Total Weight of the Course</b>	<b>100</b>	

(ii) For courses involving a theoretical and practical parts

Theoretical part		
Item	Marks Distribution	Schedule
Attendance	5	1 <sup>st</sup> -15 <sup>th</sup> week
Quiz	5	4 <sup>th</sup> - 12 <sup>th</sup>
Student assignment	10	5 <sup>th</sup> - 12 <sup>th</sup> week
Mid-term exam	20	7 <sup>th</sup> or 8 <sup>th</sup> week
Final-exam	60	16 <sup>th</sup> -17 <sup>th</sup> week
<b>Total Theory Weight</b>	<b>100</b>	
Practical part		
Item	Marks Distribution	Schedule
Attendance and Attitude	10	1 <sup>st</sup> -10 <sup>th</sup> week
Semester work/Reporting	40	1 <sup>st</sup> -10 <sup>th</sup> week
Final exam (theory or oral )	20	11-12 <sup>th</sup> week
Final exam (practical)	30	11-12 <sup>th</sup> week
<b>Total Practical Weight</b>	<b>100</b>	
<b>Total Weight of the Course</b>	<b>100</b>	

(iii) For courses involving a theoretical and clinical part

Theoretical part		
Item	Marks Distribution	Schedule
Attendance	5	1 <sup>st</sup> -15 <sup>th</sup> week
Quiz	5	4 <sup>th</sup> - 12 <sup>th</sup>
Assignment	10	5 <sup>th</sup> - 12 <sup>th</sup> week
Mid-term exam	20	7 <sup>th</sup> or 8 <sup>th</sup> week
Final-exam	60	16 <sup>th</sup> -17 <sup>th</sup> week
<b>Total Theory Weight</b>	<b>100</b>	



Clinical part		
Items	Marks Distribution	Schedule
Attendance and attitude	10	1 <sup>st</sup> -11 <sup>th</sup> week
Clinical Evaluation/ Semester Work	40	1 <sup>st</sup> -11 <sup>th</sup> week
Final Exam (Written, Oral )	20	12 <sup>th</sup> week
Final Exam (Clinical )	30	12-13 <sup>th</sup> week
<b>Total Clinical Weight</b>	<b>100</b>	
<b>Total Weight of the Course</b>	<b>200</b>	

(iv). Graduation research project assessment

Each project will be assessed by a committee of three members as follows

Items	Marks Distribution
Research project supervisor	70
Internal examiner: a member of the department teaching staff.	15
external examiner: a qualified external examiner (either from other departments of the college or from another university)	15
<b>Total</b>	<b>100</b>

Assessment of the research project by the project supervisor	
Items	Marks Distribution
Attendance and attitude	20
Coursework and collaboration	50
<b>Total</b>	<b>70</b>

Assessment of the project by the other discussion member	
Items	Marks Distribution
Introduction and objectives	4
Literature review	5
Research methodology	6
Results	5
Discussion , conclusion and recommendations	4
References	2
Presentation	4
<b>Total</b>	<b>30</b>

\* The whole students of the projects will be assessed as one unit

\* Zero degree will be given for any student does not attending the research presentation

\* 1 or 2 degree to each MCQ, true /false and match questions.

### Questions format in writing exams

Question pattern	Details	Marks Distribution	%
Essay	<ul style="list-style-type: none"> <li>▪ Types of this pattern include: short note, enumerate, mention, explain, compare, define, complete, draw, what questions, etc.</li> <li>▪ At least 4 types of this pattern of questions should be included in the exam.</li> </ul>	50	50%
Multiple choice questions (MCQ)*	<ul style="list-style-type: none"> <li>• 15 -30 article</li> <li>• 4-5 of choices of each article</li> </ul>	30	30%
Others Types include*	<ul style="list-style-type: none"> <li>• True and False</li> <li>• Match questions.</li> </ul>	10-20	20%

### 8. Types of study:

### Semester system-Regular

No. of Credits hours and their percentage out of total No. of program hours			
University requirements	4	26	14.4
Specialty requirements	14	74	41.1

### 9. Code System

#### Departments Code

Departments	code
Community Health Nursing	01
Adult Health Nursing	02
Maternity and Child Health Nursing	03

#### Courses Code

Domain No.	Courses
0	Fundamental of nursing
1	Maternity health nursing
2	Child health nursing
3	Adult health nursing

4	Critical care nursing
5	Mental health nursing
6	Community health nursing
7	Nursing administration services

Faculty		Department		Level	Domain	Serial number
0	4	0	2	1	0	1

## 10. List of Subjects According to Type of Requirements

### 1. University Requirements

SN	Code no	Course	Credit hours
1.		Arabic language	2
2.		English language 1	2
3.		Computer skills	2
4.		Islamic culture	2
5.		English language 2	2
6.		Communication skills	2
<b>Total</b>			<b>12</b>

### 2. College Requirements

SN	Code no	Course	Credit hours
1.		Medical terminology	1
2.		Medical ethics	2
3.		Biostatistics	2
4.		Chemistry	2
5.		Physics	2
	Total		10

### 3. Program Requirements

SN	Code/no	Course	Credits hours
1.		Introduction to Fundamental of nursing	4
2.		Fundamentals of Nursing	7
3.		Maternal Health Nursing	7
4.		Health Education	2
5.		Pediatric Nursing	7
6.		Medical-Surgical Nursing I	7
7.		Medical-Surgical Nursing II	7
8.		Medical Specialties	3
9.		Mental Health Nursing	6
10.		Critical Care Nursing	6
11.		Community Health Nursing	7
12.		Nursing Services Administration	4

13.		Psychology	2
14.		Medical Sociology	2
15.		General Biology	3
16.		Anatomy	3
17.		Physiology	3
18.		Pathology	3
19.		Community Health	2
20.		Basic Nutrition	2
21.		Introduction to Histology	3
22.		Molecular Genetics	2
23.		General Immunology	2
24.		Introduction to Primary Health care	2
25.		Health Assessment	4
26.		Introduction to Microbiology	3
27.		Introduction to Biochemistry	3
28.		Medical Parasitology	3
29.		GENERAL pharmacology	3
30.		Applied Pharmacology	3
31.		Forensic medicine and Toxicology	2
32.		Critical care & emergency medicine	2
33.		Epidemiology	2
34.		Obstetrics and Gynecology	1
35.		Pediatric Medicine	1
36.		Medicine I	2
37.		Surgery	2
38.		Medicine II	2
39.		Psychiatry Medicine	2
40.		Applied Nutrition	2
41.		Research methodology	2
42.		Graduation Research Project	3
		<b>NURSING SPECIALITIES</b>	
43.	1	Advanced Critical care nursing I & II	
44.	2	Advanced Pediatric Nursing I & II	
45.	3	Advanced Community health nursing I & II	
46.	4	Maternal health Nursing I & II	
47.		<b>ELECTIVE</b>	
48.	1	New trends in nursing	
49.	2	Gediatric nursing	
50.	3	Nursing informatics	
51.			
52.			
53.			
54.		<b>Internship (6 Month)</b>	<b>5</b>

Total	74
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## 11. Study Plan

### FIRST YEAR

#### Semester 1-Foundation course (4) months

Code no	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1	Islamic culture	University	2	-	-	Humanistic
2	English language I&II	University	4	-	-	Humanistic
3	Physics	College	2	-	-	Science
4	Chemistry	College	2	-	-	Science
5	Medical ethics	College	2	-	-	Nursing
6	Arabic language	University	2	-	-	Humanistic
7	Introduction to Fundamental of nursing	Specialty	3	1	-	Nursing
8	Medical terminology	College	1	-	-	Medical
	Computer skills		2			
<b>Total</b>			20	1		21

#### Semester 2-Foundation course (4) months

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
	General anatomy	College	2	1	-	Medical
	General physiology	College	2	1	-	Medical
	General Biochemistry	College	2	1	-	Laboratory
	General Histology	College	2	1	-	Laboratory
	General molecular biology	College	2	1	-	Science
	Basic Nutrition	College	2	-	-	Medical
	Communication skills	College	2	-	-	Nursing
	Fundamental of nursing II *	Specialty	4	6	-	Nursing
<b>Total</b>			18	9	-	27

## Second Year

### Semester 3- Foundation course (4) months

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	C.H.	Department offer course
1	Parasitology	College	1	1	2	Laboratory
2	General Microbiology	College	2	1	3	Laboratory
3	General pathology	College	3	1	4	Medical
4	General Pharma	College	2	1	3	Pharmacy
5	Molecular genetics	College	2	1	3	Laboratory
6	General Immunology	College	2	-	2	Laboratory
7	Introduction to Primary Health care		2		2	
	Health Assessment		2	1		
<b>Total</b>			<b>17</b>	<b>4</b>	<b>21</b>	

## Second Year

### Semester 4

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1.	Med-Surg nursing I	Specialty	4	2	4	Nursing
2.	Internal Medicine I	College	2	-	-	Medical
3.	General surgery I	College	2	-	-	Medical
4.	Forensic Medicine and toxicology	College	2	-	-	Medical
5.	Psychology	College	2	-	-	Humanistic
6.	Medical specialties	College	2	-	-	Medical
7.	Applied pharma	College	2	-	-	Pharmacology
<b>Total</b>			<b>15</b>	<b>-</b>	<b>4</b>	<b>20</b>

## Second Year

### Summer Semester - Foundation course (4) months

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
	Med-Surg nursing II	Specialty	4	2	4	Nursing
	Internal Medicine II	College	2	-	-	Medical
	General surgery II	College	2	-	-	Medical
			<b>8</b>	<b>2</b>	<b>4</b>	<b>14</b>

**Third Year**  
**Semester 5**

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1.	Maternal health Nursing	Specialty	3	-	4	Nursing
2.	Epidemiology	College	2	-	-	Medical
3.	Health education and promotion	College	2	-	-	Nursing
4.	Sociology	College	2	-	-	Humanistic
5.	Obstetrics and Gynecology	College	2	-	-	Medical
<b>Total</b>			<b>11</b>	<b>-</b>	<b>4</b>	<b>15</b>

**Third Year**  
**Semester 6**

Code no.	Courses	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1.	Pediatric Nursing	Specialty	3	-	4	Nursing
2.	Pediatric Medicine	College	2	-	-	Medical
3.	Biostatistics	College	2	-	-	Humanistic
4.	Applied Nutrition	College	2	-	-	Medical
5.	Nursing education	Specialty	2	-	-	Nursing
<b>Total</b>			<b>11</b>	<b>-</b>	<b>4</b>	<b>15</b>



### Fourth Year Semester 7

Code no.	Subject	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1.	Community health nursing	Specialty	3	-	4	Nursing
2.	Mental health nursing	Specialty	3	-	4	Nursing
3.	Research Methodology	College	2	-	-	Nursing
4.	Psychiatric medicine	College	2	-	-	Medical
<b>Total</b>			<b>9</b>	<b>-</b>	<b>8</b>	<b>17</b>

### Fourth Year Semester 8

Code no.	Subject	Type of requirement	Theory Hours	Lab. Hours	Clinical Hours	Department offer course
1.	Nursing service administration	Specialty	2	-	2	Nursing
2.	Critical care nursing	Specialty	3	-	4	Nursing
3.	Critical care medicine	College	2	-	-	Medical
4.	Graduate Research project	College	-	-	3	Nursing
<b>Total</b>			<b>6</b>	<b>-</b>	<b>9</b>	<b>15</b>

Internship	
Course	Duration
Internship	6 Months

## 12. Eligibility for Admission

Admissions to the program shall be made as per the admission rules made by Ministry of higher education and scientific research-Yemen Republic and 48 Modern University.

1. General Secondary Certificate of the science section, or an equivalent certificate with grade as per the admission rules made by Ministry of higher education and scientific research-Yemen Republic
2. Satisfactory outcome of an interview evaluating background and suitability for a Nursing Specialist.

## 13. Regulations for Progression and Program Completion

### Attendance required for admission to examination

- No candidate shall be permitted to appear in any one of the parts of B.Sc. in Nursing Degree course Examinations unless he/she has attended the course in the subject for the prescribed period in an affiliated institution recognized by this University.
- A candidate is required to put in a minimum of **75%** of attendance in both theory and practical separately in each subject before admission to the examinations.
- If the candidate is lacking attendance in any one of the subject(s), he/she will be detained for the subject(s) in whom the candidate lacks attendance but will be permitted to appear for the rest of the subjects in which the candidate is having minimum required percentage of attendance.

### Progression and Program Completion

- The duration of study for Bachelor's Degree of nursing is four academic years followed by 6 months mandatory internship in the hospitals and health centers and under the supervision of the college. The student should attend the study as full-timer during the four study years, as well as during the internship. The faculty proposes and supervises the clinical training plan for the internship. During the internship the trainee will receive their training in the following basic clinical specialties:
  1. Adult health nursing
  2. Maternal & child health nursing
  3. Critical care nursing
  4. Mental health nursing
  5. Community health nursing
- For the students to be transferred from one academic year to the next, he is required to have successfully passed in all subjects in the final or in the complementary exams in October of the same year.
- However, the student may still be transferred if he/she has failed in not more than three subjects one of them elective. In such cases, students "carrying"

subjects from one year to the next should re-sit for their "failed" subjects in their proper respective semesters.

- Final year students should pass in all subjects, student who have failed in October exam also, he/she has to re-sit for his exams in those subjects in their proper respective semesters thereafter as many times as necessary until he succeeds

## 14. Graduation requirements

**The number of hours required to complete the program:** 183 credits hours

- The minimum degree for pass in the each course :
  - For courses involving only theoretical part , the minimum pass degree is 50% out of the total degree
  - For courses that involve practical/clinical parts, the student will not pass the course unless he/she passes both theoretical and practical course parties:
    - The student will pass the course if he/she gains at least 50 % of the total the estimation weight of the course.
    - The minimum pass degree in the final theoretical exam is 35% of the estimation weight of the exam.
    - The minimum pass degree in the final practical exam is 35% of the estimation weight of the exam.

15. Degree classification	
Excellent	From 90% to 100% from total marks
Very Good	From 80% to less than 90%
Good	From 65% to less than 80%
Pass	From 50% to less than 65%
Poor	Less than 50%

## 16. Facilities requires for the programme

Sources of learning:

1. Lectures
2. Practices in lab.
3. Clinical training (hospitals, health centers and schools)
4. Library
5. Internet