

**Krishna Vishwa Vidyapeeth (Deemed to be University)**  
**Krishna Institute of Nursing Sciences, Karad**



**Syllabus**  
**Postgraduate Diploma in Neonatal Nursing.**

**Choice Based Credit System (C.B.C.S.)**

**Program code: 4502**

**Course code: 4502-11**

## SYLLABUS



## **Preface**

Presently we are living in 21<sup>st</sup> century of advancement in technology and health sciences with super specialization. Indicator of health status of any country is determined by the health status of children. Nursing care focusing on neonate can prevent mortality and morbidity also promotes health of newborn children.

Two-thirds of death of newborn child takes place within the first week of life and 45% of neonatal deaths within 48 hours of birth caused by birth Asphyxia and trauma, low birth weight(LBW) and congenital malformations. One year Postgraduate Diploma course in neonatal nursing is designed to develop specialty-trained neonatal nurses.

Neonatal Nurses work labour room to care for newborn babies immediately after birth & in NICU for caring of babies for observation and require intensive care for problems related to birth like meconium aspiration syndrome, LBW, Prematurity, neonatal jaundice, babies of mothers with high risk pregnancies like gestational diabetes mellitus etc. Students nurses will help the parents to adjust and cope with stress due hospitalization and also learn assessment of newborn and care for the baby.

Post Graduate Diploma in Neonatal Nursing, builds and expand the knowledge and skills of the students with regards to range of patients encountered in neonatal practice settings. It provides opportunity to students to integrate knowledge gained in the theoretical subjects with clinical practice in the neonatal intensive care setting.

## Structure of syllabus

### Semester- I

#### A- Core Syllabus –

##### a- Theory -

Unit	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
Unit I	15Hr	<ul style="list-style-type: none"> <li>• Explain the modern concept of neonatal nursing and Principles of neonatal nursing</li> <li>• Describe role of neonatal nurse in neonatal admission and Grief process</li> </ul>	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Definition, concepts &amp; principles of neonatal nursing</li> <li>• Normal mother baby relationship</li> <li>• Risk factors for neonates in antenatal &amp; intranatal period.</li> <li>• Criteria for admission to NICU</li> <li>• Impact of birth of a sick /abnormal baby on the family</li> <li>• Reaction of parents to the admission of their baby to NICU</li> <li>• Grief process</li> <li>• Causes, effects, and management of stress</li> <li>• The personal and social problems of their family</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion Seminar on recent trends in neonatal nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> <li>• Long answers</li> </ul>
Unit II	15Hr	<ul style="list-style-type: none"> <li>• Provide care to normal and high risk neonates</li> <li>• Recognize and manage common neonatal problem</li> </ul>	<b>Normal Newborn</b> <ul style="list-style-type: none"> <li>• Definitions and terminology</li> <li>• Examination of newborn</li> <li>• Recognition of danger signs in a baby</li> <li>• Common minor neonatal disorders               <ul style="list-style-type: none"> <li>□ Care of normal newborns</li> </ul> </li> <li>• Immediate care</li> <li>• Routine care transition care</li> <li>□ Physiological adaptation of the neonate</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Clinical teaching</li> <li>• Demonstration</li> <li>• Demonstration of advance treatment modalities for newborns.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> <li>• Assessment of skills with a checklist</li> <li>• Long</li> </ul>

			□Thermoregulation and prevention of hypothermia		answers
Unit III	15Hr	<ul style="list-style-type: none"> <li>• Guide and counsel mother regarding the maintenance of lactation</li> </ul> <p>Acquire and demonstrate the skill in various types of feeding of LBW babies</p>	<b>Neonatal Feeding &amp; Lactation Management</b> <ul style="list-style-type: none"> <li>• Physiology of breast and milk secretion</li> <li>• Principles of feeding and nutrition</li> </ul> <p>Feeding of normal babies</p> <ul style="list-style-type: none"> <li>• Breastfeeding and maintenance of lactation</li> <li>• Managing breastfeeding problems</li> </ul> <p>Feeding of LBW babies</p> <ul style="list-style-type: none"> <li>• Artificial feeding - enteral, parenteral Katori spoon, Gavage feeding</li> </ul> <p>Fluid and electrolyte therapy</p>	<ul style="list-style-type: none"> <li>• practice session</li> <li>• Clinical practice</li> <li>• Demonstration</li> </ul> <p>Plan and conduct a counseling sessions for mothers with difficulty in breast feeding especially primi mothers.</p>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> <li>• Assessment of skills with a checklist</li> </ul> <p>Long answers</p>
Unit IV	15Hr	<ul style="list-style-type: none"> <li>• Practice skills of identification and management of babies</li> </ul> <p>Provide care to the low birth weight babies</p>	<b>Low birth weight baby</b> <ul style="list-style-type: none"> <li>• Types of LBW</li> <li>• Etiology</li> <li>• Identification of preterm and small for date babies</li> <li>• Problems of preterm and small date babies</li> <li>• Management principles ,thermoregulation, feeding monitoring</li> </ul> <p>transportation management of specific illness</p>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul> <p>Demonstration of advance treatment modalities for low birth weight newborns.</p>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> </ul> <p>Long answers</p>
Unit V	15Hrs	Practice skills of identification of Genetic disorders and counseling of parents requiring genetic counseling	<b>Genetic Counseling</b> <p>Meaning of genetics and heredity</p> <p>Mendelian laws of inheritance</p> <p>Genetic Disorders</p> <ul style="list-style-type: none"> <li>• Chromosomal errors</li> <li>• Inborn errors of metabolism</li> <li>• Multifactorial disorders (sickle cell anaemia,</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul> <p>Case presentation and counseling for mothers/parents of child</p>	<ul style="list-style-type: none"> <li>• Short Answers</li> </ul> <p>Long answers</p>

			Thalassemia, haemophilia) Genetic counseling Nurses' role in genetic counseling	with genetic diseases.	
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### **b-Practical-**

Students will demonstrate neonatal nursing skill after clinical experience in various neonatal nursing areas

## **B - Ability Enhancement Elective**

### **Prevention of infections**

#### **a- Theory-**

<b>Unit</b>	<b>Hours</b>	<b>Learning Objectives</b>	<b>Content</b>	<b>Teaching Learning Activities</b>	<b>Assessment Methods</b>
<b>1</b>	30 Hr	<ul style="list-style-type: none"> <li>• Demonstrate skills of hand washing</li> <li>• Identify &amp; apply measures to prevent infections in NICU and Standard safety measures</li> </ul>	<b>Prevention of infections in NICU</b> <ul style="list-style-type: none"> <li>• Principles of prevention of infections in NICU</li> <li>• Standard safety measures</li> <li>• Hand washing</li> <li>• Housekeeping routines</li> <li>• Disinfection and sterilization</li> <li>□ Biomedical waste management</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion - Demonstration</li> <li>• Clinical practice</li> <li>• In-service education</li> <li>Prevention of infections in NICU</li> </ul>	<ul style="list-style-type: none"> <li>• Short Answer s</li> <li>• Long Answer s</li> </ul>

**b. Practical of Prevention of infections** - Students will demonstrate skill of Prevention of infections after clinical experience in specific areas of neonatal nursing.

### **Ability enhancement –Elective**

#### **2. Kangaroo mother care- Theory**

<b>2</b>	30 hr	Demonstrate and counsels mother regarding kangaroo mother care	<b>Kangaroo mother care</b> <ul style="list-style-type: none"> <li>• Concept of KMC</li> <li>• Benefits</li> <li>• Techniques</li> <li>• Preparation of mother</li> <li>Preparation of family member</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion - Demonstration</li> <li>• Clinical practice</li> <li>• Training of mothers/family member</li> </ul>	<ul style="list-style-type: none"> <li>• Short Answer s</li> <li>• Long Answer s</li> </ul>
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				on Kangaroo mother care	
<b>b. Practical of Kangaroo mother care-</b> Students will demonstrate techniques of KMC after clinical experience in KMC Room.					

## SEMESTER- II

### A-Core subject-

#### a.- Theory-

Unit	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
Unit I	15 Hrs	<ul style="list-style-type: none"> <li>• Recognize the common Neonatal disease conditions</li> <li>• Execute nursing care to Sick neonates</li> <li>• Apply measures of Emergency treatment of neonatal problems</li> </ul>	<b>Sick neonate</b> <ul style="list-style-type: none"> <li>• Neonatal monitoring and observations</li> <li>• Respiratory problems: Asphyxia neonatorum, apnea, respiratory distress syndrome, respiratory infections.</li> <li>• Neonatal sepsis</li> <li>• Neonatal Jaundice</li> <li>• Convulsions and neurological disorders</li> <li>• Metabolic disorders</li> <li>• Necrotizing enterocolitis</li> <li>• HIV: transmission and anti retroviral therapy</li> <li>• Emergency treatment of neonatal problems</li> </ul>	<ul style="list-style-type: none"> <li>• Practice session</li> <li>• Clinical teaching care plan</li> <li>• Care study Demonstration of advance treatment modalities for sick newborns.</li> </ul>	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>

Unit II	15Hrs	<ul style="list-style-type: none"> <li>Identify neonates with surgical problems.</li> <li>Provide Pre and postoperative nursing care of a neonate with various surgical procedures</li> </ul>	<b>Neonate with surgical disorders</b> <ul style="list-style-type: none"> <li>Birth trauma</li> <li>Congenital malformations : Identification and management</li> <li>Pre and postoperative nursing care of a neonate with various surgical procedures : cleft lip and palate Esophageal Atresia , tracheoesophageal fistula, congenital hypertrophy. Pyloric stenosis, Hirschsprungs disease imperforate anus, rectovaginal fistula, Spina bifida, Meningomyelocele, Hydrocephalous.</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Practice Session Seminar on Recent advances in surgical management of newborn children.</li> </ul>	<ul style="list-style-type: none"> <li>Short answers</li> <li>Long answers</li> </ul>
Unit III	30Hrs	<ul style="list-style-type: none"> <li>Perform skill of Neonatal procedures including neonatal resuscitation</li> <li>Memorize Principles of temperature maintenance and its clinical disorders</li> </ul>	<b>Neonatal procedures</b> <ul style="list-style-type: none"> <li>Principles of drug therapy, administration of drugs, commonly used drugs.</li> <li>Principles of temperature maintenance and its clinical disorders</li> <li>Collection of specimen</li> <li>Assisting with procedures and therapies</li> <li>Use and maintenance of equipment</li> <li>Neonatal records</li> <li>Neonatal monitoring</li> <li>Admission and transfer of sick neonates.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstration</li> <li>Practice session</li> <li>Clinical practice</li> </ul>	<ul style="list-style-type: none"> <li>Short answers</li> <li>Long answers</li> </ul>



Unit IV	15Hrs	Acquire the knowledge of recent advances in Neonatology. Develop the knowledge & skill regarding Organization of neonatal unit.	Recent Advances in Neonatology & Organization of neonatal unit.	Lecture discussion • Demonstration • Clinical Practice Report writing on Organization of Neonatal unit.	
<b>b. Practical:</b> Students will demonstrate neonatal nursing skill after clinical experience in various neonatal nursing areas					

**-Generic Electives - Select any one out of Two**

1.

**Stress Management**

**a. Theory**

Subject	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
1	30 Hrs	Student will be able to Manage Stress in their personal & professional lives.	<ul style="list-style-type: none"> <li>• introduction, Meaning, Definition, Causes, sources, Signs &amp; Symptoms of Stress.</li> <li>• Stress Model</li> <li>• Managing Stress- Concept, Benefits</li> <li>• Managing Stress at Individual level</li> <li>• Models of Stress Management</li> </ul>	Lecture discussion Guest lecture on Stress Management	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>
<b>b. Practical stress management</b> - Students will demonstrate techniques of stress management after observing the experiment by a resource person.					

<b>2. Health Economics</b> <b>a. Theory</b>					
II	30	Able to develop plans for health economics and implement for individual and family	<b>Health Economics</b> <ul style="list-style-type: none"> <li>• Introduction, Definition, and Importance of Health Economics</li> <li>• Essentials of health economics</li> <li>• Developing plan for health economics</li> <li>• Presentation of health economics plan</li> <li>• Problem solving skills for health economics</li> <li>• Health economics implementation skill</li> </ul>	Lecture and discussion Project writing on health economics	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>
<b>c. Practical of Health Economics-</b> Students will demonstrate techniques of health economics after observing experiment/demonstrations by a resource person.					

Sr .No	Course Name	Title of the topic	Page No
	<b>PG Diploma in</b>		
1	Unit I	Seminar on recent trends in neonatal nursing	5
2	Unit II	Demonstration of advance treatment modalities for newborns.	5
3	Unit III	Plan and conduct a counseling sessions for mothers with difficulty in breast feeding especially primi mothers.	6
4	Unit IV	Demonstration of advance treatment modalities for low birth weight newborns.	6
5	Unit V	Case presentation and counseling for mothers/parents of child with genetic diseases.	6-7

	<b>B - Ability Enhancement Elective</b> <b>Prevention of infections</b>	UNIT-I In-service education Prevention of infections in NICU	7
	<b>a- Theory-</b>	Unit- II Training of mothers/family member on Kangaroo mother care	8
	<b>SEMESTER- II</b> <b>A-Core subject-a.- Theory</b>	Unit-I  Demonstration of advance treatment modalities for sick newborns.	8
		Unit-IV Report writing on Organization of Neonatal unit	9
	<b>Generic Electives - Select any one out of Two</b> <b>Stress Management</b>  <b>b. Theory</b>	Guest lecture on Stress Management	10
	<b>Health Economics</b> <b>a. Theory</b>	Project writing on health economics	11

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## **Philosophy**

Krishna Vishwa Vidyapeeth, “Deemed to be University”, Krishna Institute of Nursing Sciences, Karad believes that registered nurses need to be train in neonatal nursing in clinical setting in order to provide competent care to neonates. Advances in technology makes additional training necessary for nurses to work in neonatal care to expand the knowledge the skill to become specialized neonatal nurse. Scope of neonatal nursing practice encompasses provision of quality care to neonates in all neonatal levelsof care and also conducts research in areas of neonatal nursing.

## **Aim**

To improve the knowledge and skills of graduates to support neonates and their families during the challenging time.

## **Objectives**

### **General Objective-**

At the end of the course the student will be able to develop an understanding the philosophy, principles, methods, issues, management, education, research in neonatal nursing and enable them to develop skills and attitude in providing competent neonatal nursing.

### **Specific Objectives:**

At the end of the course the students will be able to,

1. Explain the basic concepts and principles applied to neonatal nursing.
2. Communicate to with parents and child to build strong family child relationship.
3. Demonstrate skill in providing essential newborn care.
4. Perform neonatal advance life support skills.
5. Apply nursing process while caring of newborn child in intensive care unit.
6. Participate actively as a member of the multidisciplinary health team.
7. Organize and demonstrate skills in management of neonatal services.
9. Conduct research in neonatal nursing.
10. Teach and supervise student nurses, nurses and allied health workers caring for neonates..

## **Admission Requirements**

The candidate seeking admission to this course should

- Students with Basic BSc.N. / Post Basic BSc.N. (Degrees)
- Registered with state nursing council.
- Possess a minimum of one year experience as a staff nurse.

## **Entrance / Selection test**

Selection of the candidates should be based on the merit of the entrance examination held by University.

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Selection of the candidates should be based on the merit of the entrance examination held by University.

## **Duration**

Duration of the course - one year

**Intake Capacity : 05**

## **Attendance**

A candidate has to secure 100%attendance in overall.

## **Fee**

As per University policy.

## **Faculty :**

DR.Prakash Naregal- Course Convener ,Assistant Professor.KINS,Karad

Mrs.Rajashri B.Karale- Associate Professor.KINS,Karad

Mrs.Ujwala Chopade - Assistant Professor.KINS,Karad

Mrs.Sheetal Kadam- Assistant Professor.KINS,Karad

Program pattern- Commencement of Semester

- *First Semester: 1<sup>st</sup> August*
- *Second Semester: 1<sup>st</sup> February*

**Course Duration:** one year

Total Weeks per Semester: 20 wks / semester

Number of Weeks per Semester for instruction: 20 weeks (30hrs/week x 20 weeks=600 hours)

**Hours Distribution- Theory and Practical**

**1<sup>st</sup> Semester :**

Theory -5 hrs /week = 105 hrs

Clinical -25hrs/week = 450hrs

Total Theory + Clinical hrs = 555 hrs

**2<sup>nd</sup> Semester:**

Theory -5 hrs /week = 105 hrs

Clinical -25hrs/week = 450hrs

Total Theory + Clinical hrs = 555 hrs

**Course of Studies**

	<b>Semester</b>	<b>Theory</b>	<b>Practical</b>	<b>Grand Total</b>
Postgraduate Diploma In Neonatal Nursing	First Semester	105 Hrs.	450 Hrs.	555hrs
	Second Semester	105 Hrs.	450 Hrs.	555hrs
	<b>Total</b>	210	900	1110 hrs

## Clinical Experience

Areas of clinical experience

Sr. no	Area of posting	First Semester	Second Semester	Grand Total	Total Hrs / semester
1.	Labour room	2 week	2 week	4week	100
2.	Postnatal ward	2 week	2 week	4week	100
3.	NICU	10week	10week	20week	600
4.	PediatricOPD	2weeks	2weeks	4weeks	100
	<b>Total</b>	18weeks	18weeks	36 weeks	900hrs

## CHOICE BASED CREDIT SYSTEM (C.B.C.S.)

### Course Instruction

#### 1<sup>st</sup> Semester

Sr. No	Content	Number of Hours	Credits.
A	<b>Core Subject</b>		
	<b>a. Theory</b>		
1	Introduction to neonatal Nursing	15	1
2	Normal Newborn	15	1
3	Neonatal feeding & Lactation Management	15	1
4	Low birth weight baby	15	1
5	Genetic Counseling	15	1
	<b>b. Practical /Clinical Posting</b>		
1	Introduction to neonatal Nursing		
2	Normal Newborn	90	3
3	Neonatal feeding & Lactation Management	90	3
4	Low birth weight baby	90	3
5	Genetic Counseling	90	3
B	<b>Ability Enhancement - Elective (Any One)</b>		
a.	<b>Theory</b>		
1	Prevention of infections in NICU	30	2
2	Kangaroo Mother care		



<b>b.</b>	<b>Practical</b>		
1	Clinical Posting at NICU & Labour Room	90	3
2	Clinical posting in KMC unit		
	<b>Total</b>	555	22

## 2<sup>nd</sup> Semester

<b>Sr. number</b>	<b>Content</b>	<b>Number of Hours</b>	<b>credits.</b>
A	<b>Core Subject</b>		
	<b>a.Theory</b>		
1	Sick neonate	15	1
2	Neonate with surgical disorders	15	1
3	Neonatal procedures	30	2
4	Recent Advances in Neonatology & Organization of neonatal unit	15	1
	<b>b.Practical /Clinical Posting</b>		
1	Sick neonate	90	3
2	Neonate with surgical disorders	90	3
3	Neonatal procedures	90	3
4	Recent Advances in Neonatology & Organization of neonatal unit	90	3
B	<b>Generic Elective -( Any One )</b>		
a.	<b>Theory</b>		
1	Stress management	30	2
2	Health Economics		
b.	<b>Practical</b>		
1	Health Economics practice	90	3
2	Stress Management practice		
	<b>Total</b>	555	22

**COURSE DESCRIPTION:**

The course is designed to prepare registered nurses (B.SC, PB.BSc.Nursing) with specialized knowledge, skills and attitudes in providing advance quality care to neonates, their families and the communities at the three levels of care.

**Semester- I****A- Core Syllabus –****a- Theory -**

Unit	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
Unit I	15Hr	<ul style="list-style-type: none"> <li>• Explain the modern concept of neonatal nursing and Principles of neonatal nursing</li> <li>• Describe the role of neonatal nurse in neonatal admission and Grief process</li> </ul>	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Definition, concepts &amp; principles of neonatal nursing</li> <li>• Normal mother-baby relationship</li> <li>• Risk factors for neonates in antenatal &amp; intranatal period.</li> <li>• Criteria for admission to NICU</li> <li>• Impact of birth of a sick /abnormal baby on the family</li> <li>• Reaction of parents to the admission of their baby to NICU</li> <li>• Grief process</li> <li>• Causes, effects, and management of stress</li> <li>• The personal and social problems of their family</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion Seminar on recent trends in neonatal nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple choice Question (MCQ)</li> <li>• Short answers</li> <li>• Long answers</li> </ul>
Unit II	15Hr	<ul style="list-style-type: none"> <li>• Provide care to normal and high risk neonates</li> <li>• Recognize and manage common neonatal problem</li> </ul>	<b>Normal Newborn</b> <ul style="list-style-type: none"> <li>• Definitions and terminology</li> <li>• Examination of newborn</li> <li>• Recognition of danger signs in a baby</li> <li>• Common minor neonatal disorders               <ul style="list-style-type: none"> <li>□ Care of normal newborns</li> </ul> </li> <li>• Immediate care</li> <li>• Routine care transition care</li> <li>□ Physiological adaptation of the neonate</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Clinical teaching</li> <li>• Demonstration</li> <li>• Demonstration of advance treatment modalities for newborns.</li> </ul>	<ul style="list-style-type: none"> <li>• multiple eChoice Question (MCQ)</li> <li>• Short answers</li> <li>• Assessment of skills with checklist</li> <li>• Long</li> </ul>

			□Thermoregulation and prevention of hypothermia		answers
Unit III	15Hr	<ul style="list-style-type: none"> <li>• Guide and counsel mother regarding the maintenance of lactation</li> <li>• Acquire and demonstrate the skill in various types of feeding of LBW babies</li> </ul>	<b>Neonatal Feeding &amp; Lactation Management</b> <ul style="list-style-type: none"> <li>• Physiology of breast and milk secretion</li> <li>• Principles of feeding and nutrition</li> </ul> Feeding of normal babies <ul style="list-style-type: none"> <li>• Breastfeeding and maintenance of lactation</li> <li>• Managing breastfeeding problems</li> </ul> Feeding of LBW babies <ul style="list-style-type: none"> <li>• Artificial feeding - enteral, parenteral Katori spoon, Gavage feeding</li> <li>• Fluid and electrolyte therapy</li> </ul>	<ul style="list-style-type: none"> <li>• practice session</li> <li>• Clinical practice</li> <li>• Demonstration</li> <li>• Plan and conduct a counseling sessions for mothers with difficulty in breast feeding especially primi mothers.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> <li>• Assessment of skills with a checklist</li> <li>• Long answers</li> </ul>
Unit IV	15Hr	<ul style="list-style-type: none"> <li>• Practice skills of identification and management of babies</li> <li>• Provide care to the low birth weight babies</li> </ul>	<b>Low birth weight baby</b> <ul style="list-style-type: none"> <li>• Types of LBW</li> <li>• Etiology</li> <li>• Identification of preterm and small for date babies</li> <li>• Problems of preterm and small date babies</li> <li>• Management principles ,thermoregulation, feeding monitoring transportation management of specific illness</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration of advance treatment modalities for low birth weight newborns.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Choice Question (MCQ)</li> <li>• Short answers</li> <li>• Long answers</li> </ul>

Unit V	15Hrs	<ul style="list-style-type: none"> <li>Practice skills of identification of Genetic disorders and counseling of parents requiring genetic counseling</li> </ul>	<b>Genetic Counseling</b> Meaning of genetics and heredity Mendelian laws of inheritance Genetic Disorders <ul style="list-style-type: none"> <li>Chromosomal errors</li> <li>Inborn errors of metabolism</li> <li>Multifactorial disorders (sickle cell anaemia, Thalassemia, haemophilia)</li> </ul> Genetic counseling <ul style="list-style-type: none"> <li>Nurses' role in genetic counseling</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Case presentation and counseling for mothers/parents of child with genetic diseases.</li> </ul>	<ul style="list-style-type: none"> <li>Short Answers</li> <li>Long answers</li> </ul>
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**b-Practical-**

Students will demonstrate neonatal nursing skill after clinical experience in various neonatal nursing areas

**B - Ability Enhancement Elective****2. Prevention of infections****a- Theory-**

Unit	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
1	30 Hr	<ul style="list-style-type: none"> <li>• Demonstrate skills of hand washing</li> <li>• Identify &amp; apply measures to prevent infections in NICU and Standard safety measures</li> </ul>	<b>Prevention of infections in NICU</b> <ul style="list-style-type: none"> <li>• Principles of prevention of infections in NICU</li> <li>• Standard safety measures</li> <li>• Hand washing</li> <li>• Housekeeping routines</li> <li>• Disinfection and sterilization</li> <li>□ Biomedical waste management</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion - Demonstration</li> <li>• Clinical practice</li> <li>• In-service education on Prevention of infections in NICU</li> </ul>	<ul style="list-style-type: none"> <li>• Short Answers</li> <li>• Long Answers</li> </ul>
<b>b. Practical of Prevention of infections</b> - Students will demonstrate skill of Prevention of infections after clinical experience in specific areas of neonatal nursing.					
<b>Ability enhancement –Elective</b> <b>2. Kangaroo mother care</b> <b>a- Theory</b>					
2	30 hr	Demonstrate and counsels mother regarding kangaroo mother care	<b>Kangaroo mother care</b> <ul style="list-style-type: none"> <li>• Concept of KMC</li> <li>• Benefits</li> <li>• Techniques</li> <li>• Preparation of mother</li> <li>Preparation of family member</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion - Demonstration</li> <li>• Clinical practice</li> <li>• Training of mothers/ family member on</li> </ul>	<ul style="list-style-type: none"> <li>• Short Answers</li> <li>• Long Answers</li> </ul>

				Kangaro o mother care	
<b>b. Practical of Kangaroo mother care-</b> Students will demonstrate techniques of KMC after clinical experience in KMC Room.					

**SEMESTER- II****A-Core subject-****a.- Theory-**

Unit	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
Unit I	15 Hrs	<ul style="list-style-type: none"> <li>• Recognize the common Neonatal disease conditions</li> <li>• Execute nursing care to Sick neonates</li> <li>• Apply measures of Emergency treatment of neonatal problems</li> </ul>	<b>Sick neonate</b> <ul style="list-style-type: none"> <li>• Neonatal monitoring and observations</li> <li>• Respiratory problems: Asphyxia neonatorum, apnea, respiratory distress syndrome, respiratory infections.</li> <li>• Neonatal sepsis</li> <li>• Neonatal Jaundice</li> <li>• Convulsions and neurological disorders</li> <li>• Metabolic disorders</li> <li>• Necrotizing enterocolitis</li> <li>• HIV: transmission and anti retroviral therapy</li> <li>• Emergency treatment of neonatal problems</li> </ul>	<ul style="list-style-type: none"> <li>• Practice session</li> <li>• Clinical teaching care plan</li> <li>• Care study Demonstration of advance treatment modalities for sick newborns.</li> </ul>	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>
Unit II	15Hrs	<ul style="list-style-type: none"> <li>• Identify neonates with surgical problems.</li> <li>• Provide Pre and postoperative nursing care of a neonate with various surgical procedures</li> </ul>	<b>Neonate with surgical disorders</b> <ul style="list-style-type: none"> <li>• Birth trauma</li> <li>• Congenital malformations : Identification and management</li> <li>• Pre and postoperative nursing care of a neonate with various surgical procedures : cleft lip and palate Esophageal Atresia , tracheoesophageal fistula, congenital hypertrophy. Pyloric stenosis, Hirschsprungs disease imperforate anus, rectovaginal fistula, Spina bifida, Meningomyelocele, Hydrocephalous.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practice Session Seminar on Recent advances in surgical management of newborn children.</li> </ul>	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>

Unit III	30Hrs	<ul style="list-style-type: none"> <li>• Perform skill of Neonatal procedures including neonatal resuscitation</li> <li>• Memorize Principles of temperature maintenance and its clinical disorders</li> </ul>	<b>Neonatal procedures</b> <ul style="list-style-type: none"> <li>• Principles of drug therapy, administration of drugs, commonly used drugs.</li> <li>• Principles of temperature maintenance and its clinical disorders</li> <li>• Collection of specimen</li> <li>• Assisting with procedures and therapies</li> <li>• Use and maintenance of equipment</li> <li>• Neonatal records</li> <li>• Neonatal monitoring</li> <li>• Admission and transfer of sick neonates.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Practice session</li> <li>• Clinical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>
Unit IV	15Hrs	Acquire the knowledge of recent advances in Neonatology. Develop the knowledge & skill regarding Organization of neonatal unit.	Recent Advances in Neonatology & Organization of neonatal unit.	Lecture discussion <ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Clinical Practice Report writing on Organization of Neonatal unit.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>b. Practical :</b> Students will demonstrate neonatal nursing skill after clinical experience in various neonatal nursing areas					



**B-Generic Electives - Select any one out of Two**  
**1. Stress Management**

**c. Theory**

Subject	Hours	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
1	30 Hrs	Student will be able to Manage Stress in their personal & professional lives.	<ul style="list-style-type: none"> <li>• introduction, Meaning, Definition, Causes, sources, Signs &amp; Symptoms of Stress.</li> <li>• Stress Model</li> <li>• Managing Stress- Concept, Benefits</li> <li>• Managing Stress at Individual level</li> <li>• Models of Stress Management</li> </ul>	Lecture discussion Guest lecture on Stress Management	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>

**b. Practical stress management** - Students will demonstrate techniques of stress management after observing the experiment by a resource person.

**2. Health Economics**

**a. Theory**

II	30	Able to develop plans for health economics and implement for individual and family	<b>Health Economics</b> <ul style="list-style-type: none"> <li>• Introduction, Definition, and Importance of Health Economics</li> <li>• Essentials of health economics</li> <li>• Developing plan for health economics</li> <li>• Presentation of health economics plan</li> <li>• Problem solving skills for health economics</li> <li>• Health economics implementation skill</li> </ul>	Lecture and discussion Project writing on health economics	<ul style="list-style-type: none"> <li>• Short answers</li> <li>• Long answers</li> </ul>
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**c. Practical of Health Economics**- Students will demonstrate techniques of health economics after observing experiment/demonstrations by a resource person.

## Clinical Experience

Areas of clinical experience required Neonatal services

Sr. no	Area of posting	No. of week	Total hours
4.	Labour room	4 week	100 Hrs
5.	Postnatal ward	4 week	100 Hrs
6.	NICU (Medical)	14week	350Hrs
7.	NICU (Surgical )	14week	350Hrs
8.	Total	36 weeks	900 Hrs

## Prescribed Books For Course

Sr. No	Name Of Author	Name Of Book	Edition
1.	Fernandez Armida	Manual of Neonatal Care	1
2.	Gardner Sandra L.	Neonatal intensive care	7
3.	Gupta Piyush	Essential pediatric nursing	1
4.	Gupte Suraj	Short textbook of pediatrics: incorporating national and international recommendations ( MCI, LAP, NNF. WHO, UNICEF, IPA, ISTP, AAP, etc.)	1
5.	Kalaimathi S Anigrace	Nurses' guide to neonatal procedures	1
6.	Kumar A. Santosh	Manual of newborn care	2
7.	Pratinidhi Asha K.	Primary perinatal and neonatal health care	1
8.	SarkarSubrata	Pediatric nursing (as per INC syllabus)	1
9.	Singh Meharban	Essential pediatrics for nurses	1
10.	Sudhakar A.	Essentials of pediatric nursing : as per revised INC syllabus	1
11.	Hockenberry Marilyn J	Wong's essential of pediatric nursing (With CD)	7

## **EXAMINATION SCHEME**

### **CHOICE BASED CREDIT SYSTEM**

#### **Scheme of Examinations:**

Internal Assessment Clinical Assignments, Theory and practical are at the end of the year.

#### **Examination Scheme:**

Theory Internal Assessment = 25 Marks

Practical Internal Assessment = 25 Marks

End semester University examination:

Question Paper Pattern:

**Theory:** 75 Marks

Answer all the questions.

- I. Multiple Choice Question (MCQ) =  $15 \times 1 = 15$
- II. Short Answers (Answers 4 out of 6) =  $4 \times 5 = 20$
- III. Essay question :  $20 \times 1 = 20$
- IV. Long Answers (Answer 2 out of 3) =  $2 \times 10 = 20$

Total = 75 Marks

#### **Practical:**

Oral Examination: 25 Marks

Practical Examination 50 Marks

Total Marks : 75.

Total exam marks for end semester are 100 marks theory and 100 marks practical.

#### **1. Promotion and award of grades**

A student shall be declared PASS and eligible for getting he/she secures at least 50% marks in that particular course including internal assessment..

#### **2. Carry forward of marks**

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified ,then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

#### **3. Improvement of internal assessment**

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

## Grading of performances

### Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in table I

**Table –I Letter grades and grade points equivalent to Percentage of marks and performances**

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 – 100	O	10	Outstanding
80.00 – 89.99	A	9	Excellent
70.00 – 79.99	B	8	Good
60.00 – 69.99	C	7	Fair
50.00 – 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

### 18. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called ‘Semester Grade Point Average’ (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses(Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student’s grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students’ SGPA is equal to:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4* \text{ZERO} + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

### **Cumulative Grade Point Average (CGPA)**

The CGPA is calculated with the SGPA of II semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of II semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C_1S_1 + C_2S_2 + C_3S_3 + C_4S_4 + C_5S_5 + C_6S_6 + C_7S_7 + C_8S_8}{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8}$$

where  $C_1, C_2, \dots$  is the total number of credits for semester I, II, III, .... and  $S_1, S_2, \dots$  is the SGPA of semester I, II, III, ....

### **19. Declaration of class**

The class shall be awarded on the basis of CGPA as follows:

First Class with Distinction= CGPA of 7.50 and above

First Class= CGPA of 6.00 to 7.49

Second Class= CGPA of 5.00 to 5.99

### **20. Award of Ranks**

Ranks and Medals shall be awarded on the basis of final CGPA.

### **21. Award of degree**

Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

### Final Mark list Of University Examination

Sr. No.	Semester	Internal Assessment		End Semester Examination		Total	
		Theory 25 marks	Practical 25 marks	Theory 75 marks	Practical 75 marks	Theory 100 marks	Practical 100 marks
1	Semester I						
2	Semester II						

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