

INDIAN NURSING COUNCIL
8TH Floor, NBCC Centre, Plot No. 2, Community Centre
Okhla Phase-1, New Delhi -110020

Dated _____, 2020

NOTIFICATION
(TO BE GAZETTED)

F.No. 11-1/2019-INC: In exercise of the powers conferred by sub-section (1) of Section 16 of Indian nursing Council Act, 1947 (XLVIII of 1947), as amended from time to time, the Indian Nursing Council hereby makes the following regulations for Post Basic Diploma in Neonatal Specialty Nursing- Residency Programme 2019:-

Short Title and Commencement.-

1. These Regulations may be called Indian Nursing Council (**Post Basic Diploma in Neonatal Specialty Nursing- Residency Programme**) **Regulations 2019.**
2. These Regulations shall come into force on the date of notification of the same in the Official Gazette of India.

Definitions

In these Regulations, unless the context otherwise requires,

- i. 'the Act' means the Indian Nursing Council Act, 1947 (XLVIII of 1947) as amended from time to time;
- ii. 'the Council' means the Indian Nursing Council constituted under the Act;
- iii. 'SNRC' means the State Nurse and Midwives Registration Council, by whichever name constituted, by the respective State Governments;
- iv. 'RN & RM' means a Registered Nurse and Registered Midwife (RN & RM) and denotes a nurse who has completed successfully, recognized Bachelor of Nursing (B.Sc. Nursing) or Diploma in General Nursing and Midwifery (GNM) course, as prescribed by the Council and is registered in a SNRC as Registered Nurse and Registered Midwife;
- v. 'NUID' is the Nurses Unique Identification Number given to the registrants in the NRTS system
- vi. "General Nursing and Midwifery (GNM) means Diploma in General Nursing and Midwifery qualification recognized by the Council under Section 10 of the Act and included in Part-I of the Schedule of the Act;

POST BASIC DIPLOMA IN NEONATAL SPECIALTY NURSING -RESIDENCY PROGRAM 2019

I. INTRODUCTION

The National Health Policy document (NHP, 2017) emphasizes the need to expand tertiary care services, prepare specialist nurses and standardization of clinical training for nurses. Responding to this, the Council planned to redesign the existing specialty nursing programs making it as a one-year post basic diploma residency programs utilizing competency- based training approach. Neonatal Nursing is a new specialty prepared by the Council using revised guidelines that aim to prepare specialist nurses who can provide competent care to neonates with various medical and surgical conditions in which diagnostic, treatment, and care needs are complex and intensive.

India faces the biggest newborn health challenge in the world. The country is on the threshold of a neonatal survival revolution with the concerted efforts of the Government of India & professional bodies aimed at bringing about a reduction in Infant Mortality Rate (IMR) & Neonate Mortality Rate (NMR). The specialized newborn care

facilities have grown rapidly during the last two decades. A number of level II special care units and Neonatal Intensive Care Units (NICU's) have been established in teaching as well as corporate hospitals.

The above revolution in newborn care demands adequate number of nurses specially trained in neonatal nursing who will function as neonatal specialist nurses. Therefore, it is essential for the health care system to meet such needs effectively. In this context, it is highly significant to strengthen or establish education and training programs to prepare super-specialty nurses for tertiary care institutions, who can provide safe, competent and compassionate care to neonates.

II. PHILOSOPHY

The Council believes that registered nurses need to be further trained as specialist nurses to function in various emerging speciality areas of practice and the training should be competency based. One such area that demands specialist nurses is Neonatal Nursing. Expanding roles of nurses and advances in technology necessitates additional training to prepare them for effective participation in neonatal care within their scope of practice.

III. CURRICULAR FRAMEWORK

The post basic diploma in Neonatal specialty nursing education is a one-year residency program and its curriculum is conceptualized encompassing foundational short courses and major specialty courses for specialty nursing practice.

The foundations to Neonatal nursing practice such as Professionalism, Communication & patient education, Clinical leadership & resource management and Evidence based & applied research are short courses that aim to provide the students with the knowledge, attitude and competencies essential to function as accountable, committed, safe and competent specialist nurses. The major specialty courses are organized under Neonatal Specialty Nursing I and Neonatal Specialty Nursing II. Specialty Nursing I includes applied Anatomy and Physiology, Embryology, Pharmacology, Genetics, Community health, Obstetrics, Neonatal Advance Life Support. Specialty Nursing II includes feeding of normal and low birth weight babies, policies and procedures for prevention of infections in NICU, nursing management of common medical and surgical problems in neonates and role of neonatal nurses in various investigations and procedures carried out on neonates. The curricular framework for the Neonatal Specialty Nursing residency program is illustrated in the following figure 1.

POST BASIC DIPLOMA IN NEONATAL SPECIALTY NURSING– RESIDENCY PROGRAM

FOUNDATIONS TO NEONATAL

NEONATAL SPECIALTY NURSING– COURSES

SPECIALTY NURSING- COURSES

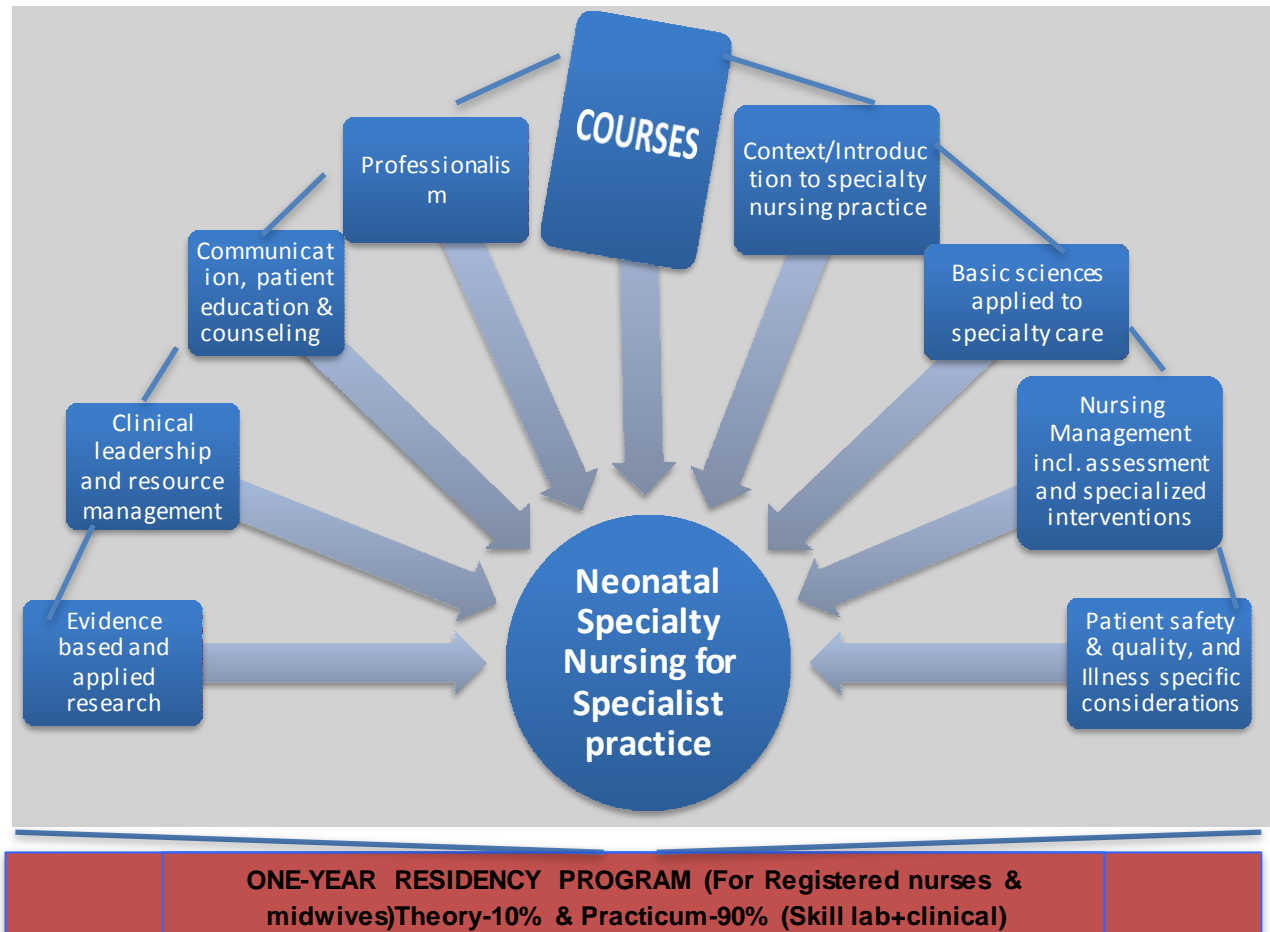


Figure 1. Curricular Framework: Neonatal Specialty Nursing- Residency Program.

IV. AIM/PURPOSE & COMPETENCIES

AIM

The Program is designed to prepare nurses with specialized skills, knowledge and attitude in providing quality care to neonates with neonatal disorders. It further aims to prepare technically qualified and trained specialist nurses who will function effectively and optimally at Neonatal care units of Tertiary/Quaternary hospitals providing high standards of care.

COMPETENCIES

On completion of the program, the neonatal specialist nurse will be able to:

1. Demonstrate professional accountability for the delivery of nursing care as per the Council standards that is consistent with moral, altruistic, legal, ethical, regulatory and humanistic principles in neonatal practice.
2. Communicate effectively with parents, families and professional colleagues fostering mutual respect and shared decision making to enhance health outcomes.
3. Educate and counsel parents and families to participate effectively in treatment and care and enhance their coping abilities through crisis and bereavement.
4. Demonstrate understanding of clinical leadership and resource management strategies and use them in neonatal care and settings promoting collaborative and effective teamwork.
5. Identify, evaluate and use the best current evidence in neonatal care and treatment coupled with clinical expertise and consideration of patient's preferences, experience and values to make practical decisions in neonatal nursing practice.
6. Participate in research studies that contribute to evidence-based neonatal nursing care interventions with basic understanding of research process.
7. Apply basic sciences in the assessment, diagnosis and treatment of the physiological, physical, psychological, social & spiritual problems of neonates and their families with neonatal disorders.
8. Apply nursing process in caring for neonates with neonatal disorders.
9. Describe the principles of fluid, electrolyte, nutrition and elimination management, developmental supportive care, pain management, infant temperature management in treatment of patients with neonatal disorders.
10. Demonstrate specialized practice competencies/skills relevant in providing care to neonates under different treatment regimes.
11. Demonstrate skill in managing neonates undergoing various surgeries.
12. Identify treatment related adverse effects and emergencies and manage them effectively.
13. Understand the method of drug procurement, storage, administering and maintenance of neonatal equipment, exchange transfusion, immune therapy and demonstrate sound practice.
14. Understand the maintenance of special equipment such as radiant warmer, pulse oximeter, phototherapy, Oxygen concentrator, Weighing scale, infusion pump, resuscitation bag, glucometer, suction machine, etc.
15. Demonstrate empathy and humane approach towards neonates and their families.
16. Conduct clinical audit and participate in quality assurance activities in Neonatal units/centres.
17. Provide palliative care to neonates with emphasis to end of life care and bereavement management promoting comfort and dignity respecting individual cultural and spiritual needs and differences.

V. PROGRAM DESCRIPTION & SCOPE OF PRACTICE

The post basic diploma in Neonatal specialty nursing program is a one-year residency program with main focus on competency-based training. Theory includes foundational courses and specialty courses besides practicum. The theory component comprises 10% and practicum 90% (Lab & Clinical).

On completion of the program and certification, and registration as additional qualification with respective State Nursing Council, the neonatal specialist nurses will be employed only in the specialty hospital/department/unit as neonatal specialist nurses. They will be able to practice as per the competencies trained during the program particularly the specialized procedural competencies/clinical skills as per the logbook of the Council syllabus. The specialist nurses can be privileged to practice those specialized procedural competencies by the respective institution as per institution protocols. Specialist nurse cadre/positions should be created at government/public/private sectors. The diploma will be awarded by respective Examination Board/State Nursing Council/University approved by the Council.

VI. MINIMUM REQUIREMENTS / GUIDELINES FOR STARTING THE POST BASIC DIPLOMA IN NEONATAL SPECIALTY NURSING RESIDENCY PROGRAM

The program may be offered at

- a. College of Nursing offering degree programs in nursing attached to parent specialty hospital/tertiary hospital having a minimum of 200 bedded hospital with diagnostic, therapeutic and state of the art Neonatal units with optimum neonatal supportive care and specialized nursing care facilities.

OR

- Hospitals offering DNB/fellowship programs in neonatology having minimum of 200 beds with diagnostic, therapeutic and state of the art Neonatal units with optimum neonatal supportive care and specialized nursing care facilities.
- b. The above eligible institution shall get recognition from the concerned state nursing council for Post Basic Diploma in Neonatal Specialty Nursing for the particular academic year, which is a mandatory requirement.
 - c. The Council shall after receipt of above documents/proposal would then conduct statutory inspection of the recognized training nursing institution under section 13 of Act, in order to assess the suitability with regard to availability of teaching faculty, clinical and infrastructural facilities in conformity with Regulations framed under the provisions of Act,.

1. Nursing Teaching Faculty

- a. Full time teaching Faculty in the ratio of 1:10
- b. Minimum number of faculty should be two
- c. Qualification:
 - i. M.Sc. Nursing with Child Health Nursing Speciality -1
 - ii. Post Basic Diploma in respective nursing specialty with Basic B.Sc. (N)/ P.B. B.Sc. (N)-1
- d. Experience: Minimum three years of clinical experience in neonatal specialty nursing
- e. Guest Faculty: multi-disciplinary in related specialities

f. Preceptors:

- *Nursing Preceptor*- Full time qualified GNM with 6 years of experience in specialty care nursing (Neonatal nursing) or B.Sc. (N) with 2 years' experience in specialty nursing or M.Sc. with one year neonatal specialty nursing experience working in the neonatal specialty care unit.
- *Medical Preceptor*: Specialist (Neonatologist) doctor with PG qualification (with 3 years post PG experience/faculty level/consultant level preferable)
- Preceptor student ratio -**Nursing** 1:10, **Medical** 1:10 (Every student must have a medical and nursing preceptor)

2. Budget

There should be budgetary provision for staff salary, honorariums for guest faculty, and part time teachers, clerical assistance, library and contingency expenditure for the programme in the overall budget of the institution.

3. Physical and learning resources at Hospital/College

- a. One classroom/conference room at the clinical area
- b. Skill lab for simulated learning at hospital/college. **Skill lab requirements are listed in Appendix 1.**
- c. Library and computer facilities with access to online journals
 - i. College library having current books, journals and periodicals related to respective nursing specialty, Nursing Administration, Nursing Education, Nursing Research and Statistics.

OR

- Permission to use medical/hospital library having current books, journals and periodicals related to respective nursing specialty, Nursing Administration, Nursing Education, Nursing Research and Statistics.
- ii. Computer with internet facility
 - d. E-Learning facilities
 - e. Teaching Aids – Facilities for use of
 - i. Over – head Projectors
 - ii. Video viewing facility
 - iii. LCD Projector
 - iv. CDs, DVDs and DVD players
 - v. Appropriate equipment, manikins and simulators for skill learning
 - f. Office facilities
 - i. Services of typist, peon, Safai Karmachari
 - ii. Facilities for office, equipment and supplies such as
 - Stationery
 - Computer with printer
 - Xerox machine
 - Telephone and Fax

4. Clinical facilities

- a. Parent specialty hospital/tertiary hospital having minimum of 200 beds with advanced diagnostic, therapeutic and state of the art Neonatal units with optimum neonatal supportive care and specialized nursing care facilities.
- b. Regional centres/Neonatal specialty hospitals having minimum of 200 beds with advanced diagnostic, therapeutic and state of the art Neonatal units with optimum neonatal supportive care and specialized nursing care facilities.
- c. Hospital must have a minimum of 20 specialty beds (Level 2 &3) with advanced diagnostic, treatment and care facilities
- d. Nurse staffing of units as per the Council recommended norms
- e. Student patient ratio- 1:2-3

5. Admission terms and conditions/Entry requirements

The student seeking admission to this program should:

- a. Be a registered nurse (R.N & R.M) or equivalent with any State Nurses Registration Council (SNRC) having NUID number.

- b. Possess a minimum of one year clinical experience as a staff nurse preferably in the oncology unit prior to enrolment.
 - c. Be physically fit.
 - d. Selection must be based on the merit of an entrance examination and interview held by the competent authority
 - e. Nurses from other countries must obtain an equivalence certificate from the Council before admission.
6. **No. of seats:** For hospital having 200 beds and 10-20 NICU beds, number of seats=5-10, for hospital having 500 beds and more with 20 and more NICU beds, the number of seats= 10-20
7. **Number of candidates:** 1 candidate for 2-3 specialty beds
8. **Salary:**
- a. In-service candidates will get regular salary
 - b. Stipend/Salary for the other candidates as per the salary structure of the hospital where the program is conducted

VII. EXAMINATION REGULATIONS AND CERTIFICATION

Examining and Diploma awarding authority: Respective Examination Boards/State Nursing Council/University approved by the Council.

1. Eligibility for appearing for the examination

- a. Attendance: Theory & practical- 80%. However, 100% Clinical attendance have to be completed prior to certification.
- b. Candidate who successfully completes the necessary requirements such as logbook and clinical requirements is eligible and can appear for final examination.

2. Practical examination

- a. OSCE: Objective Structured Clinical Examination type of examination will be conducted alongside viva (oral examination) both in the internal and final examination (Detailed guidelines are given in guidebook)
- b. Observed Practical/Clinical: Final internal and external examination will also include assessment of actual clinical performance in real settings including viva and Mini clinical evaluation exercise for 3-4 hours (Nursing process application and direct observation of procedural competencies) Minimum period of assessment in the clinical area is 5-6 hours. Evaluation guidelines are given in guidebook.
- c. Maximum number of students per day = 10 students.
- d. Practical Examination should be held in clinical area only
- e. The team of practical examiners will include one internal examiner [(M.Sc. faculty with two years of experience in teaching the respective specialty program/M.Sc. faculty (Child Health Nursing) with 5 years of Post PG experience], one external examiner (nursing faculty with the same qualification & experience stated as above) and one medical internal examiner who should be preceptor for specialty program.
- f. The practical examiner and the theory examiner should be the same nursing faculty

3. Standard of Passing

- a. In order to pass, a candidate should obtain at least 60% marks in aggregate of internal assessment and external examination both together, in each of the theory and practical papers. Less than 60 % is considered fail.
- b. Students will be given opportunity of maximum of 3 attempts for passing.
- c. If the student fails in either theory or practical, he/she needs to appear for the exam failed either theory or practical only.

CERTIFICATION

- a. TITLE: Post Basic Diploma in Neonatal Specialty Nursing
- b. A diploma is awarded by Examination Boards/State Nursing Council/University approved by the Council, upon successful completion of the prescribed study program, which will state that
 - i. Candidate has completed all the courses of study under the Post Basic Diploma in Neonatal Specialty Nursing -Residency program.
 - ii. Candidate has completed 80 % theory and 100% clinical requirements.
 - iii. Candidate has passed the prescribed examination.

VIII. SCHEME OF EXAMINATION

| Courses | Int. Ass. Marks | Ext. Ass. Marks | Total marks | Exam hours (External) |
|---|-------------------|-------------------|-------------|-----------------------|
| Theory (Experiential/Residential learning) | | | | |
| Neonatal Specialty Nursing (Part I & Part II) {Part I- Neonatal specialty Nursing I including Foundations, Part II- Neonatal Specialty Nursing II} | 25 (10+15) | 75 (35+40) | 100 | 3 |
| Practicum- Neonatal Specialty Nursing | 75 | 150 | 225 | |

| | | | | |
|--|-------------------------------------|--------------------------------------|------------|--|
| <ul style="list-style-type: none"> OSCE including Viva Observed Practical/clinical (Direct observation of actual performance at real settings) including viva– Mini clinical evaluation exercise for 3-4 hours (Nursing process application and direct observation of procedural competencies) | (25+50) (OSCE & Observed Practical) | (50+100) (OSCE & Observed Practical) | | Minimum 5-6 hours in the clinical area |
| Grand Total | 100 | 225 | 325 | |

IX. PROGRAM ORGANIZATION/STRUCTURE

1. Courses of Instruction
2. Implementation of curriculum
3. Clinical Practice (Residency posting)
4. Teaching Methods
5. Methods of Assessment
6. Logbook & Clinical requirements

1. Courses of Instruction - Delivered through mastery of learning (skill lab practice) and experiential learning (Clinical practice) approaches.

| S.No | Courses | Theory (Hrs) | Lab/Skill Lab (Hrs) | Clinical (Hrs) |
|------|---|--------------|---------------------|----------------|
| I | Foundations to Neonatal Specialty Nursing practice <ol style="list-style-type: none"> 1. Professionalism 2. Communication, parent education & counseling in specialty nursing 3. Clinical leadership and resource management in the specialty care setting 4. Evidence based and applied research in specialty nursing | 40 | | |
| II | Neonatal Specialty Nursing courses Neonatal Specialty Nursing I <ol style="list-style-type: none"> 1. Context/ Introduction to specialty nursing 2. Basic sciences applied to specialty care- diagnosis and treatment of clinical conditions (Anatomy & | 50 | 10 | |

| | | | |
|---|-----------------------|---------------------|--------------------------|
| Physiology, Microbiology, Pharmacology & Pathophysiology) | | | |
| Neonatal Specialty Nursing II | | | |
| 3. Nursing management of clinical conditions including assessment, diagnosis, treatment and specialized interventions | | | |
| 4. Patient safety and quality | | | |
| 5. Specialty/Illness specific considerations (Developmental Supportive care /palliative care/ rehabilitation, Impact of Illness on Parents, family and community) | 110 | 30 | 1730 |
| TOTAL= 2208hrs | 200 (5wks) | 40 (1wk) | 1730 (38wks) |

Total weeks available in a year: 52 weeks

- **Academic Leave + Casual Leave + Sick Leave + Public holidays=6 weeks**
- **Exam preparation and exam= 2weeks**
- **Theory and practical =44weeks**

2. Implementation of the curriculum (Theory- 10% and Practicum- 90%)

Block classes-2wksx40hrs = 80hrs, Residency of 42wksx45hrs/week=1890hrs

Total: 1970 hours

- Block classes (Theory and skill lab experience = 2 weeks X 40 hours/week (80hours) (Theory=74hrs, skill lab=6, total=80hrs)
- Clinical practice including theory and skill lab = 42 weeks X 45 hours/week (1890 hours) Theory=126 hrs, skill lab=34hrs, Clinical= 1730 hrs

Theory=200 (74+126) hrs, Skill lab= 40 (6+34) hrs, Clinical=1730 hrs

126 hours of theory and 34 hours of skill lab learning can be integrated during clinical experience. Mastery learning and experiential learning approaches are used in training the students throughout the program. Skill lab requirements are listed in *Appendix 1*.

3. Clinical practice

Clinical Residency experience: A minimum of 45 hrs/ week is prescribed, however, it is flexible with different shifts and OFF followed by on call duty every week or fortnight.

Clinical placements

The students will be posted to the under mentioned clinical area during their training period

| S/No | Clinical area | Week | Remarks |
|------|-----------------------------------|------|---|
| 1 | Neonatal Intensive Care Unit | 12 | Postings in Own Neonatal specialty hospital/ Neonatal care units |
| 2 | Post-natal Ward | 04 | |
| 3 | KMC Ward/ Human Milk Bank | 04 | |
| 4. | Labour Room (Newborn Care Corner) | 04 | |
| 5. | OPD | 04 | |
| 6. | Neonatal Surgical Ward | 10 | |
| 7. | Reputed Neonatal centers | 04 | Attachment/visits |
| | TOTAL | 42 | |

The residency students will follow the same duty schedule as staff nurses/nursing officers with different shift duties. In addition to that, for 40 weeks 4 hours every week is dedicated for their learning that can be offered for theory (For example: faculty lecture-1hr, nursing & interdisciplinary rounds-1hr, clinical presentations, case study report, clinical assignments-1hour and skill lab practice-1hr) to cover a total of 126 hrs of theory and 34 hrs of skill lab practice. A small group research project (Research/QI) can be conducted during clinical posting applying the steps of research process and written report to be submitted.

4. Teaching Methods

Theoretical, skill lab & Clinical teaching can be done in the following methods and integrated during clinical posting

- Case/clinical presentation & Case study report
- Drug study & presentation
- Bedside clinic/Nursing rounds/ Interdisciplinary rounds
- Journal clubs/clinical seminar
- Faculty lecture & Discussion in the clinical area
- Demonstration & skill training in skill lab and at bedside
- Directed reading/Self-study
- Role play
- Symposium/group presentation
- Group research project-Research/QI
- Clinical assignments
- Parental involvement and empowerment exercise (engaging parents in care decisions of neonates to improve health outcomes using information technology) for example, discharge planning, follow up and home-based care.
- Educational visits to regional Level II & III NICU, KMC unit and Human milk banks.

5. Method of assessment

- Written test (Case/scenario based)
- Practical examination- OSCE and Observed Practical (Direct observation of actual clinical performance at real settings)
- Written assignments
- Project
- Case studies/care plans/ clinical presentation/drug study
- Clinical performance evaluation
- Completion of clinical procedural competencies and clinical requirements

For assessment guidelines refer Appendix-2

6. Clinical Logbook/Procedures Book

At the end of each clinical posting, clinical logbook (Specific procedural competencies/Clinical skills) (*Appendix 3*), clinical requirements (*Appendix 4*) and clinical experience details (*Appendix 5*) have to be signed by the concerned clinical faculty/preceptor.

FOUNDATIONS TO NEONATAL NURSING PRACTICE:

PROFESSIONALISM, COMMUNICATION, PATIENT EDUCATION & COUNSELING, CLINICAL LEADERSHIP & RESOURCE MANAGEMENT AND EVIDENCE BASED AND APPLIED RESEARCH IN NEONATAL NURSING PRACTICE

Total Theory hrs: 40

Course description: This course is designed to develop an understanding of professionalism, communication, patient education and counseling; clinical leadership and resource management and evidence based and applied research in Neonatal nursing practice.

| Unit | Time (hrs) | Learning Outcomes | Content | Teaching / Learning activities | Assessment methods |
|------|------------|---|---|--|--|
| I | 6 | Demonstrate understanding of professionalism and exhibit professionalism in the practice of neonatal nursing. | PROFESSIONALISM <ul style="list-style-type: none"> • Professionalism- meaning and elements- Accountability, Knowledgeable, visibility and ethical in neonatal nursing specialty practice • Professional values and professional behavior • INC Code of ethics, code of professional conduct and practice standards • Ethical issues related to neonatal nursing • Expanding role of Nurse – Neonatal specialty Nurse/ nurse practitioner • Professional organizations • Continuing nursing education | <ul style="list-style-type: none"> • Discussion | <ul style="list-style-type: none"> • Write about code of ethics related to Neonatal nursing |
| | | Describe medico-legal aspects of neonatal nursing | Medico-Legal Issues <ul style="list-style-type: none"> • Legislations and regulations related to Neonatal nursing • Consumer protection act • Negligence & malpractice • Medico-legal aspects • Records & reports • Legal responsibilities of Neonatal specialist nurses | <ul style="list-style-type: none"> • Lecture cum Discussion | <ul style="list-style-type: none"> • Maintain record of patients |

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| II | 12 | <p>Communicate effectively with parents of neonates, families and professional colleagues fostering mutual respect and shared decision making to enhance health outcomes.</p> <p>Educate and counsel parents and families to participate effectively in treatment and care.</p> | <p>Communication</p> <ul style="list-style-type: none"> • Channels and Techniques of communication • Breaking bad news to parents of neonates with medical & surgical disorders of poor prognosis • Culturally sensitive communication • Development of nursing care plans and records • Information technology tools in support of communication • Team communication <p>Parental & family education</p> <ul style="list-style-type: none"> • Principles of teaching and learning • Principles of health education • Assessment of informational needs and patient education • Developing patient education materials <p>Counseling</p> <ul style="list-style-type: none"> • Counseling techniques • Parent and family counseling during breaking bad news, intensive treatment, crisis intervention and end-of-life stage | <p>Module</p> <ul style="list-style-type: none"> • Lecture • Breaking bad news-Role play • Peer teaching • Counseling sessions | <ul style="list-style-type: none"> • Digital records • Conduct a group health education programme for the parents of neonates with various disorders • Prepare parental education materials on relevant topic for mass awareness |
| III | 12 | <p>Demonstrate understanding of clinical leadership and management strategies and use them in Neonatal care and settings promoting collaborative and effective teamwork.</p> <p>Prepare the Neonatal Care Units</p> | <p>Clinical Leadership & Resource management</p> <ul style="list-style-type: none"> • Leadership & Management • Elements of management of Neonatal nursing care – planning, organizing, staffing, reporting, recording and budgeting • Clinical leadership and its challenges • Delegation • Managing human resources in Neonatal units • Material management • Designing of an ideal Neonatal care unit Level II and Level III, KMC ward and Human milk banks. • Emotional intelligence and self-management skills • Working as interdisciplinary team member • Participation in making policies relevant to care of neonates • Organization of neonatal care units with various Neonatal disorders. | <ul style="list-style-type: none"> • Lecture | <ul style="list-style-type: none"> • Plan a duty roster for the junior nursing officers/ Staff nurses working in the Neonatology department/unit • Plan an ideal Neonatal care unit Level II and Level III, KMC ward and Human milk banks |

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| | | <p>or Special Newborn Care Units (SNCU).</p> <p>Conduct clinical audit and participate in quality assurance activities in Neonatal units /centres.</p> | <p>Quality Assurance programme in Neonatal units/ Centres</p> <ul style="list-style-type: none"> • Nursing audit • Nursing standards • Quality assurance | <ul style="list-style-type: none"> • Demo – Preparation of Neonatal Care unit or SNCUs. • Visit SNCU of any specialized Children Hospital • Modules - Accreditation & Practice Standards | <ul style="list-style-type: none"> • Assignment on designing of Special Neonatal Care unit/s • Develop SOPs for Neonatal wards and Special Neonatal care units |
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|----|----|--|---|--|---|
| IV | 10 | Describe research process and perform basic statistical tests Conduct research project using principles and steps of research Apply evidence based/best practices in professional practice | Evidence based and application of research <ul style="list-style-type: none"> • Introduction to nursing research and research process • Data presentation, basic statistical tests and its application • Research priorities in Neonatal nursing • Formulation of problem /question that are relevant to Neonatal nursing practice • Review of literature to identify evidence based/best practices in Neonatal nursing practice • Implementation of evidence-based interventions in daily professional practice • Ethics in research | <ul style="list-style-type: none"> • Lecture Module: <ul style="list-style-type: none"> • Writing of scientific paper | <ul style="list-style-type: none"> • Preparation of statistical data of Neonatal Department for last five years • Conduct literature review on neonatal nursing interventions /Group research project |
|----|----|--|---|--|---|

NEONATAL SPECIALTY NURSING – I

CONTEXT/ INTRODUCTION TO NEONATAL NURSING & BASIC SCIENCES APPLIED TO NEONATAL NURSING PRACTICE (Psychology & Sociology, Anatomy and Physiology, Genetics, Community health, Pharmacology, Obstetrics, Embryology, Neonatal Advance Life Support)

Theory: 50hrs & Lab10hrs

Course description: This course is designed to help students to develop understanding and in-depth knowledge regarding the context of neonatal care provision and application of basic sciences in the diagnosis and treatment of neonates suffering from various medical and surgical disorders.

T-Theory, L-Lab

| UNIT | TIME (Hrs) | LEARNING OUTCOMES | CONTENT | TEACHING/LEARNING ACTIVITIES | ASSESSMENT METHODS |
|------|------------|--|--|--|--|
| I | 2 (T) | Describe epidemiology of common neonatal disorders, risk identification and reduction strategies | <ul style="list-style-type: none"> • Epidemiology of neonatal disorders - Prevalence and statistics • Risk factors and identification • Risk reduction strategies | <ul style="list-style-type: none"> • Lecture & Discussion | <ul style="list-style-type: none"> • Presentation of statistics |

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| II | 8 (T) 2 (L) | Explain general concepts and principles of Neonatal nursing Role of Neonatal specialist nurses | Introduction to Neonatal nursing <ul style="list-style-type: none"> • Definition, concepts and principles of neonatal nursing • Attributes of a neonatal nurse. • Levels of neonatal care and role of nurse • Criteria for admission to NICU • Nursing process • Role of Neonatal specialist nurses • Scope of Neonatal nursing practice | <ul style="list-style-type: none"> • Lecture • Discussion • Visit to Level II and Level III Neonatal Care Units | <ul style="list-style-type: none"> • Visit Report |
| III | 5 (T) | Explain Psychosocial aspects in Neonatal Nursing care | Psychology <ul style="list-style-type: none"> • Individual differences • Learning, motivation, attention & perception • Emotions • Human behavior & needs in crisis • Stress & coping in crisis situations • Leadership • Communication and IPR • Attitude and humanizing care • Guidance & Counseling Sociology- <ul style="list-style-type: none"> • Social organization & community resources • Leadership roles in community. • Family and family relationship • Socio-cultural influences on child rearing | <ul style="list-style-type: none"> • Lecture cum discussion • Counseling- Review steps | <ul style="list-style-type: none"> • Conduct counseling session |
| IV | 4 (T) 2 (L) | Explain medical Surgical asepsis and infection control in Neonatal setup | Infection control in neonatal setting <ul style="list-style-type: none"> • Immunity, Infection • Principles of asepsis, sterilization & disinfection • Diagnostic test and related nurse's responsibility • Standard safety measures • Biomedical waste management • Barrier Nursing & infection control practices | <ul style="list-style-type: none"> • Lecture • Demonstration | <ul style="list-style-type: none"> • Prepare SOP for Infection control in Neonatal unit • Written assignment: Infection control practices in Neonatal unit |
| V | 8 (T) 2 (L) | Describe the basic anatomy and physiology of various systems. | Review of Applied Anatomy and Physiology- <ul style="list-style-type: none"> • Neurological system • Respiratory system • Cardiovascular system • Gastro intestinal system • Endocrine system | <ul style="list-style-type: none"> • Lecture • Self study • Demonstration at Laboratory | <ul style="list-style-type: none"> • Quiz • Short answer |

| | | | | | |
|------|----------------|---|--|--|---|
| | | | <ul style="list-style-type: none"> • Musculoskeletal system • Genitourinary system • Reproductive system • Sensory organs | | |
| VI | 6 (T) | Understand cellular basis of Neonatology. Explain genetic basis of Neonatology | Genetic basis of Neonatology <ul style="list-style-type: none"> • Development of fetus from conception to birth • Fetal circulation • Meaning of genetics and heredity • Mendelian laws of inheritance • Genetic disorders <ul style="list-style-type: none"> - Chromosomal errors - Inborn errors of metabolism - Multifactorial disorders (sickle cell anemia, thalassemia, hemophilia) • Genetic counseling & Nurses' role in genetic counseling | <ul style="list-style-type: none"> • Lecture | <ul style="list-style-type: none"> • Prepare a model of fetal circulation • Conduct Counselling session |
| VII | 3 (T) 2 (L) | Understand various health services and programmes for neonates | Community Health <ul style="list-style-type: none"> • Demography and family welfare- Definition, meaning, population trends – global and Indian • Review <ul style="list-style-type: none"> ○ Maternal and child health services and programs <ul style="list-style-type: none"> - Organization of services - CSSM/RCH - Family welfare program ○ Health Education: concepts, principles, approaches and methods | <ul style="list-style-type: none"> • Lecture • Visit to a District Hospital • Demonstration | <ul style="list-style-type: none"> • Visit report • Prepare, plan and give health education to the parents and families of neonates |
| VIII | 6 (T) | Explain pharmacotherapy for different neonatal medical and surgical disorders | Applied Pharmacology <ul style="list-style-type: none"> • Analgesics/ Anti-inflammatory agents • Antibiotics, antiseptics • Drug reaction & toxicity • Drugs used in neonatal resuscitation • Blood and blood components • Principles of drug administration role of nurses and care of drugs | <ul style="list-style-type: none"> • Lecture cum Discussion • Drug presentation | <ul style="list-style-type: none"> • Drug study |
| IX | 8 (T) 2 (L) | Explain Feto-placental physiology. Understanding Perinatology and care of normal newborn and High risk newborn in labour room | Obstetrics Review- <ul style="list-style-type: none"> • Pregnancy- <ul style="list-style-type: none"> - Normal & High risk - Obstetrical disorders • Labor- Normal & Abnormal <ul style="list-style-type: none"> - Risk factors for neonates in antenatal and intra-natal period • Normal newborn – immediate care in labor ward | <ul style="list-style-type: none"> • Lecture cum Discussion • Case discussion/ presentation | <ul style="list-style-type: none"> • Case study evaluation • Assessment of skills with check list • Drug Study |

| | | | | | |
|--|--|--|--|--|--|
| | | | <ul style="list-style-type: none"> • High risk neonate – IUGR, post maturity, babies of high risk mothers • Drugs used in obstetrics and their implications for the fetus/ neonate | <ul style="list-style-type: none"> • Supervised Clinical practice | |
|--|--|--|--|--|--|

NEONATAL SPECIALTY NURSING – II

NURSING MANAGEMENT OF CLINICAL CONDITIONS including Assessment, Diagnosis, Treatment and Specialized Interventions, Patient Safety and Quality and Specialty/ Illness Specific Considerations (Supportive Care/Palliative Care/Rehabilitation)

Theory: 110 hrs & Lab – 30 hrs

Course description: This course is designed to help students to develop knowledge and competencies required for assessment, diagnosis, treatment, nursing management, and supportive /palliative care to patients with various Neonatal disorders

| UNIT | TIME (Hours) | LEARNING OUTCOMES | CONTENT | TEACHING/LEARNING ACTIVITIES | ASSESSMENT METHODS |
|------|-----------------|--|--|--|---|
| I | 14 (T) 6 (L) | <p>Explain and demonstrate skill in assessment of neonates</p> <p>Understanding normal adaptation and essential care of neonates</p> | <p>Normal Newborn</p> <ul style="list-style-type: none"> - Definitions & terminology - Normal mother-baby relationship. - Examination and Assessment of newborn - Recognition of danger signs in a newborn - Common minor neonatal disorders - Care of normal newborns - Immediate care - Routine care – Transition care - Daily care – Home care - Physiological adaptation of the neonate - Thermoregulation & prevention of hypothermia - Kangaroo Mother Care (KMC) | <ul style="list-style-type: none"> • Lecture cum discussion • Demonstration on immediate care of newborn. • Demonstrate the correct positioning and Care during KMC | <ul style="list-style-type: none"> • Perform assessment of neonates in NICU and Neonatal wards • Write assessment report • Assessment of skills with the help of check-list. |
| II | 16 (T) 6 (L) | <p>Understanding various methods of feeding and demonstrating correct methods of feeding the neonates</p> | <p>Methods of feeding neonates</p> <ul style="list-style-type: none"> • Physiology of breast and milk secretion • Principles of feeding & nutrition • Feeding of normal babies • Breast feeding & maintenance of lactation • Managing breast feeding problems • Feeding of LBW babies • Artificial feeding – Enteral, parenteral, Katori spoon, Gavage feeding • Total parenteral Nutrition (TPN) | <ul style="list-style-type: none"> • FBNC module • (oral drills, videos, self - evaluation exercises) • Demonstration | <ul style="list-style-type: none"> • Assessment of skills with Checklist • Return demonstration on patients |

| | | | | | |
|-----|-----------------|---|---|--|--|
| | | | <ul style="list-style-type: none"> • Fluid & electrolyte balance & Fluid & electrolyte therapy | | |
| III | 14 (T) 4 (L) | Develop skills in caring for Low birth weight babies | <p>Caring for Low birth weight baby</p> <ul style="list-style-type: none"> - Types of LBW - Etiology - Identification of preterm & small for date babies - Problems of preterm & small for date babies • Management: Principles, thermoregulation, feeding, monitoring, transportation, management of specific illnesses. | <ul style="list-style-type: none"> • Pre-term Care package | <ul style="list-style-type: none"> • Self-assessment • Write recent evidences in treating Low Birth weight newborns |
| IV | 24 (T) 3 (L) | Describe etiology, pathophysiology, clinical manifestations, diagnosis and management of various medical disorders of neonates | <p>Sick Neonate</p> <ul style="list-style-type: none"> • Neonatal monitoring & observations • Danger signs in newborns • Respiratory problems: Asphyxia neonatorum, apnea, Respiratory Distress Syndrome (RDS), meconium aspiration syndrome, respiratory infections • Neonatal sepsis • Neonatal jaundice • Convulsions & neurological disorders • Metabolic disorders • Necrotizing Enteroocolitis (NEC) • HIV: transmission & Anti-Retroviral (ARV) Therapy • Emergency treatment of neonatal problems | <ul style="list-style-type: none"> • Lecture cum Discussion • Bed-side Teaching • Discussion of Case scenarios • Group Presentations | <ul style="list-style-type: none"> • Nursing clinic/rounds • Case presentation • Case discussion |
| V | 22 (T) 3 (L) | Describe etiology, pathophysiology, clinical manifestations, diagnosis and management of various surgical disorders of neonates | <p>Management of various surgical disorders of neonates</p> <ul style="list-style-type: none"> • Birth trauma • Congenital malformations: Identification & management • Pre & Post-operative nursing care of a neonate with various surgical procedures: <ul style="list-style-type: none"> - Cleft lip & palate - Esophageal atresia and Tracheo-esophageal fistula - Congenital hypertrophic pyloric stenosis - Hirschsprungs' disease - Imperforated anus - Recto vaginal fistula (RVF) - Spina bifida (Meningomyelocele) - Hydrocephalus - Exstrophy of bladder - Congenital heart disease | <ul style="list-style-type: none"> • Lecture & discussion • Seminar | <ul style="list-style-type: none"> • Write a case study • Develop nursing standards on management of patients undergoing surgery • Conduct Health Education session for the parents of neonates with congenital malformations |

| | | | | | |
|------|-----------------|--|---|--|---|
| VI | 3 (T) 2 (L) | Perform neonatal Resuscitation | Neonatal advance life support <ul style="list-style-type: none"> • Routine care • Initial steps • Bag & mask ventilation • Chest compression • Endotracheal intubation • Drugs | <ul style="list-style-type: none"> • Workshop on neonatal resuscitation NRP module, • Demonstration & Practice Session | <ul style="list-style-type: none"> • Assessment of skills with check list |
| VII | 14 (T) 6 (L) | Understand and demonstrate the skills in handling various equipment and conducting neonatal procedures | Neonatal procedures and handling special equipment <ul style="list-style-type: none"> • Neonatal procedures • Principles of drug therapy, administration of drugs, commonly used drugs • Principles of temperature maintenance & its clinical disorders • Collection of specimens • Assisting with procedures & therapies • Use & maintenance of equipment • Neonatal records • Neonatal monitoring • Admission & transfer of sick neonates | <ul style="list-style-type: none"> • Demonstration • Skilled videos | <ul style="list-style-type: none"> • Return demonstration • Complete procedural requirements • Conducting unit audit |
| VIII | 3 (T) | Describe the impact of birth of a sick/abnormal baby in the family | Impact of birth of a sick/abnormal baby on the family <ul style="list-style-type: none"> • Reaction of parents to the admission of their baby to NICU • Grief process • Causes, effects & management of stress. • The personal & social problems of the family. | <ul style="list-style-type: none"> • Discussion and demonstration | <ul style="list-style-type: none"> • Critical thinking and decision making |

PRACTICUM (Skill lab & Clinical)

Total Hours: 1770 hrs (40+1730)

(Skill Lab-40 hrs and Clinical-1730 hrs)

Practice Competencies:

At the end of the program students will be able to:

1. Assess gestational age as well as physical and behavioral states of neonates.
2. Monitor and interpret vital signs.
3. Measure weight, height as well as head and chest circumferences.
4. Provide immediate and daily care for neonates.
5. Apply the nursing process in caring for normal and sick neonates.
6. Assists in administration of medications via different routes.
7. Follow the universal infection control precautions.
8. Encourage mothers to breast feed whenever possible.
9. Maintain optimal nutrition for neonates either enteral or parenteral.

10. Encourage and facilitate parent child bonding.
11. Assess and manage neonatal pain.
12. Record and report any detected abnormality.
13. Prepare parents for discharge and home care.
14. Provide health education concerning child care & follow up
15. Documents findings, nursing care & abnormalities.

CLINICAL POSTINGS

| Areas | Duration (week) | Clinical Learning outcomes | Skills/procedural competencies | Assignments/ | Assessment methods |
|------------------------------|-----------------|--|--|---|---|
| Neonatal Intensive Care Unit | 12 weeks | Provide nursing care for patients suffering from Neonatal disorders. | Assessment of Neonates: <ul style="list-style-type: none"> • Identification & assessment of risk factors • Gestation age assessment • Detection of life threatening congenital abnormalities • Admission & discharge of neonates. • Monitoring of Neonates – clinically & with monitors, <ul style="list-style-type: none"> - CRT (Capillary Refill Time) - assessment of jaundice - ECG. • Setting of Ventilators • Phototherapy • Use of Radiant warmer and incubators • Centrifuge machine • Flux meter, Bilimeter, Refractometer • Laminar Flow • Procedures for prevention of infections: <ul style="list-style-type: none"> - Hand washing & disinfections & sterilization - surveillance - Fumigation. | <ul style="list-style-type: none"> • Neonatal assessment report • Case study report | <ul style="list-style-type: none"> • Clinical evaluation • Case study and NICU visit report |
| Neonatal Surgical Ward | 10 weeks | Perform pre and post-operative care for neonates undergoing surgery Perform counseling of | <ul style="list-style-type: none"> • Preparation of neonates for surgery • Perform postoperative care • Airway Management | <ul style="list-style-type: none"> • Health Talk | <ul style="list-style-type: none"> • Clinical evaluation • Case study |

| | | | | | |
|-----------------------------------|----------|--|---|--|---|
| | | parents and family members. | <ul style="list-style-type: none"> • Application of Oropharyngeal Airway • Oxygen therapy • CPAP (Continuous Positive Airway Pressure) • Care of Tracheostomy • Endotracheal Intubation • OG (Orogastric) tube insertion • gavage feeding, • Gastric Lavage. • Administration of Drugs: <ul style="list-style-type: none"> - I/M, - IV injection, - IV Cannulation & fixation - Infusion pump, - Calculation of dosages - Neonatal formulation of drugs - use of tuberculin /insulin syringes - Monitoring fluid therapy - Blood transfusion. • Collection of specimens. • Parental Guidance and Counselling | | |
| Labour Room (Newborn Care Corner) | 04 weeks | Provide immediate care to newborn and perform Neonatal resuscitation to those in need. | <ul style="list-style-type: none"> • Neonatal Resuscitation • Immediate Care of Newborn • APGAR Score • Weighing the baby • Administration of Vitamin K • KMC • Skin to skin contact • Breast feeding | <ul style="list-style-type: none"> • Nursing Assessment | <ul style="list-style-type: none"> • Clinical Evaluation |

| | | | | | |
|---------------------------------|----------|---|--|---|--|
| Post- natal ward | 04 weeks | Provide nursing care for neonates and mothers of neonates admitted in Post-natal ward | <ul style="list-style-type: none"> • Anthropometric assessment • Newborn examination • Feeding-management of <ul style="list-style-type: none"> - Breast feeding & Breast feeding counseling - artificial feeding, - TPN • Thermoregulation • Axillary temperature, • Management of thermoregulation & control. • Diet planning • Counseling for parents | <ul style="list-style-type: none"> • Health talk • Case presentation | <ul style="list-style-type: none"> • Clinical evaluation |
| KMC Ward/ Human Milk Bank | 04 weeks | Prepare neonates and mothers/parents for KMC | <ul style="list-style-type: none"> • Kangaroo Mother Care (KMC) • Expression of breast milk • Health education to patients | <ul style="list-style-type: none"> • Drug study • Health Talk | <ul style="list-style-type: none"> • Clinical Evaluation • Evaluation of health talk |
| OPD | 04 weeks | Assist in examination of the neonates with various disorders Assist in diagnostic procedures | <ul style="list-style-type: none"> • History taking • Physical examination • Health education • Observing and assisting in- <ul style="list-style-type: none"> - Echocardiogram - Ultrasound head - ROP screening (Retinopathy of prematurity) | <ul style="list-style-type: none"> • Health assessment report– history taking and physical examination | <ul style="list-style-type: none"> • Clinical Evaluation |

Appendix 1
SKILL LAB REQUIREMENTS

Note: In addition to the basic skill lab requirement of College of Nursing, the following are necessary.

| S. No. | SKILL LAB REQUIREMENT | No/s | SKILL |
|--------|---|------|---|
| 1. | Newborn Mannequin having Squeeze bulbs for simulation of cord pulsation, spontaneous breathing, auscultation of heart sound and cry | 02 | Essential New Born Care |
| 2. | External umbilical cords | 04 | |
| 3. | Umbilical ties | 06 | |
| 4. | Baby sheets or towels | 04 | |
| 5. | Head cap | 02 | |
| 6. | Neonatal mucus sucker (easy to open, clean, autoclavable and reusable) | 02 | |
| 7. | Training Stethoscope | 02 | |
| 8. | Normal New Born Baby Mannequin- of normal weight with moving head, flexible upper and lower limbs | 02 | Kangaroo Mother Care |
| 9. | Baby cap, nappy, mittens, socks | 02 | |
| 10. | Kangaroo Mother Care (KMC) dress / shawl | 02 | |
| 11. | Bed sheet (for wrapping the mother and baby) | 02 | |
| 12. | Digital Thermometer | 10 | Thermoregulation |
| 13. | Radiant Warmer- | | |
| 14. | Mattress | 03 | |
| 15. | Skin temperature probe (with connection cable) | 06 | |
| 16. | Spare heating element | 03 | |
| 17. | Spare set of fuses | 10 | |
| 18. | Power cord and fittings with at least 10 meters wire | 01 | |
| 19. | Basic Nursing care articles | - | Basic and advance nursing care |
| 20. | Advance Nursing care articles | - | |
| 21. | Bowls with lid 10 cm | 10 | Instruments for various procedures |
| 22. | Bowls 10cm | 10 | |
| 23. | Instrument Tray with lid | 10 | |
| 24. | Plain Artery Forceps | 10 | |
| 25. | Toothed Artery Forceps | 10 | |
| 26. | Plain Dissecting Forceps | 10 | |
| 27. | Toothed Dissecting Forceps | 10 | |
| 28. | Sponge holding Forceps | 10 | |
| 29. | Towel clip | 20 | |
| 30. | | | |

| | | | |
|-----|---|----|-------------------------------------|
| 31. | Stethoscope with neonatal chest piece | 10 | Monitoring Equipment in NICU |
| 32. | Non-invasive BP monitors | 5 | |
| 33. | Pulse oximeter | 5 | |
| 34. | Room thermometers | 5 | |
| 35. | Mechanical weighing scale | 5 | |
| 36. | Electronic weighing scale | 5 | |
| 37. | Intubation head | 5 | |
| 38. | Self-inflating bag with mask of preterm & term newborns | 5 | Resuscitation equipments |
| 39. | Foot operated suction apparatus/mucus trap | 5 | |
| 40. | Oxygen cylinders | 5 | |
| 41. | O2 concentrators | 5 | |
| 42. | Laryngoscope | 5 | |

| | | | |
|-----|--|---------|---|
| 43. | Paediatric instrument set | 5 | Umbilical venous catheterization |
| 44. | Umbilical catheters: Fg 5.0> 1000 gram infant or Size Fg 5 feeding tube if umbilical catheters are not available | 10 each | |
| 45. | Intravenous cannula: size Fg 24 | 10 | Peripheral intravenous cannulation |
| 46. | Intra-osseous needle Fg 18 | 10 | |
| 47. | Skin preparation solution | 2 | |
| 48. | Three way tap and extension tubing primed with 0.9% sodium chloride | 5 | |
| 49. | Arm board | 5 | Drug and fluid administration |
| 50. | Syringes: 2 mL, 5 mL, 10 mL & 20 ML | 10 each | |
| 51. | Needles: Fg 19, Fg 21, Fg 23, Fg 25 and blunt drawing up needles | 10 each | |
| 52. | Adrenaline 1: 10,000 concentration (0.1 mg/mL) | 5 | |
| 53. | Volume expanders: 0.9% sodium chloride | 5 | |
| 54. | I/V Cannula (24 G, 26 G) | 5 each | Blood Transfusion |
| 55. | BT Set | 20 | |
| 56. | Normal Saline | 20 | |
| 57. | Blood/ Blood component simulator | 20 | |
| 58. | Blood bag Carriage/ container | 05 | |
| 59. | Intravenous cannula 16/18 F | 30 | |
| 60. | IV simulator arm for transfusion | 01 | Infection Control |
| 61. | Standard safety Protection Devices | 20Sets | |
| 62. | Nutrition Lab for preparation of diet | 01 | |
| 63. | Barrier Nursing Unit | 01 | |
| 64. | Hand washing area | 01 | |
| 65. | Biomedical waste disposal unit | 01 | Recording |
| 66. | Records (Consent Form, Clinical charts, Nurses Note) | - | |
| 67. | LCD TV | 01 | Video assisted Demonstration |
| 68. | Health Teaching modules for parents | - | Health Teaching |

APPENDIX 2 ASSESSMENT GUIDELINES (THEORY & PRACTICUM)

I. THEORY A. INTERNAL

NEONATAL SPECIALTY NURSING (Part I-Neonatal Nursing I Including Foundations & Part II- Neonatal Nursing II) –TOTAL: 25 marks

- Test papers & Quiz -10 marks
- Written assignments -10 marks (Code and ethics relevant to Neonatal nursing practice, literature review on EBP in Neonatal nursing/ Infection control practices, Nutritional care of neonates)
- Group project: 5 marks

B. EXTERNAL/FINAL

NEONATAL SPECIALTY NURSING (Part I-Neonatal Nursing I Including Foundations & Part II- Neonatal Nursing II)-TOTAL: 75 marks

Part I – 35 marks (Essay type 1 x 15 marks=15, Short answers 4 x 4 marks=16, Very short answers 2x2 marks=4) and Part II – 40 marks (Essay 1x15 marks = 15, Short answers 5x4marks=20, Very short answers 5x1 mark=5)

II. PRACTICUM

A. INTERNAL-75 marks

- OSCE – 25 marks (End of posting OSCE-10+Internal end of year OSCE-15)
- Other Practical: 50 marks
- a) Practical assignments – 20 marks (Clinical presentation & Case study report-5, Counseling report/visit report-5, Drug study report-5, and Health talk-5)
- b) Completion of procedural competencies and clinical requirements: 5marks
- c) Continuous clinical evaluation of clinical performance: 5 marks
- d) Final Observed practical (Actual performance in clinicals)- 20

B. EXTERNAL-150 marks

OSCE- 50 marks, Observed practical- 100 marks

Detailed guidelines given in Guidebook

**APPENDIX 3
CLINICAL LOGBOOK FOR PBD IN NEONATAL SPECIALTY NURSING PROGRAM
(Procedural competencies/Nursing Skills)**

| S.No. | SPECIFIC COMPETENCIES/SKILLS | NUMBER PERFORMED/ASSISTED/OBSERVED (P/A/O) | DATE & SIGNATURE OF THE FACULTY/ PRECEPTOR |
|----------|---|--|--|
| I | FOUNDATIONS TO NEONATAL NURSING | | |
| 1 | Preparation of patient education materials | P | |
| 2 | Patient education plan for teaching patients with hematologic disorders | P | |
| 3 | Preparation of duty roster for nursing officers/staff nurses | P | |
| 4 | Writing literature review/systematic review (Identify evidence based nursing interventions/practices) | P | |
| 5 | Preparation of a manuscript for publication/paper presentation | P | |
| 6 | Group research project | P | |

| S.No. | SPECIFIC COMPETENCIES/SKILLS | NUMBER PERFORMED/ASSISTED/OBSERVED (P/A/O) | DATE & SIGNATURE OF THE FACULTY/ PRECEPTOR |
|--------------|---|---|---|
| | Topic: | | |
| II | NEONATAL NURSING SPECIALTY | | |
| 1 | HEALTH ASSESSMENT | | |
| 1.1 | History taking | P | |
| 1.2 | Neonatal examination | P | |
| 2 | DIAGNOSTIC PROCEDURES | | |
| 2.1 | Echocardiogram, Ultrasound head | O | |
| 2.2 | ROP screening (Retinopathy of prematurity) | A | |
| 2.3 | Advanced neonatal life support | A | |
| 2.4 | Lumbar Puncture | A | |
| 2.5 | Arterial Blood gas | A | |
| 2.6 | ECG Recording | A | |
| 2.7 | Arterial B P monitoring | A | |
| 3 | NEONATAL INTENSIVE CARE UNIT | | |
| 3.1 | Gestation age assessment | P | |
| 3.2 | Detection of life threatening congenital abnormalities | P | |
| 3.3 | Assessment of jaundice | P | |
| 3.4 | Setting of Ventilators | P | |
| 3.5 | Use of Radiant warmer and incubators, Phototherapy | P | |
| 3.6 | Use of Laminar flow | P | |
| 3.7 | Procedures for prevention of infections: - Hand washing - disinfections & sterilization - surveillance - fumigation | P | |
| 3.8 | TPN | P | |
| 4 | NEONATAL SURGICAL WARD | | |
| 4.1 | Oxygen therapy | P | |
| 4.2 | CPAP (Continuous Positive Airway Pressure) | P | |

| S.No. | SPECIFIC COMPETENCIES/SKILLS | NUMBER PERFORMED/ASSISTED/OBSERVED (P/A/O) | DATE & SIGNATURE OF THE FACULTY/ PRECEPTOR |
|-------|--|--|--|
| 4.3 | Care of Tracheostomy | P | |
| 4.4 | Endotracheal Intubation | A | |
| 4.5 | OG (Orogastric) tube insertion | P | |
| 4.6 | Gavage feeding | P | |
| 4.7 | Gastric Lavage | P | |
| 4.8 | Administration of Drugs through various routes | P | |
| 4.9 | IV Cannulation & fixation | P | |
| 4.10 | Infusion pump | P | |
| 4.11 | Calculation of dosages | P | |
| 4.12 | Blood transfusion | P | |
| 4.13 | Collection of specimens | P | |
| 5. | LABOUR ROOM (NEWBORN CARE CORNER) | | |
| 5.1 | Neonatal Resuscitation | A | |
| 5.2 | Immediate Care of Newborn | P | |
| 5.3 | APGAR Scoring | P | |
| 5.4 | Weighing the baby | P | |
| 5.5 | Administration of Vitamin K | P | |
| 5.6 | KMC | P | |
| 5.7 | Skin to skin contact | P | |
| 5.8 | Breast feeding | P | |
| 6. | POST- NATAL WARD | | |
| 6.1 | Anthropometric assessment | P | |
| 6.2 | Newborn examination | P | |
| 6.3 | Breast feeding & Breast-feeding counseling | P | |
| 6.4 | Artificial feeding | P | |

* - When the student is found competent to perform the skill, the faculty will sign it.

Students: Students are expected to perform the listed skills/competencies many times until they reach level 3 competency, after which the faculty signs against each competency.

Faculty: Must ensure that the signature is given for each competency only after they reach level 3.

- Level 3 competency denotes that the student is able to perform that competency without supervision
- Level 2 Competency denotes that the student is able to perform each competency with supervision
- Level 1 competency denotes that the student is not able to perform that competency/skill even with supervision

**APPENDIX 4
CLINICAL REQUIREMENTS**

| S.No. | CLINICAL REQUIREMENT | DATE | SIGNATURE OF THE FACULTY/PRECEPTOR |
|--------------|---|-------------|---|
| 1 | <i>Health talk (OPD, Ward/ KMC Ward)</i> | | |
| 1.1 | <i>Topic:</i> | | |
| 1.2 | <i>Topic</i> | | |
| 2 | <i>Counseling patients & relatives</i> Counseling report-1 | | |
| 3 | <i>Health Assessment</i> | | |
| 3.1 | Gestational Age Assessment History & Neonatal Examination (Two written reports) 3.1.1. Normal Newborn 3.1.2. Sick Newborn | | |
| 4 | <i>Journal Club/ clinical seminar</i> <i>Topic:</i> | | |
| 5 | <i>Case study/Clinical presentation & Report –Medical Neonatal ward-1 & Surgical Neonatal Ward-1 (Nursing /interdisciplinary rounds)</i> | | |
| 5.1 | Name of clinical condition: | | |
| 5.2 | Name of clinical condition: | | |
| 6 | Drug study, presentation and report (Two written reports for submission) | | |
| 6.1 | Drug name: | | |
| 6.2 | | | |
| 6.3 | | | |
| 6.4 | | | |
| 7 | <i>Designing NICU/ KMC Ward</i> | | |
| 8 | <i>Visits –reports</i> | | |

