2020 CANDIDATE GUIDE
MATERNAL NEWBORN NURSING
Congratulations on taking the next step in your career—earning your RNC-MNN certification!

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ABOUT THIS GUIDE
This guide lists fees, general policies and provides information that will help you prepare for the examination including sample questions to familiarize you with question format, competency statements and examination content in outline form. Study resources are also suggested for your review. It is recommended that you familiarize yourself with the information in this guide.

NCC examinations are offered in several different test administrations options. The NCC publication Guide to Testing Methods will explain the different rules and policies based on how you are taking the examination. Please download this publication from the NCC website and review the exam administration options. It should answer your questions about the NCC examination process.

If you have other questions, please feel free to contact NCC through the NCC website at NCCwebsite.org.

NCC'S PHILOSOPHY OF TESTING
Certification is an evaluative process that provides the opportunity for nurses in the obstetric, gynecologic and/or neonatal specialty to demonstrate publicly what they know and to be recognized for the special knowledge they possess. The NCC certification carries no licensing authority. The ability to practice as a nurse is regulated by the state boards of nursing, and while certification may be required in some states for advanced practice roles, NCC has no regulatory power to require states to recognize NCC certification for this purpose. Practice and educational standards are reflected in the certification process, but the responsibility for development of such standards rests with the professional nursing specialty organizations and the nursing educational community. NCC encourages individual nurses to seek out information about how certification relates to state licensure requirements, program accreditation of the educational institutions attended, the educational and practice standards of national nursing specialty organizations, and employment expectations.

IT IS IMPORTANT TO READ THE INFORMATION IN THIS GUIDE. IT WILL ANSWER YOUR QUESTIONS AND WILL EXPLAIN ALL POLICIES TO WHICH YOU WILL BE SUBJECT.
FEES & GENERAL POLICIES

EXAMINATION AND RELATED FEES

EXAMINATION FEES*
Computer Exam Fees are $325 which includes the non-refundable $50 application fee.

Professional Education Center (PEC) Exam Fees are $275 which includes the non-refundable $50 application fee.

Institutional Certification Program (ICP) Exam Fees are pre-paid by your institution.

*Examination fees are subject to change.

CHANGE REQUEST
Candidates who cannot take their currently scheduled examination, have missed their testing date or need to take a different exam - can request a change for a fee of $125. Details are on the NCC website.

WITHDRAWAL FEE
A computer testing candidate who withdraws from testing is subject to a $165 withdrawal fee. The candidate will receive $160 of their $325 payment, minus any outstanding charges. PEC and ICP candidates cannot withdraw.

RETEST FEE
Retest candidates must pay full application and examination fees. There are no discounts and they must wait at least 90 days from the day they receive their official exam results before resubmitting an application for testing (this date is provided in the results notification). Certifications exams of the same specialty can only be taken TWICE in a calendar year for the same candidate.

SUBSTITUTION FEE
Candidate substitutions are not allowed for any reason.

THIRD PARTY PAYMENTS
Applicant fees paid by third parties will be reimbursed to the third party in the event the applicant is determined ineligible or withdraws within the specified time. Reimbursement will be in accordance with stated refund policies.

NO REFUNDS WILL BE CONSIDERED FOR ANY CANDIDATE
• who has taken an examination
• who is not successful in achieving certification
• who failed to take the exam via computer within the 90-day testing window and did not submit a change request within stated time frames
• who is unable to schedule their exam and is beyond the first 30 days of their eligibility window
PAYMENT INFORMATION

- All applications are subject to a nonrefundable application fee.
- All fees are nonrefundable except where otherwise noted.
- Payments can be made by credit card (Visa, American Express and MasterCard only).
- Payments can be made by check: bank routing number and account number required.
- For payments made by third parties, any refund reimbursement will be issued to the third party and not to the applicant.
- All payments must be in US funds.
- NCC does not accept debit cards or split payments (part check and part credit card).
- Exam fees can only be submitted online at the NCC website. Applications will not be accepted by mail, phone or fax.
- NCC will accept group payments for certification exams from institutions. Details are on the NCC website.

OTHER NON-REFUNDABLE PAYMENT RELATED FEES

INCOMPLETE APPLICATION FEE

All incomplete applications (those applications submitted with missing information, containing incomplete or incorrect information, missing required licensure information and upload, or do not include full fee payment) are subject to a non-refundable $30 reprocessing fee upon the submission of proper documentation.

LICENSE VERIFICATION FEE

If licensure information is requested requiring an additional submission the candidate will have 2 weeks to provide the license with all the correct information and pay the non-refundable $30 reprocessing fee. If this is not provided within the two weeks, NCC will attempt to verify the license and a $50 verification fee will be added to your account as arrears. If the candidate is deemed eligible at that point, they may schedule and sit for the exam. However, the exam will not be scored until such arrears are resolved. If NCC is unable to verify the license, you will be found ineligible and you will be refunded your registration fee minus $100 ($50 non-refundable application fee and $50 non-refundable license verification fee).

RETURNED CHECKS AND CREDIT CARD CHARGEBACK FEE

A $30 fee will be assessed for any check or e-check returned or a credit card payment disputed for any reason. Remittance thereafter of all fees and applications must be in the form requested by NCC.

Certification will be revoked or withheld if a returned check or a chargeback request on a credit card payment results in loss of income to NCC and the monies are not recovered in an alternate payment. Fees received at any time will first be applied to any unpaid prior certification/special fees.
VERIFICATION OF CERTIFICATION
Third party notification of status will not be released without authorization from the RNC. A $30 fee is required for any third party notification or issuance of duplicates of test results reports. Verification requests can only be submitted after official written results have been received in the mail.

Verification requests can only be made via the online verification system on the NCC website NCC does not issue verifications via the mail or fax.

GENERAL POLICIES

UNSUCCESSFUL CANDIDATES
A candidate who sits for the examination and does not receive a passing score is not eligible for any refund nor for any credit on any later NCC exam.

EXAM CATEGORY CHANGES
You can only request an exam category change by completing a Change Request Form on the NCC website and submitting with non-refundable payment of $125. Candidates are only allowed one change option (e.g. if you reschedule your exam date, you will not be able to change your exam category). All change requests must be approved by NCC. There will be no refund of original or Change Request fees. Eligibility must be re-established for the new exam category, and additional documentation and fees may be required. The time to consider eligibility for the new category will count toward the original 90-day window assigned to take the examination. Examinees must take the exam for which they have been determined eligible. No changes will be permitted on examination day. If a candidate knowingly or unknowingly takes an examination other than the one she/he was found eligible to take, the examination will not be scored. No refunds will be allowed, and all fee policies will apply if the candidate reapplies for an examination.

RETEST POLICY
You may retake the examination if you do not pass. You must reapply, submit all applicable fees and documentation, and re-establish eligibility according to the appropriate deadlines. There is no limit to the number of times you may retake the examination however candidates must wait at least 90 days from the day they receive their official exam results before making application to retake the examination by computer or paper and pencil (this date is provided in the results notification). All submission deadlines for application for paper and pencil testing must be met. No accommodation will be given to those who are retesting via paper and pencil mode if they cannot meet application deadline because of the 90 day wait rule. The maximum number of times a candidate can take the same NCC test in a calendar year is two.

AMERICANS WITH DISABILITIES ACT
Special testing accommodations will be provided pursuant to the Americans with Disabilities Act. Download the special accommodations request form from the website. The request must be signed by a clinician, physician, or another qualified specialist with training and experience appropriate to diagnose and treat the specified disability. The completed form must be submitted with your online certification application.
REVIEW COURSES AND MATERIALS
NCC does not offer or sponsor review courses or review materials for its certification examinations. Examination candidates should view any course of study as being independent of NCC. You should carefully examine the merits of any individual exam preparation offering before you participate.

GENERAL POLICIES (CONTINUED)

TEST DISCLOSURE
NCC does not make test questions available for review. Because test questions may be used for more than one examination administration, distributing this information would compromise the security of the test questions and would increase the cost of certification if the questions had to be replaced each year.

APPEALS PROCEDURE
Any request to waive any policy of the NCC Board of Directors relative to eligibility, administration, examination content issues, or certification maintenance must be received in writing within 60 days of the dispute. All requests should be sent to the attention of the NCC President at nccpresident@nccnet.org. The correspondence should contain a detailed account as to why the NCC policy should be waived or the candidate’s status should be changed. Such requests are referred to the NCC Policy Review Committee of the Board of Directors. All decisions will be provided in writing. Cases not resolved by the Policy Review Committee will be referred to the full Board of Directors.

NONDISCRIMINATION
It is the policy of NCC that no individual will be excluded from the examinations as a result of age, sex, race, religion, national origin, ethnicity, disability, marital status, sexual orientation, military status or gender identity.

REVOCATION
Your certification may be revoked for falsifying any information submitted to determine eligibility to take the certification examination or for maintaining certification, for losing your license to practice nursing, or for failing to pay designated certification or maintenance fees.

ANSWER SHEET REVIEW OF PAPER AND PENCIL EXAMINATIONS
All answer sheets are scored electronically. If you believe there might be a discrepancy in your results, you may request a Hand Score (a review of your answer sheet) for a fee of $55. This request must be submitted online at the NCC website within 60 days of the exam date. The “Submit Hand Scoring Request” link can be found in your account under “failed certification”. You will be notified of the results by email.

RETENTION OF ANSWER SHEETS AND EXAMINATION BOOKLETS
All answer sheets are kept for one year from the date of the examination. Examination booklets used by the candidates are kept for six months from the date of the examination. Computer answer strings are kept for at least one year from the date of the examination.
ABOUT THE EXAM

TIMED EXAMINATION
Three (3) hours are allotted to complete the examination.

EXAM FORMAT
The Maternal Newborn Nursing examination consists of up to 175 test questions. 150 are scored and the remainder are embedded in the exam as pretest items. The pretest items do not count toward the examinee’s final results.
- There is one question format used for all NCC examinations.
- Each question has a premise (stem) and three alternative answers.
- The answer options are alphabetized by the first word in each answer option to randomize the answers.
- Computer tests are delivered in a different random order for each candidate.
- Questions will test both basic knowledge and application of knowledge.
- Questions that contain laboratory data will show results in conventional units of measure with international units in parentheses.
- Drugs are listed in both generic and trade names where appropriate.

EXAMINATION CONTENT DEVELOPMENT
The development of NCC certification involves many individuals and involves a meticulous process of review. There are three major groups that contribute to the test development process:

ITEM WRITERS:
RNCs and others identified with special expertise have the responsibility of drafting test items per designated assignment for review by the content team and expert reviewers. Item writers are solicited from the NCC certified population, by recommendations or through the volunteer portal.

REVIEWERS:
Reviewers are RNCs or other designated experts who assist the content teams in review of test items developed by the item writers. Reviewers are responsible for reviewing items for content relevance and confirming that references cited for the questions support the items as written.

CONTENT TEAMS:
Content team members are experienced practitioners and are appointed on an annual basis by the NCC President. Content teams are solicited from the NCC certified population, by recommendations or through the volunteer portal. To see the current membership composition of the Content Team responsible for the Maternal Newborn Nursing examination, please visit the NCC website under the section on NCC Leadership.

Content team members are RNCs or other identified experts who:
- develop and update the test outline and competency statements
- review test items developed by item writers
- review item statistics from exam administrations and pretest examinations
- approve the exam forms to be administered
- review item banks

In addition, NCC uses volunteers for standard setting and content validation studies.
The above chart shows the percentage distribution of questions on the Maternal Newborn Nursing exam across the major content categories covered on the examination. The major focus of the examination is on Maternal and Newborn Assessment and Management sections with both these areas having the most emphasis. Lesser emphasis is on Factors that affect Maternal and Neonatal Outcomes and Professional Issues having the least number of questions assigned to this content category.
EXAMINATION CONTENT
FOR TESTS TAKEN BEFORE APRIL 1, 2020

EXAM OUTLINE

Focus of the examination will primarily be on the childbearing family from birth to six weeks and will encompass hospital and community settings.

Percentages identified for the topic areas represent a range of the number of test questions assigned to each content area and therefore might total more or less than 100 percent. These ranges do not necessarily reflect the content of future exams.

10.00 Factors Affecting Maternal/Neonatal Outcomes (10%)
• Antenatal Factors
• Intrapartal Factors

11.00 Maternal Assessment and Management in the Postpartum Period (44%)
• Physiologic Changes & Physical Assessment (including Laboratory Values)
• Nursing Care and Education
• Lactation and Newborn Feeding
• Family Dynamics after Childbirth
• Complications

12.00 Newborn Assessment and Management (44%)
• Transition to Extrauterine Life
• Physiologic Changes and Physical Assessment (including Laboratory Values)
• Nursing Care and Family Education
• Complications (Recognition and Stabilization)

13.00 Professional Issues (2%)
including: Evidence Based Practice, Legal/Ethical, Patient Safety
EXAMINATION CONTENT
FOR TESTS TAKEN BEFORE APRIL 1, 2020

ASSOCIATED COMPETENCIES

• Demonstrate knowledge of physiological, psychological and sociocultural factors that affect the childbearing family with emphasis on the postpartal/neonatal period (birth to six weeks)

• Recognize antepartal and intrapartal factors affecting the family in the postpartal/neonatal period

• Assess the physical status of the mother and neonate

• Assess the psychological and sociocultural status of the childbearing family

• Analyze data to identify nursing and educational needs of the childbearing family

• Develop and implement an individualized plan for the childbearing family

• Evaluate outcomes and modify the plan as necessary

• Incorporate knowledge of current standards of practice, research and professional issues into the nursing management of the childbearing family
STUDY GUIDE
FOR TESTS TAKEN BEFORE APRIL 1, 2020
FACTORS AFFECTING MATERNAL/NEONATAL OUTCOMES

I. Antenatal Factors
• Maternal Health Status
• Age
• Nutrition
• Obstetrical history
• Psychosocial/Cultural Issues
• Infertility
• Physiologic Changes and Associated Lab Values
• Antepartum Risk Factors and Complications
  - Diabetes
  - Hypertension (Chronic, gestational)
  - Common Bacterial and Viral Infections
  - Hematologic (Anemias)
  - Cardiac Disease
  - Substance Abuse, (e.g. Smoking, Drugs, Alcohol, marijuana)
  - Preterm Labor/Post term Pregnancy
  - Multiple Gestation
  - Intrauterine Growth Restriction
  - Oligohydramnios
  - Polyhydramnios
• Fetal Assessment
  - Biophysical Profile
  - Nonstress Test
  - Diagnostic Ultrasound
  - Amniocentesis
  - Quad Screen/Cell Free DNA Testing
• Obesity/Bariatric Surgery
• Domestic Violence/Family Dynamics

II. Intrapartal Factors
• Significance of Fetal Heart Rate Patterns and Blood Gases
• Fetal Heart Rate Abnormalities (Tachycardia, Bradycardia, Altered Variability, Decelerations)
• Cord Gases
• Medications Used in Labor
  - Tocolytics
  - Analgesics
  - Anesthesia
  - Oxytocics
• Complications of Labor
  - Breech and Other Malpresentations
  - Meconium
  - Shoulder Dystocia
  - PROM and Chorioamnionitis
  - Prolonged Labor
  - Abruptio Placenta
  - Cord Prolapse
  - Precipitous Delivery
• Methods of Delivery
  - Vaginal
  - Operative Delivery (Forceps, Vacuum, Cesarean)
  - VBAC
• Delayed Cord Clamping
• ABO incompatibility
STUDY GUIDE
FOR TESTS TAKEN BEFORE APRIL 1, 2020
MATERNAL ASSESSMENT AND MANAGEMENT IN THE POSTPARTUM PERIOD
(DELIVERY THROUGH SIX WEEKS)

I. Physiologic Changes & Physical Assessment
• Reproductive
• Cardiopulmonary
• Genitourinary
• Gastrointestinal
• Hematological
• Endocrine

II. Nursing Care and Education
• Comprehensive Postpartum Health Assessment
  Postoperative Care
• Common Medications (Indications, Administration, Drug Interactions, Patient Teaching)
  -Insulin
  -Analgesics (Tylenol)
  -Antimicrobials
  -Antihypertensives
  -Diuretics
  -Oxytocics
  -GI Motility Drugs
  -Vaccines
  -Rh Immune Globulin (RhoGAM) (Rhophillac)
  -Nicotine Patches
  -Antiretroviral
  -Methadone (subutex) SSI’s
  -Psychotropic Drugs
• Common Problems and Complications
  -Bladder Distention & Urinary Retention
  -Hemorrhoids
  -Afterpains
  -Perineal Edema and Pain
  -Breast Engorgement
  -Constipation
  -Fatigue and Sleep Disturbances
  -Postpartum Blues/Depression
  -Spinal Headaches
  -Vaginal Lacerations
• Patient Education for the New Mother
  -Postpartum Self Care
  -Contraception
  -Nutrition
III. Lactation & Newborn Feeding
(Management and Patient Teaching)

- Lactation
  - Anatomy and Physiology of Lactation
  - Composition of Breast Milk
  - Maternal Nutritional Needs

- Normal Breastfeeding Process/Hand Expression
  - Positioning
  - Latch On
  - Suck/Swallow/Sequence
  - Timing (Frequency and Duration)
  - Feeding Cues

- Breast/Nipple Care
  - Use of Supplementary/Complementary Feedings
  - Use of Breastfeeding Devices
  - Expressing and Storing Breast Milk

- Contraindications to Breast Feeding
  - Maternal Complications
  - Latch on Problems
  - Nipple Problems
  - Breast Engorgement
  - Insufficient Milk Supply
  - Therapeutic Medications
  - Infection/Mastitis
  - Maternal Illness
  - Perinatal Substance Abuse

- Maternal/Newborn Separation

- Bottle Feeding
  - Nutritional Needs
  - Formulas
  - Techniques and Equipment

- Newborn Complications
  - Hyperbilirubinemia
  - Hypoglycemia
  - Multiple Birth
  - Patient Education

IV. Family Dynamics after Childbirth

- Normal Characteristics of Parent/Infant Interactions
- Maternal Role Transition
- Sibling Response
- Barriers and Alterations to Parent/Infant Interactions
- Cultural/Life-Style Factors Affecting Family Integration
- Adoption
- Perinatal Grief

V. Maternal Complications

- Hemorrhage
- Thrombophlebitis
- Infections
- Hematoma
- Diabetes
- Postpartum Depression/Psychosis
- Chronic Hypertension, gestational/Eclampsia
- DIC/HELLP
STUDY GUIDE
FOR TESTS TAKEN BEFORE APRIL 1, 2020

NEWBORN ASSESSMENT AND MANAGEMENT

I. Transition to Extrauterine Life (Birth to 4 Hours)
• Initial Physiologic Adaptations
• Neonatal Resuscitation and Stabilization
• Thermoregulation
• Associated Laboratory Findings

II. Physiologic Changes and Physical Assessment (to Include Laboratory Values)
• Gestational Age Assessment
• Neurobehavioral and Sensory Assessment
• Systems Review (Including Common Variations)
  -Cardiac
  -Respiratory
  -Gastrointestinal
  -Integumentary
  -Musculoskeletal
  -Head, Ears, Eyes, Nose and Throat
  -Endocrine
  -Genitourinary

III. Nursing Care and Family Education
• Newborn Care
• Cord Care
• Elimination
• Feeding
• Circumcision
• Comfort Measures
• Screening (CHD/Car Seat)
• Skin Care
• Safety
  -Safe Sleep/Tummy Time
• Commonly Used Medications
  -Sucrose/Sweet ease
  -Vitamin K
  -Vaccines/Immunoglobulins (HBIG, Hep B)
  -Eye Prophylaxis
  -Analgesics
  -Anti-infectives

IV. Complications (Recognition and Stabilization)
• Cardiac
• Respiratory
  -Apnea
  -Transient Tachypnea of the Newborn
  -Pneumothorax
  -Meconium Aspiration
• Gastrointestinal
  -Obstructions
  -Anomalies
• Musculoskeletal
  -Congenital Hip Dislocation
  -Skeletal Anomalies
  -Birth Injuries (Fractured Clavicle)
• Head, Ears, Eyes, Nose and Throat
• Hematopoietic
  -Anemia
  -Vitamin K Deficiency
  -ABO Incompatibility
  -Hemolytic Disease
  -Polycythemia/Hyperviscosity
  -Thrombocytopenia
  -Jaundice
  -G6PD
• Neurological
  -Seizures
  -Jitteriness
  -Intracranial Hemorrhage
  -Neural Tube Defects
• Genitourinary
  -Structural Defects/Anomalies
• Infectious Diseases
  -Neonatal Sepsis/Neonatal I:T/Lumbar Puncture
  -Viral Infections
  -Bacterial Infections
  -Sexually Transmitted Infections
• Endocrine/Metabolic/Genetic
  -Hypoglycemia
  -Inborn Errors of Metabolism
  -Patterns of Inheritance
  -Infant of a Diabetic Mother
  -Substance Abused Neonate
Professional Issues

Ethical Principles
- Autonomy
- Beneficence
- Non-maleficence
- Justice

Professional/Legal Issues
- Professional
  - Regulation
  - Practice
- Staffing issues
- Legal liability
  - Consent
  - Documentation/medical records
  - Negligence/malpractice

Evidence based practice
- Terminology
  - Reliability
  - Validity
  - Significance
  - Levels of Evidence
- Quality Improvement
- Research utilization

Patient Safety
- Communication
- Interprofessional practice
The above chart shows the percentage distribution of questions on the Maternal Newborn Nursing exam across the major content categories covered on the examination. The major focus of the examination is on the Maternal Postpartum Assessment, Management and Education, Maternal Postpartum Complications and Newborn Complications sections with these three areas having the most emphasis. Lesser emphasis is on Newborn Assessment and Management, with Pregnancy, Birth Risk Factors and Complications having the least number of questions assigned to this content category.
EXAMINATION CONTENT
FOR TESTS TAKEN ON/AFTER APRIL 1, 2020

EXAM OUTLINE
Focus of the examination will primarily be on the childbearing family from birth to six weeks and will encompass hospital and community settings.

Percentages identified for the topic areas represent a range of the number of test questions assigned to each content area and therefore might total more or less than 100 percent. These ranges do not necessarily reflect the content of future exams.

10.00 Pregnancy, Birth Risk Factors and Complications (7%)
   - Antenatal Factors
   - Intrapartum Factors

11.00 Maternal Postpartum Assessment, Management and Education (26%)
   - Physiologic Changes and Physical Assessment (including Laboratory Values)
   - Nursing Care
   - Lactation
   - Psychosocial and Ethical Issues
   - Newborn Feeding and Nutrition

12.00 Newborn Assessment and Management (19%)
   - Transition to Extrauterine Life
   - Physical Assessment and Gestational Age Assessment (including Laboratory Values)
   - Newborn Care and Family Education
   - Resuscitation and Stabilization

14.00 Maternal Postpartum Complications (24%)
   - Hematologic
   - Cardiovascular
   - Infection
   - Diabetes
   - Mood and substance use disorders

15.00 Newborn Complications (24%)
   - Cardiovascular and Respiratory
   - Neurological and Gastrointestinal
   - Hematologic
   - Infectious disease
   - Genetic, Metabolic and Endocrine
EXAMINATION CONTENT
FOR TESTS TAKEN ON/AFTER APRIL 1, 2020

ASSOCIATED COMPETENCIES

- Demonstrate knowledge of physiological, psychological and sociocultural factors that affect the childbearing family with emphasis on the postpartal/neonatal period (birth to six weeks)
- Recognize antepartal and intrapartal factors affecting the family in the postpartal/neonatal period
- Assess the physical status of the mother and neonate
- Assess the psychological and sociocultural status of the childbearing family
- Analyze data to identify nursing and educational needs of the childbearing family
- Develop and implement an individualized plan for the childbearing family
- Evaluate outcomes and modify the plan as necessary
- Incorporate knowledge of current standards of practice, research and professional issues into the nursing management of the childbearing family
STUDY GUIDE
FOR TESTS TAKEN ON/AFTER APRIL 1, 2020

PREGNANCY, BIRTH RISK FACTORS AND COMPLICATIONS

I. Antenatal Factors
- Maternal Health Status
- Age
- Nutrition
- Obstetrical history
- Psychosocial/Cultural Issues
- Infertility
- Physiologic Changes and Associated Lab Values
- Antepartum Risk Factors and Complications
  - Diabetes
  - Hypertension (Chronic, gestational)
  - Common Bacterial and Viral Infections
  - Hematologic (Anemias)
  - Cardiac Disease
  - Substance Abuse, (e.g. Smoking, Drugs, Alcohol, marijuana)
  - Preterm Labor/Post term Pregnancy
  - Multiple Gestation
  - Intrauterine Growth Restriction
  - Oligohydramnios
  - Polyhydramnios
- Fetal Assessment
  - Biophysical Profile
  - Nonstress Test
  - Diagnostic Ultrasound
  - Amniocentesis
  - Quad Screen/Cell Free DNA Testing
- Obesity/Bariatric Surgery

II. Intrapartum Factors
- Significance of Fetal Heart Rate Patterns and Blood Gases
- Fetal Heart Rate Abnormalities (Tachycardia, Bradycardia, Altered Variability, Decelerations)
- Cord Gases
- Medications Used in Labor
  - Tocolytics
  - Analgesics
  - Anesthesia
- Complications of Labor
  - Breech and Other Malpresentations
  - Meconium
  - Shoulder Dystocia
  - PROM and Chorioamnionitis
  - Prolonged Labor
  - Abruptio
  - Placenta Previa
  - Cord Prolapse
  - Precipitous Delivery
- Methods of Delivery
  - Vaginal
  - Operative Delivery (Forceps, Vacuum, Cesarean)
  - VBAC
- Delayed Cord Clamping
I. Physiologic Changes and Physical Assessment
   - Reproductive
   - Cardiopulmonary
   - Genitourinary
   - Gastrointestinal
   - Hematological
   - Endocrine

II. Nursing Care
   - Comprehensive Postpartum Health Assessment
   - Postoperative Care
   - Common Medications (Indications, Administration, Drug Interactions, Patient Teaching)
     - Insulin
     - Analgesics (Tylenol)
     - Antimicrobials
     - Antihypertensives
     - Diuretics
     - Oxytocics
     - GI Motility Drugs
     - Vaccines
     - Rh Immune Globulin (RhOGAM) (Rhophillac)
     - Nicotine Patches
     - Antiretroviral
     - Methadone (subutex) SSI’s
     - Psychotropic Drugs
   - Common Problems and Complications
     - Bladder Distention & Urinary Retention
     - Hemorrhoids
     - Afterpains
     - Perineal Edema and Pain
     - Breast Engorgement
     - Constipation
     - Spinal Headaches
     - Vaginal Lacerations

III. Lactation
   - Lactation
     - Anatomy and Physiology of Lactation
     - Composition of Breast Milk
     - Maternal Nutritional Needs
   - Normal Breastfeeding Process/Hand Expression
     - Positioning
     - Latch On
     - Suck/Swallow/Sequence
     - Timing (Frequency and Duration)
     - Feeding Cues
   - Breast/Nipple Care
     - Use of Supplementary/Complementary Feedings
     - Use of Breastfeeding Devices
     - Expressing and Storing Breast Milk
   - Contraindications to Breast Feeding
     - Maternal Complications
     - Latch on Problems
     - Nipple Problems
     - Breast Engorgement
     - Insufficient Milk Supply
     - Therapeutic Medications
     - Infection/Mastitis
     - Maternal Illness
     - Perinatal Substance Abuse

   - Maternal/Newborn Separation
   - Newborn Complications
     - Hyperbilirubinemia
     - Hypoglycemia
     - Multiple Birth

   - Patient Education
     - Postpartum Self Care
     - Contraception
     - Nutrition
IV. Psychosocial and Ethical Issues
- Normal Characteristics of Parent/Infant Interactions
- Maternal Role Transition
- Sibling Response
- Barriers and Alterations to Parent/Infant Interactions
- Cultural/Life-Style Factors Affecting Family Integration
- Domestic Violence/Family Dynamics
- Adoption
- Perinatal Grief
- Ethical Principles
  - Autonomy
  - Beneficence
  - Non-maleficence
  - Justice

V. Newborn feeding and nutrition
- Bottle Feeding
  - Nutritional Needs
  - Formulas
  - Techniques and Equipment
I. Transition to Extrauterine Life (*Birth to 4 Hours*)
   • Initial Physiologic Adaptations
   • Thermoregulation
   • Associated Laboratory Findings

II. Physical Assessment and Gestational Age Assessment (*to Include Laboratory Values*)
   • Gestational Age Assessment
   • Neurobehavioral and Sensory Assessment
   • Systems Review (*Including Common Variations*)
     - Cardiac
     - Respiratory
     - Gastrointestinal
     - Integumentary
     - Musculoskeletal
     - Head, Ears, Eyes, Nose and Throat
     - Endocrine
     - Genitourinary
     - Screening (CHD/Car Seat/NBGS)

III. Newborn Care and Family Education
   • Cord Care
   • Elimination
   • Circumcision
   • Comfort Measures
   • Screening (CHD/Car Seat)
   • Skin Care
   • Safety
     - Safe Sleep/Tummy Time
   • Commonly Used Medications
     - Oral Sucrose
     - Vitamin K
     - Vaccines/Immunoglobulins (HBIG, Hep B)
     - Eye Prophylaxis
     - Analgesics

IV. Resuscitation and Stabilization
   • General assessment of status and need for resuscitation
   • Management of resuscitation
     - Airway
     - Breathing
     - Circulation
   • Drug Therapy
   • Evaluation of effectiveness of interventions
   • Apgar scores
MATERNAL POSTPARTUM COMPLICATIONS

I. Hematologic
- Hemorrhage
- Thrombophlebitis
- Pulmonary embolus
- DIC/HELLP
- Hematoma

II. Cardiovascular
- Chronic Hypertension, gestational/Eclampsia
- Shock

III. Infection
- Endometritis
- Wound infection
- Septic Pelvic thrombophlebitis
- Urinary tract infections

IV. Diabetes

V. Mood and Substance Use Disorders
- Sleep disturbances
- Postpartum depression/psychosis
- Substance abuse
I. Cardiovascular and Respiratory
• Cyanotic Heart Disease
• Acyanotic Heart Disease
• Apnea
• Transient Tachypnea of the Newborn
• Pneumothorax
• Meconium Aspiration

II. Neurological and Gastrointestinal
• Seizures
• Jitteriness
• Intracranial Hemorrhage
• Neural Tube Defects
• Substance Abused Neonate
• Intestinal Obstructions and Anomalies

III. Hematologic
• Anemia
• Vitamin K Deficiency
• Hyperbilirubinemia
• ABO Incompatibility
• Hemolytic Disease
• G6PD
• Polycythemia/Hyperviscosity
• Thrombocytopenia

IV. Infectious Disease
• Neonatal Sepsis
• Neonatal CBC and differential
• Lumbar Puncture
• Viral Infections
• Bacterial Infections
• Sexually Transmitted Infections
• Anti-infectives

V. Genetic, Metabolic and Endocrine
• Hypoglycemia
• Inborn Errors of Metabolism
• Patterns of Inheritance
• Infant of a Diabetic Mother
• Ladewig, et al., Contemporary Maternal-Newborn Nursing Care, Pearson, 2017.
• Snell, et al., Care of the Well Newborn, Jones & Bartlett, Burlington, 2017.
SAMPLE QUESTIONS

MATERNAL NEWBORN NURSING SAMPLE QUESTIONS

Listed below are sample questions to acquaint you with the test question format. These questions do not reflect the scope or the difficulty level of the questions on the actual examination. The reference from which each question is derived is also cited. However, other references might substantiate a different answer, and the answer shown here might be substantiated by other references. The rigorous review to which actual test questions are subject is not applied to these sample questions. The focus that should be attended to in reviewing these items is format, not content.

1. Removing a neonate from an incubator for procedures without the use of an overhead warmer will result in heat loss by
   A. convection
   B. evaporation
   C. radiation

   Answer: A


2. A normal finding of male genitalia in the term neonate is
   A. retractable prepuce
   B. rugated scrotum
   C. testes in the inguinal canal

   Answer: B

Tappero, et al., Physical Assessment of the Newborn, Springer, 2019, p. 131

3. A preeclamptic woman in the immediate postpartum period needs to be monitored closely for elevated blood pressure and
   A. adult respiratory distress syndrome
   B. onset of seizures
   C. subdural hematoma

   Answer: B


4. A predisposing factor for assisted delivery (forceps or vacuum) is
   A. adolescent pregnancy
   B. multiparity
   C. post dates gestation

   Answer: C


5. A breastfeeding woman with sore nipples should be advised to
   A. insure that the infant has proper latch on to the breast
   B. limit the feeding time on each breast
   C. wash her breasts frequently with soap and water

   Answer: A

**SCORING & TEST REPORT**

**HOW EXAMS ARE SCORED**

NCC examinations are criterion-referenced. This means the passing score is based on a predetermined criterion. This criterion is a statistical ability level established by the Content Team based on evaluation of criticality of content and the test questions’ past statistical performance. Questions used to determine pass/fail have proven statistical history that demonstrates the question is appropriate for use to measure an individual’s ability level.

There is no set percentage passing level. **An ability level for each candidate is calculated based on the number of questions they answer correctly (there is no penalty for wrong answers).** Pass/fail is determined based on this ability level as compared to pass/fail standard which is a predetermined ability criterion. When different forms of the examination are used, a process called equating is initiated. This procedure converts all results to a common scale. So someone who takes a slightly more difficult form of the exam will need to answer fewer questions correctly than someone who takes a slightly easier form of the exam.

NCC utilizes the item response theory of psychometrics for the analysis of its examinations. Item response theory (Rasch analysis) is the study of test and item scores based on assumptions concerning the mathematical relationship between abilities and item responses. This is a commonly used system, and such examinations as the NCLEX and other health related certification examinations utilize this type of psychometric analysis.

Test reports identify pass/fail status, and they give feedback on the various content areas of the examination in the form of word descriptors: very weak, weak, average, strong and very strong. No percentages or standard scores are given. These descriptors are based on the items within a given subtest. The overall pass/fail decisions are based on the full test, and the verbal descriptors are intended to provide suggested feedback on strengths and weaknesses in various content areas. Since this feedback is based on relatively few items, general verbal descriptions are given instead of subtest scores. These word descriptors are for information only, and they should be interpreted cautiously due to the small number of items included in each content area.
SAMPLE TEST REPORT

Whether you take the computer or paper and pencil version of the examination, you will receive an official test results report from NCC. Shown below is a sample test result report for a candidate who has passed the examination.

MATERNAL NEWBORN NURSING EXAMINATION

Test Results

NAME

DATE

ADDRESS

Pass/Fail: PASS

EXAM CONTENT REPORT

The following provides information regarding your performance on the different content areas tested on the examination.

Test reports identify pass/fail status, and they give feedback on the various content areas of the examination in the form of word descriptors: Very weak, weak, average, strong and very strong. No percentages or standard scores are given. These descriptors are based on the items within a given subtest. The overall pass/fail decisions are based on the full test, and the verbal descriptors are intended to provide suggested feedback on strengths and weaknesses in various content areas. Since this feedback is based on relatively few items, general verbal descriptions are given instead of subtest scores. These word descriptors are for information only, and they should be interpreted cautiously due to the small number of items included in each content area.

Content Area & Percentage

Your Results:

Range of Questions Asked:

Factors Affecting Maternal/Neonatal Outcomes; Professional Issues (12%)

WEAK

Maternal Assessment and Management in the Postpartum Period (44%)

VERY STRONG

Newborn Assessment and Management (44%)

AVERAGE
SAMPLE TEST REPORT

Whether you take the computer or paper and pencil version of the examination, you will receive an official test results report from NCC. Shown below is a sample test result report for a candidate who has passed the examination.

MATERNAL NEWBORN NURSING EXAMINATION

Test Results

NAME

DATE

ADDRESS

Pass/Fail: PASS

EXAM CONTENT REPORT

The following provides information regarding your performance on the different content areas tested on the examination.

Test reports identify pass/fail status, and they give feedback on the various content areas of the examination in the form of word descriptors: Very weak, weak, average, strong and very strong. No percentages or standard scores are given. These descriptors are based on the items within a given subtest. The overall pass/fail decisions are based on the full test, and the verbal descriptors are intended to provide suggested feedback on strengths and weaknesses in various content areas. Since this feedback is based on relatively few items, general verbal descriptions are given instead of subtest scores. These word descriptors are for information only, and they should be interpreted cautiously due to the small number of items included in each content area.

<table>
<thead>
<tr>
<th>Content Area &amp; Percentage</th>
<th>Your Results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of Questions Asked:</td>
<td></td>
</tr>
<tr>
<td>Pregnancy, Birth Risk Factors and Complications;</td>
<td>WEAK</td>
</tr>
<tr>
<td>Maternal Postpartum Complications</td>
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</tr>
<tr>
<td>(31%)</td>
<td></td>
</tr>
<tr>
<td>Maternal Postpartum Assessment, Management and Education</td>
<td>VERY STRONG</td>
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<tr>
<td>(26%)</td>
<td></td>
</tr>
<tr>
<td>Newborn Assessment and Management</td>
<td>AVERAGE</td>
</tr>
<tr>
<td>(19%)</td>
<td></td>
</tr>
<tr>
<td>Newborn Complications</td>
<td>AVERAGE</td>
</tr>
<tr>
<td>(24%)</td>
<td></td>
</tr>
</tbody>
</table>
Terms of Certification and Certification Maintenance

When You Pass the Exam

Credential
Your NCC certification status entitles you to use the credential RNC-MNN (Registered Nurse Certified – Maternal Newborn Nursing)

Terms of Certification
NCC certification is awarded for a period of three years.

The effective date for certification is the date on the official NCC letter that tells you that you have successfully completed the certification process.

No Continuing Education is Issued for Taking the Maternal Newborn Nursing Exam.

Maintaining Your Certification

- NCC certification must be maintained every three years.
- Certification that is not maintained will expire
- The NCC certification maintenance program allows you to continue your certification status by obtaining specific hours of continuing education credit as defined in your Education Plan, which is generated by your Continuing Competency Assessment (CCA).
- For continuing education credit to be used for certification maintenance it must be earned AFTER you have taken your Assessment and in the areas defined by your Education Plan before your maintenance is due.
- The maintenance process includes submitting a maintenance application prior to your maintenance due date with appropriate fees and requested documentation. Using NCC CE modules does NOT automatically maintain your certification. You must submit a maintenance application and pay a maintenance fee in addition to any CE fees.

- Maintenance applications are subject to random audit. If you are chosen for audit, you will be required to upload CE certificates and course descriptions. These records should be maintained during each maintenance cycle, until your maintenance application has been approved. You can upload these documents in your maintenance application throughout your maintenance cycle.

You may apply for maintenance up to 1 year before your maintenance date. As long as you have obtained the required contact hours of continuing education credit—you do not need to wait until your maintenance deadline to apply. Maintenance will be due in the quarter in which you were notified of your certification (not the date on which you took the examination). Your maintenance due date can be found by signing into your NCC account. Sign into your account using your email and password.

The NCC website has more detailed information
For more information about the certification maintenance program and the Continuing Competency Assessment (CCA), click the purple "Maintain your Certification" box.
CONTINUING COMPETENCY ASSESSMENT (CCA)

NCC views certification as a process that functions throughout an individual nurse or nurse practitioner's career. It reflects life-long learning, ongoing professional development and is supported by maintaining specialty knowledge competencies.

The standard process for the NCC Certification Maintenance Program makes use of an assessment tool and resulting personal education plan:

- Complete the continuing competency assessment (CCA) that reflects the current knowledge competencies aligned with your certification specialty at the beginning of each new certification maintenance cycle.

- Earn CE as specified by the education plan developed from your assessment. Your education plan outlines the CE needed to maintain your NCC certification. Only CE earned after you have taken your assessment can be used to maintain your certification. It must address the CE needs as outlined by your educational plan.

This program provides continuing validation that NCC certified nurses and nurse practitioners are maintaining their specialty knowledge competencies based on current practice and examination content.

Download Continuing Competency Assessment brochures for details by clicking the links below.

Four Steps to Continuing Competency
https://www.nccwebsite.org/content/documents/cms/cca-steps.pdf

Continuing Competency Assessment - Education Plan Examples
https://www.nccwebsite.org/content/documents/cms/cca-education-plans.pdf