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 Practice having the least number of questions assigned to this content category.
**CONDENSED 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.

<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>10.00</td>
<td>Factors Affecting Maternal/Neonatal Outcomes (5-10%)</td>
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<tr>
<td>10.01</td>
<td>Antenatal Factors</td>
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<td>10.02</td>
<td>Intrapartal Factors</td>
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<tr>
<td>11.00</td>
<td>Maternal Assessment and Management in the Postpartum Period (40-45%)</td>
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<tr>
<td>11.01</td>
<td>Physiologic Changes &amp; Physical Assessment (to Include Laboratory Values)</td>
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<tr>
<td>11.02</td>
<td>Nursing Care and Education</td>
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<tr>
<td>11.03</td>
<td>Lactation and Newborn Feeding</td>
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<tr>
<td>11.04</td>
<td>Family Dynamics After Childbirth</td>
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<td>11.05</td>
<td>Complications</td>
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<tr>
<td>12.00</td>
<td>Newborn Assessment and Management (40-45%)</td>
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<tr>
<td>12.01</td>
<td>Transition to Extraterine Life</td>
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<tr>
<td>12.02</td>
<td>Physiologic Changes and Physical Assessment (to Include Laboratory Values)</td>
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<tr>
<td>12.03</td>
<td>Nursing Care and Family Education</td>
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<tr>
<td>12.04</td>
<td>Complications (Recognition and Stabilization)</td>
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<tr>
<td>13.00</td>
<td>Aspects of Professional Practice (Less than 5%)</td>
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<tr>
<td>13.01</td>
<td>Research</td>
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<tr>
<td>13.02</td>
<td>Guidelines for Practice</td>
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<tr>
<td>13.03</td>
<td>Ethical/Legal Issues</td>
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<tr>
<td>13.04</td>
<td>Patient Safety</td>
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</tbody>
</table>
### Factors Affecting Maternal/Neonatal Outcomes

#### 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

#### Antenatal Factors
- Maternal Health Status
- Age
- Nutrition
- Obstetrical history
- Psychosocial/Cultural Issues
- Infertility
- Physiologic Changes and Associated Lab Values

#### Intrapartal Factors
- Significance of Fetal Heart Rate Patterns and Blood Gases
- Fetal Heart Rate Abnormalities (Tachycardia, Bradycardia, Altered Variability, Decelerations)
- Cord Gases

#### 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
- Preterm Labor/Postterm Pregnancy
- Multiple Gestation
- Intrauterine Growth Restriction
- Oligohydramnios
- Polyhydramnios

#### Fetal Assessment
- Biophysical Profile
- Nonstress Test
- Diagnostic Ultrasound
- Lung Maturation Studies (L:S Ratio, Lung Profile, PG)
- Amniocentesis
- Alpha-Fetoprotein/Triple Screen

#### Mediations Used in Labor
- Tocolytics
- Analgesics
- Anesthesia
- Oxytocics
- Complications of Labor
- Breech and Other Malpresentations

#### Study Resources
MATERIAL ASSESSMENT AND MANAGEMENT IN THE POSTPARTUM PERIOD
(DELIVERY THROUGH SIX WEEKS)

ASSOCIATED COMPETENCIES

- 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

Physiologic Changes & Laboratory Values
Reproductive
Cardiopulmonary
Genitourinary
Gastrointestinal
Hematological
Endocrine

Nursing Care and Education
Comprehensive Postpartum
Health Assessment
Postoperative Care
Common Medications
(Indications, Administration, Drug Interactions, Patient Teaching)
Insulin
Analgesics
Antimicrobials
Antihypertensives
Diuretics
Oxytocics
GI Motility Drugs
Vaccines
Rh Immune Globulin
(RhoGAM)

Common Problems
Bladder Distention & Urinary Retention
Hemorrhoids
Afterpains
Perineal Edema and Pain
Breast Engorgement
Constipation
Fatigue and Sleep Disturbances
Postpartum Blues/Depression

Patient Education for the New Mother
Postpartum Self Care
Contraception
Nutrition

Lactation & Newborn Feeding
(Management and Patient Teaching)
Lactation
Anatomy and Physiology of Lactation
Composition of Breast Milk
Maternal Nutritional Needs
Normal Breastfeeding Process
Positioning
Latch On
Suck/Swallow/Sequence
Timing (Frequency and Duration)
Feeding Cues
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

Complications
Hemorrhage
Thrombophlebitis
Infections
Hematoma
Diabetes
Postpartum Depression/Psychosis
Chronic Hypertension, gestational/eclampsia
DIC/HELLP
Diabetes
Newborn Complications
- Hyperbilirubinemia
- Hypoglycemia
- Multiple Birth
- Patient Education
- Breast/Nipple Care
  - Use of Supplementary/Complementary Feedings
  - Use of Breastfeeding Devices
  - Expressing and Storing Breast Milk

Bottle Feeding
- Nutritional Needs
- Formulas
- Techniques and Equipment

Family Dynamics after Childbirth
- Normal Characteristics of Parent/Infant Interactions
- Maternal Role Transition

Sibling Responses and Interventions
- Barriers and Alterations to Parent/Infant Interactions
- Cultural/Life-Style Factors Affecting Family Integration
- Adoption
- Perinatal Grief

STUDY RESOURCES
ASSOCIATED COMPETENCIES

- 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

LABOR AND DELIVERY

Transition to Extrainterine Life (Birth to 4 Hours)
Initial Physiologic Adaptations
Neonatal Resuscitation and Stabilization
Thermoregulation
Associated Laboratory Findings

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

Nursing Care and Family Education
Newborn Care
Cord Care
Elimination
Feeding
Circumcision
Comfort Measures
Skin Care
Safety

Commonly Used Medications
Vitamin K
Vaccines/Immunoglobulins
Eye Prophylaxis
Analgesics
Anti-infectives
Complications (Recognition and Stabilization)
Cardiac
Cyanotic Heart Disease
Acyanotic Heart Disease

Respiratory
Apnea
Transient Tachypnea of the Newborn
Pneumothorax
Meconium Aspiration

Gastrointestinal
Obstructions
Anomalies

Musculoskeletal
Congenital Hip Dislocation
Skeletal Anomalies
Birth Injuries

Head, Ears, Eyes, Nose and Throat

Hematopoietic
Anemia
Vitamin K Deficiency
Rh Disease and ABO Incompatibility
Incompatibility
Polycythemia/Hyperviscosity
Thrombocytopenia
Jaundice
EXAMINATION CONTENT
COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

Neurological
Seizures
Jitteriness
Intracranial Hemorrhage
Neural Tube Defects

Genitourinary
Structural Defects/Anomalies
Infectious Diseases
Neonatal Sepsis
Viral Infections
Bacterial Infections
Sexually Transmitted Infections

Endocrine/Metabolic/Genetic
Hypoglycemia
Electrolyte Imbalances
Inborn Errors of Metabolism
Patterns of Inheritance
Infant of a Diabetic Mother
Substance Abused Neonate

STUDY RESOURCES
EXAMINATION CONTENT
COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

PROFESSIONAL ISSUES

ASSOCIATED COMPETENCIES

- 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

Research
Terminology
Incorporation into Practice

Guidelines for Practice
(Governmental & Professional)

Quality Outcome Measurements

Ethical/Legal Issues
Ethical Concepts
Autonomy
Beneficence
Justice
Nonmaleficence
Informed Consent
Confidentiality
Documentation/Medical Records
Impaired Nurse
Legal Liability

Study Resources

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, NICU, Ink, 2015, p. 123

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 & SCORE 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, but pass/fail status is based on achieving a predetermined ability level. Each test item has a difficulty level. The higher the difficulty of an item, the greater the ability score one achieves. Pass/fail is determined based on the number of questions answered correctly, and the pass/fail standard is a predetermined ability criterion. As questions are answered correctly, the examinees build on their ability score and subtract from it when questions are answered incorrectly. 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 results reports will identify a pass/fail status and will 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 percentage or standard score will be given.