

From RN Magazine

# RN BOARDS REVIEW

NCLEX-RN

FOR

# 1990

A Nursing Review to Help You Pass—The First Time

Edited by

Alice M. Stein, RN, MA

and

Nancy H. Jacobson, RN, MSN

From RN Magazine

# RN

## BOARDS REVIEW

---

**NCLEX-RN**

---

for 1990

**EDITORS**

Alice M. Stein, RN, MA

Director, Division of Continuing Nursing Education

The Medical College of Pennsylvania

Nancy H. Jacobson, RN, C, MSN, CNSN

Associate Director, Division of Continuing Nursing Education

The Medical College of Pennsylvania

C M P  
GENERAL MEDICAL PUBLISHERS

# Contributors

## EDITORS

### **Alice M. Stein, RN, MA**

*Director, Division of Continuing Nursing Education, The Medical College of Pennsylvania, Philadelphia, Pennsylvania*

### **Nancy H. Jacobson, RN, C, MSN, CNSN**

*Associate Director, Division of Continuing Nursing Education, The Medical College of Pennsylvania, Philadelphia, Pennsylvania*

## CONTRIBUTORS

### **Margaret Ahearn-Spera, RN, C, MSN**

*Associate Director, Nursing, Danbury Hospital, Danbury Connecticut; Assistant Clinical Professor, Yale School of Nursing, New Haven, Connecticut*

### **\*Margaret B. Brenner, RN, MSN**

*Lecturer, Division of Nursing, Holy Family College, Philadelphia, Pennsylvania*

### **Deborah L. Dalrymple, RN, MSN, CRNI**

*Assistant Professor of Nursing, Montgomery County Community College, Blue Bell, Pennsylvania*

### **Judy Donlen, RN, C, MSN**

*Director of Nursing, Southern New Jersey Perinatal Cooperative, Camden, New Jersey*

### **\*Jeanne Gelman, RN, MA, MSN**

*Associate Professor, Widener University, Chester, Pennsylvania*

### **Theresa M. Giglio, RD, MS**

*Nutrition Instructor, Albert Einstein Medical Center, Philadelphia, Pennsylvania*

### **Holly Hillman, RN, MSN**

*Assistant Professor, Montgomery County Community College, Blue Bell, Pennsylvania*

### **\*Charlotte D. Kain, RN, C, EdD**

*Professor of Nursing, Health Care of Women, Montgomery County Community College, Blue Bell, Pennsylvania*

### **Constance O. Kolva, RN, MSN**

*Faculty, Medical College of Pennsylvania, Department of Psychiatry, Division of Continuing Mental Health Education, Philadelphia, Pennsylvania; Educator and Consultant, Mental Health and Management in Nursing, Harrisburg, Pennsylvania*

### **\*Mary Lou Manning, RN, C, MSN, CPNP**

*Research Nurse, Division of Infectious Diseases, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania*

### **\*Eileen Moran, RN, MSN**

*Staff Development Instructor, Fox Chase Cancer Center, American Oncologic Hospital, Philadelphia, Pennsylvania*

### **Marie T. O'Toole, RN, MSN, CRRN**

*Assistant Professor, Thomas Jefferson University, College of Allied Health Sciences, Department of Nursing, Philadelphia, Pennsylvania*

### **Janice Selekman, RN, DNSc**

*Associate Professor, Undergraduate Program Director, Thomas Jefferson University, College of Allied Health Sciences, Philadelphia, Pennsylvania*

### **\*Anne R. Waldman, RN, C, MSN**

*Clinical Nurse Specialist, Albert Einstein Medical Center, Philadelphia, Pennsylvania*

*\*Contributors to this edition as well as to the original edition.*

# Preface

This book had been expressly developed to meet your needs as you study and prepare for the all important NCLEX-RN examination. Taking this exam is always a stressful event in the best of circumstance: it constitutes a major career milestone, and NCLEX success is the key to your future ability to practice as a registered nurse.

## **Organization, Content and Features**

The content and design of this revised edition have been carefully crafted to conform to the new NCLEX-RN test plan, beginning with an introductory unit on how to prepare for NCLEX-RN. This includes:

- Explanation of the new test plan
  - Information on how the test is constructed
  - Data on scoring and notification of results
  - Tips on how to plan your study and prepare successfully
- The units that follow concentrate on adult nursing, pediatric nursing, maternity and gynecologic nursing, and psychiatric-mental health nursing. Each unit includes:
- The nursing process (utilizing all five steps) integrated with a body systems approach
    - Assessment: reviews both history and physical examination.
    - Analysis: includes appropriate NANDA nursing diagnoses.
    - Planning: discusses patient goals.
    - Implementation: provides interventions to achieve patient goals.
    - Evaluation: lists outcome criteria.
  - Introductory review of anatomy and physiology, and basic theories/principles
  - Review of pertinent disorders for each system including:
    - General characteristics
    - Pathophysiology/psychopathology
    - Medical management
    - Assessment data
    - Nursing intervention/patient education
  - Sample test questions, structured like those on the new NCLEX-RN, so you can evaluate yourself as you study

- Pertinent journal articles on specific topics relevant to the content and level of the exam
- Updated and expanded information on selected disorders, theories, and therapies

There are two complete practice tests so that you can simulate the actual testing experience. These include:

- Practice questions similar to the NCLEX-RN
- Correct answers with rationales, and a key to categorize each question according to the new test plan including phases of the nursing process, client needs classification, and levels of cognitive ability.

The appendices provide readily accessible information on drug administration and special diets.

## **Contributors**

The authors and editors are all experienced clinicians and educators who have extensive experience teaching nursing and helping graduates reach NCLEX success. This experience enables them to organize and present what seems to be an overwhelming amount of information very clearly and concisely. They have used an easy-to-digest outline format that emphasizes key content and frequently tested areas, as well as areas that tend to present difficulty for the graduate nurse.

We are all committed, through continuing education, to help you reach your fullest professional potential. Collectively, the authors and editors of this book have many successful years of experience helping nurses to pass their board exams. A major focus for RN magazine is the presentation of clinically relevant content, designed to help you in your nursing practice. The publisher views helping you to pass the NCLEX-RN as a major commitment. We believe that our experience, coupled with support from RN magazine, has enabled us to produce a book that will fully meet your needs.

Alice Stein  
Nancy Jacobson  
Editors

Guillain-Barré Syndrome	60
Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease)	61
Disorders of the Eye	61
Cataracts	61
Cataract Surgery	61
Glaucoma	62
Detached Retina	62
Disorders of the Ear	63
Otosclerosis	63
Stapedectomy	63
Ménière's Disease	64
Sample Questions	64

## The Cardiovascular System 65

Overview of Anatomy and Physiology	65
Assessment	66
Health History	66
Physical Examination	67
Laboratory/Diagnostic Tests	67
Analysis	68
Planning and Implementation	68
Goals	68
Interventions	68
Cardiac Monitoring	68
Swan-Ganz Catheter (Hemodynamic Monitoring)	69
Central Venous Pressure (CVP)	69
Evaluation	69
Disorders of the Cardiovascular System	69
Coronary Artery Disease (CAD)	69
Angina Pectoris	70
Arrhythmias	70
Myocardial Infarction (MI)	72
Coronary Artery Bypass Surgery	73
Congestive Heart Failure (CHF)	73
Pulmonary Edema	74
Pacemakers	75
Cardiac Arrest	75
Cardiopulmonary Resuscitation (CPR)	76
Endocarditis	76
Pericarditis	76
Cardiac Tamponade	77
Hypertension	77
Arteriosclerosis Obliterans	78
Thromboangiitis Obliterans (Buerger's Disease)	80
Raynaud's Phenomenon	80
Aneurysms	80
Femoral-Popliteal Bypass Surgery	81
Venous Stasis Ulcers	81
Thrombophlebitis	82
Pulmonary Embolism	83
Varicose Veins	83
Amputation	84
Sample Questions	84

## The Hematologic System 85

Overview of Anatomy and Physiology	85
Assessment	87
Health History	87
Physical Examination	87
Laboratory/Diagnostic Tests	88
Analysis	88
Planning and Implementation	88
Goals	88
Interventions	88

Blood Transfusion and Component Therapy	88
Isolation Techniques	89

Evaluation	91
Disorders of the Hematologic System	91
Iron-deficiency Anemia	91
Pernicious Anemia	92
Aplastic Anemia	92
Hemolytic Anemia	93
Splenectomy	93
Disseminated Intravascular Coagulation (DIC)	94
Acquired Immune Deficiency Syndrome (AIDS)	94
Multiple Myeloma	95
Polycythemia Vera	96

## The Respiratory System 98

Overview of Anatomy and Physiology	98
Assessment	99
Health History	99
Physical Examination	100
Laboratory/Diagnostic Tests	100
Analysis	101
Planning and Implementation	101
Goals	101
Interventions	101
Chest Tubes/Water-seal Drainage	101
Chest Physiotherapy	103
Mechanical Ventilation	103
Oxygen Therapy	104
Tracheobronchial Suctioning	104
Tracheostomy Care	105
Evaluation	105
Disorders of the Respiratory System	106
Chronic Obstructive Pulmonary Disease (COPD)	106
Emphysema	106
Bronchitis	106
Bronchiectasis	106
Pulmonary Tuberculosis	107
Fractured Ribs	107
Flail Chest	108
Pneumothorax/Hemothorax	109
Atelectasis	109
Pleural Effusion	109
Pneumonia	110
Bronchogenic Carcinoma	111
Thoracic Surgery	111
Adult Respiratory Distress Syndrome (ARDS)	112
Cancer of the Larynx	112
Total Laryngectomy	113
Sample Questions	114

## The Gastrointestinal System 115

Overview of Anatomy and Physiology	115
Assessment	117
Health History	117
Physical Examination	117
Laboratory/Diagnostic Tests	118
Analysis	119
Planning and Implementation	119
Goals	119
Interventions	120
Enemas	120
Gastrostomy	120
Nasogastric (NG) Tubes	120
Intestinal Tubes	121

Evaluation	121
Disorders of the Gastrointestinal System	121
Nausea and Vomiting	121
Diarrhea	122
Constipation	122
Cancer of the Mouth	123
Cancer of the Esophagus	123
Hiatal Hernia	124
Gastritis	124
Peptic Ulcer Disease	125
<i>Gastric Ulcers</i>	125
<i>Duodenal Ulcers</i>	126
<i>Ulcer Surgery</i>	126
Cancer of the Stomach	127
Hernias	127
Intestinal Obstructions	128
Chronic Inflammatory Bowel Disorders	128
<i>Regional Enteritis (Crohn's Disease)</i>	128
<i>Ulcerative Colitis</i>	128
Diverticulosis/Diverticulitis	129
Cancer of the Colon/Rectum	129
Bowel Surgery	129
Peritonitis	131
Hemorrhoids	131
Disorders of the Liver	132
Hepatitis	132
Cirrhosis of the Liver	132
Ascites	133
Esophageal Varices	134
Hepatic Encephalopathy	135
Cancer of the Liver	135
Disorders of the Gallbladder	135
Cholecystitis/Cholelithiasis	135
Cholecystectomy/Choledochostomy	136
Disorders of the Pancreas	136
Pancreatitis	136
Cancer of the Pancreas	137
Sample Questions	137
<b>The Genitourinary System</b>	<b>138</b>
Overview of Anatomy and Physiology	138
Assessment	140
Health History	140
Physical Examination	140
Laboratory/Diagnostic Tests	140
Analysis	141
Planning and Implementation	141
Goals	141
Interventions	141
<i>Urinary Catheterization</i>	141
<i>Dialysis</i>	142
<i>Hemodialysis</i>	142
<i>Peritoneal Dialysis</i>	142
Evaluation	143
Disorders of the Genitourinary System	143
Cystitis	143
Bladder Cancer	143
Bladder Surgery	144
Nephrolithiasis/Urolithiasis	144
Pyelonephritis	145
Acute Renal Failure	145
Chronic Renal Failure	146
Kidney Transplantation	147
Nephrectomy	147

Disorders of the Male Reproductive System	148
Epididymitis	148
Prostatitis	148
Benign Prostatic Hypertrophy (BPH)	148
Cancer of the Prostate	149
Prostatic Surgery	149
Sample Questions	150
<b>The Musculoskeletal System</b>	<b>151</b>
Overview of Anatomy and Physiology	151
Assessment	151
Health History	151
Physical Examination	152
Laboratory/Diagnostic Tests	152
Analysis	152
Planning and Implementation	152
Goals	152
Interventions	152
<i>Preventing Complications of Immobility</i>	152
<i>Range-of-Motion (ROM) Exercises</i>	152
<i>Isometric Exercises</i>	153
<i>Assistive Devices for Walking</i>	153
<i>Care of the Patient with a Cast</i>	154
<i>Care of the Patient in Traction</i>	154
Evaluation	155
Disorders of the Musculoskeletal System	155
Rheumatoid Arthritis (RA)	155
Osteoarthritis	156
Gout	157
Systemic Lupus Erythematosus (SLE)	157
Osteomyelitis	158
Fractures	158
Open Reduction and Internal Fixation	158
Fractured Hip	159
Total Hip Replacement	159
Herniated Nucleus Pulposus (HNP)	159
Laminectomy	160
Spinal Fusion	161
Sample Questions	161
<b>The Endocrine System</b>	<b>162</b>
Overview of Anatomy and Physiology	162
Assessment	163
Health History	163
Physical Examination	164
Laboratory/Diagnostic Tests	164
Analysis	164
Planning and Implementation	165
Goals	165
Interventions	165
<i>Care of the Patient on Corticosteroid Therapy</i>	165
Evaluation	165
Disorders of the Endocrine System	166
Disorders of the Pituitary Gland	166
Hypopituitarism	166
Hyperpituitarism	166
Hypophysectomy	166
Diabetes Insipidus	167
Disorders of the Adrenal Gland	167
Addison's Disease	167
Addisonian Crisis	168
Cushing's Syndrome	168
Primary Aldosteronism (Conn's Syndrome)	168
Pheochromocytoma	168
Adrenalectomy	169

Disorders of the Thyroid Gland	169
Simple Goiter	169
Hypothyroidism (Myxedema)	170
Hyperthyroidism (Grave's Disease)	170
Thyroid Storm	171
Thyroidectomy	171
Disorders of the Parathyroid Glands	172
Hypoparathyroidism	172
Hyperparathyroidism	172
Disorders of the Pancreas	173
Diabetes Mellitus	173
Ketoacidosis (DKA)	175
Insulin Reaction/Hypoglycemia	176
Hyperglycemic Hyperosmolar Nonketotic Coma (HHNK)	176
Sample Questions	176

<b>The Integumentary System</b>	177
Overview of Anatomy and Physiology	177
Assessment	177

Health History	177
Physical Examination	178
Laboratory/Diagnostic Studies	178

Analysis	178
Planning and Implementation	178

Goals	178
Interventions	178
Skin Grafts	178
Evaluation	179

Disorders of the Integumentary System	179
Primary Lesions of the Skin	179
Contact Dermatitis	179
Psoriasis	179
Skin Cancer	180
Herpes Zoster (Shingles)	180
Herpes Simplex Virus, Type I	180
Burns	180

Sample Questions	182
References and Recommended Readings	182

## Reprints 183

"Are you ready for this bedside emergency?" by S. Sarsany. ( <i>RN</i> , December 1987)	185
"Colorectal cancer: When a polyp is more than a polyp," by S. Griefzu. ( <i>RN</i> , September 1986)	187
"Gastric surgery: Your crucial pre- and postop role," by D. Feickert. ( <i>RN</i> , January 1987)	194
"Helping an MS patient live a better life," by J. Ferguson. ( <i>RN</i> , December 1987)	201
"Helping your patient through eye surgery," by E. Lent-Wunderlich and M. Ott. ( <i>RN</i> , June 1986)	207
"Stroke: How to contain the damage," by R. Gary, B. Jermier, and A. Hickey. ( <i>RN</i> , May 1986)	212
"Nursing the kidney transplant patient," by R. Rivers. ( <i>RN</i> , August 1987)	218
"Nursing the patient in traction," by L. Morris, S. Kraft, S. Tessem, and S. Reinisch. ( <i>RN</i> , January 1988)	223
"Special care for skeletal traction," by L. Morris, S. Kraft, S. Tessem, and S. Reinisch. ( <i>RN</i> , February 1988)	229
"Stopping CHF while there's still time," by A. Ryan. ( <i>RN</i> , August 1986)	235
"What you need to know about today's pacemakers," by L. Porterfield and J. Porterfield. ( <i>RN</i> , March 1987)	242
"When the patient has hyperkalemia," by K. Toto. ( <i>RN</i> , April 1987)	248
"Why deep vein thrombosis is so dangerous," by B. McMahan. ( <i>RN</i> , January 1987)	252

## UNIT 3: PEDIATRIC NURSING 257

### Growth and Development 259

General Principles	259
Child Development Theorists	259
Assessment	259
Infant (Birth through 12 months)	260
Toddler (12 months to 3 years)	262
Preschooler (3 to 5 years)	263
School-age (6 to 12 years)	264
Adolescent (12 to 18 years)	265
Analysis	266
Planning and Implementation	266
Goals	266
Interventions for the Sick or Hospitalized Child	266
Communicating with Children	266
Play	266
Preparation for Procedures	268
Evaluation	268
Disorders of Growth and Development	268
Communicable Childhood Diseases	268
Child Abuse	268
Failure to Thrive (FTT)	269
Learning Disabilities	269
Sudden Infant Death Syndrome (SIDS)	270

### Multisystem Stressors 271

Genetic Disorders	271
Principles of Inheritance	271
Down's Syndrome	273
Fluid and Electrolyte, Acid-base Balances	273
Dehydration	274
Diarrhea	274
Vomiting	275
Accidents, Poisonings, and Ingestions	273
Pediatric Poisonings	275
Aspirin Ingestion	276
Acetaminophen Ingestion	276
Lead Poisoning	276
Aspiration of a Foreign Object	277
Sample Questions	277

### The Nervous System 278

Variations from the Adult	278
Assessment	278
History	278
Physical Examination	279
Laboratory/Diagnostic Tests	279
Analysis	279
Planning and Implementation	279
Goals	279
Interventions	279
Care of the Child with Increased Intracranial Pressure	279
Evaluation	280
Disorders of the Nervous System	280
Hydrocephalus	280
Shunts	280
Spina Bifida	281
Brain Tumors	282
Brain Surgery	283
Neuroblastoma	283
Reye's Syndrome	284
Seizure Disorders	284
Cerebral Palsy (CP)	286
Tay-Sachs Disease	287

Disorders of the Eye	287
Blindness	287
Conjunctivitis	288
Disorders of the Ear	288
Deafness	288
Otitis Media	288
Sample Questions	289
<b>The Cardiovascular System</b>	<b>290</b>
Variations from the Adult	290
Assessment	291
History	291
Physical Examination	291
Laboratory/Diagnostic Tests	291
Analysis	291
Planning and Implementation	291
Goals	291
Interventions	291
<i>Surgical Shunts</i>	291
Evaluation	292
Disorders of the Cardiovascular System	292
Acyanotic Heart Defects	292
Cyanotic Heart Defects	293
Cardiac Surgery	294
Rheumatic Fever (RF)	295
Sample Questions	296
<b>The Hematologic System</b>	<b>297</b>
Variations from the Adult	297
Assessment	297
History	297
Physical Examination	297
Analysis	297
Planning and Implementation	297
Goals	297
Interventions	297
<i>Bone Marrow Transplant</i>	297
Evaluation	299
Disorders of the Hematologic System	299
Iron Deficiency Anemia	299
Sickle Cell Anemia	299
Idiopathic Thrombocytopenic Purpura (ITP)	300
Hemophilia	300
Infectious Mononucleosis	301
Leukemia	301
Hodgkin's Lymphoma	302
Non-Hodgkin's Lymphoma	302
Sample Questions	303
<b>The Respiratory System</b>	<b>304</b>
Variations from the Adult	304
Assessment	304
History	304
Physical Examination	304
Laboratory/Diagnostic Tests	304
Analysis	305
Planning and Implementation	305
Goals	305
Interventions	305
<i>Oxygen Tent (Croup Tent, Mist Tent, Oxygen Canopy)</i>	305
<i>Vaporizers</i>	305
<i>Chest Physical Therapy</i>	305
<i>Suctioning</i>	305
<i>Deep Breathing Exercises</i>	305
<i>Apnea Monitor</i>	305

Evaluation	306
Disorders of the Respiratory System	306
Tonsillitis	306
Tonsillectomy	306
Epiglottitis	306
Acute Spasmodic Laryngitis (Croup)	307
Laryngotracheobronchitis	307
Bronchiolitis	307
Cystic Fibrosis (CF)	308
Asthma	309
Sample Questions	310
<b>The Gastrointestinal System</b>	<b>311</b>
Variations from the Adult	311
Assessment	311
History	311
Physical Examination	311
Analysis	311
Planning and Implementation	311
Goals	311
Interventions	312
<i>Nasogastric Tube Feeding</i>	312
<i>Gastrostomy</i>	312
<i>Parenteral Nutrition</i>	312
Evaluation	312
Disorders of the Gastrointestinal Tract	312
Cleft Lip and Palate	312
Altered Connections between Trachea, Esophagus, and Stomach	313
Gastroesophageal Reflux (Chalasia)	314
Pyloric Stenosis	314
Intussusception	314
Hirschsprung's Disease (Aganglionic Megacolon)	315
Imperforate Anus	315
Celiac Disease	315
Appendicitis	316
Parasitic Worms	316
Constipation	316
Sample Questions	317
<b>The Genitourinary System</b>	<b>318</b>
Variations from the Adult	318
Assessment	318
History	318
Physical Examination	318
Analysis	318
Planning and Implementation	318
Goals	318
Interventions	318
<i>Pediatric Urine Collector (PUC)</i>	318
Evaluation	318
Disorders of the Genitourinary Tract	318
Urinary Tract Infection (UTI)	318
Vesicoureteral Reflux	319
Extrophy of the Bladder	319
Undescended Testicles (Cryptorchidism)	319
Hypospadias	320
Enuresis	320
Nephrosis (Nephrotic Syndrome)	320
Acute Glomerulonephritis (AGN)	321
Hydronephrosis	321
Wilm's Tumor (Nephroblastoma)	321
Sample Questions	322



**The Musculoskeletal System 323**

Variations from the Adult	323
Assessment	323
History	323
Physical Examination	323
Analysis	323
Planning and Implementation	324
Goals	324
Interventions	324
<i>Care of the Child with a Cast</i>	324
<i>Care of the Child in Traction</i>	324
<i>Care of the Child with a Brace</i>	324
Evaluation	325
Disorders of the Musculoskeletal System	325
Congenital Dislocation of the Hip	325
Clubfoot (Talipes)	325
Tibial Torsion	326
Legg-Calvé-Perthes Disease	326
Slipped Femoral Capital Epiphysis	326
Osteogenesis Imperfecta	326
Scoliosis	327
Harrington Rod Insertion	327
Muscular Dystrophy	327
Juvenile Rheumatoid Arthritis (JRA)	328
Bone Tumors	328
Osteogenic Sarcoma	328
Ewing's Sarcoma	328
Sample Questions	329

**The Endocrine System 330**

Variations from the Adult	330
Analysis	330
Planning and Implementation	330
Goals	330
Evaluation	330
Disorders of the Endocrine System	330
Juvenile Diabetes Mellitus	330
Congenital Hypothyroidism (Cretinism)	331
Hypopituitarism (Pituitary Dwarfism)	331
Hyperpituitarism (Gigantism)	331
Sample Questions	332

**The Integumentary System 333**

Variations from the Adult	333
Assessment	333
History	333
Analysis	333
Planning and Implementation	333
Goals	333
Evaluation	333
Disorders of the Skin	333
Burns	333
Impetigo	333
Ringworm	334
Pediculosis (Head Lice)	334
Diaper Rash	334
Poison Ivy	334
Eczema	335
Acne	335

**Care of the Terminally Ill Child 336**

Pediatric Oncology	336
Modes of Cancer Treatment	336
Side Effects	337
Nursing Interventions	337

Death and Dying	338
Parental Response to Death	338
Child's Response to Death	338
Nursing Implications	338
Communicating with Dying Child	338
Care Guidelines at Impending Death	338
Sample Questions	338
References and Recommended Readings	339

**Reprints 341**

"Are you sure it's only croup?" by D. Thomas. (RN, December 1984)	342
"Fever in children," by D. Thomas. (RN, December 1985)	346
"When your littlest patients need IVs," by G. Arthur. (RN, July 1984)	348

**UNIT 4: MATERNITY AND GYNECOLOGIC NURSING 355****The Female Reproductive System 357**

Anatomy	357
Physiology	358

**The Childbearing Cycle 359**

Conception	359
Nidation (Implantation)	359
Developmental Stages	359
Special Structures of Pregnancy	359
Physical and Psychologic Changes of Pregnancy	360

**The Antepartal Period 363**

Assessment	363
Determination of Pregnancy	363
Analysis	363
Planning and Implementation	363
Goals	363
Interventions	364
Prenatal Care	364
Nutrition during Pregnancy	364
Education for Parenthood	365
Determination of Fetal Status and Risk Factors	365
Evaluation	366
Common Discomforts During Pregnancy	366
Complications of Pregnancy	366
Abortion	366
Incompetent Cervical Os	367
Ectopic Pregnancy	367
Hydatidiform Mole (Gestational Trophoblastic Disease)	367
Placenta Previa	368
Abruptio Placentae	368
Hyperemesis Gravidarum	368
Toxemias of Pregnancy	368
Mild Preeclampsia	368
Severe Preeclampsia	369
Eclampsia	369
Pre- and Co-existing Diseases of Pregnancy	369
Other Conditions of Risk in Pregnancy	371
Adolescence	371
Disseminated Intravascular Coagulation (DIC)	371
Anemia	371
Sample Questions	371

**Labor and Delivery 372**

Overview	372
Assessment during Labor	374
Auscultation	374
Palpation	374
Electronic Fetal Monitoring	374

Premonitory Assessment	375
True vs False Labor	375
First Stage of Labor	375
Second Stage of Labor	376
Third Stage of Labor	377
Fourth Stage of Labor	377
Complications of Labor and Delivery	378
Premature Labor	378
Postmature/Prolonged Pregnancy	379
Prolapsed Umbilical Cord	379
Premature Rupture of Membranes	379
Fetal Distress	379
Dystocia	380
Precipitous Labor and Delivery	380
Amniotic Fluid Embolism	381
Induction of Labor	381
Analgesia and Anesthesia	381
Operative Obstetrical Procedures	383
Episiotomy	383
Forceps Delivery	383
Cesarean Birth	383
Sample Questions	384
<b>The Postpartum Period</b>	<b>385</b>
Overview	385
Assessment	386
Physical	386
Psychosocial Adjustment	387
Analysis	387
Planning and Implementation	387
Goals	387
Interventions	387
Physical Care	387
Adjustment to Parenthood	387
Infant Feeding	387
Evaluation	388
Complications of the Postpartum Period	388
Postpartum Hemorrhage	388
Thrombophlebitis	389
Subinvolution	389
Postpartum Infection	389
Mastitis	389
Urinary Tract Infection	390
Sample Questions	390
<b>The Newborn</b>	<b>391</b>
Physiologic Status of the Newborn	391
Assessment	392
Physical Examination	392
Apgar Scoring	393
Analysis	393
Planning and Implementation	393
Goals	393
Interventions	393
Delivery Room	393
Nursery	393
Evaluation	394
Variations from Normal Newborn Assessment Findings	394
<b>The High-risk Infant</b>	<b>396</b>
Overview	396
Assessment	396
Analysis	396
Planning and Implementation	396
Goals	396

Interventions	396
Evaluation	396
High-risk Disorders	396
The Premature Infant	396
The Dysmature Infant (SGA)	397
The Postmature Infant	397
Special Conditions in the Neonate	398
Hyperbilirubinemia	398
Hemolytic Disease of the Newborn (Erythroblastosis Fetalis)	398
Neonatal Sepsis	399
Hypoglycemia	399
Infant Born to Addicted Mother	400
Respiratory Distress Syndrome (RDS)	400
Necrotizing Enterocolitis (NEC)	400
Phenylketonuria (PKU)	401
Sample Questions	401
<b>Gynecologic Conditions</b>	<b>402</b>
Fertility and Infertility	402
Termination of Pregnancy	404
Menstrual Disorders	404
Dysmenorrhea	405
Amenorrhea	405
Menorrhagia	405
Metrorrhagia	405
Endometriosis	405
Infectious Disorders	405
Sexually Transmitted Diseases (STD)	405
Herpes	405
Chlamydia	406
Gonorrhea	406
Syphilis	406
Trichomonas vaginalis	406
Candida albicans	406
Bacterial Vaginitis	406
Female Reproductive System Neoplasia	406
Fibrocystic Breast Disease	406
Breast Cancer	406
Mastectomy	407
Cancer of the Cervix	407
Cancer of the Uterus	407
Cancer of the Ovary	407
Cancer of the Vulva	407
Hysterectomy	407
Menopause	407
Complications of Menopause	408
Osteoporosis	408
Cystocele/Rectocele	408
Prolapse of the Uterus	408
Sample Questions	408
References and Recommended Readings	409
<b>Reprints</b>	<b>411</b>
"Dealing with third-trimester bleeding," by C. Howe.	
(RN, February 1985)	413
"Getting mothers and newborns off to a good start: How to give baby's first physical," by L. Wilson. (RN, April 1984)	416
"Helping the patient with vaginitis," by D. Washington.	
(RN, April 1984)	420
"The 'other' STDs: As dangerous as ever," by P. McElhose.	
(RN, June 1988)	426
"When your pregnant patient has diabetes," by C. Robertson.	
(RN, November 1987)	433

## UNIT 5: PSYCHIATRIC-MENTAL HEALTH NURSING 439

<b>Psychiatric-Mental Health Nursing</b>	<b>441</b>
Theoretical Basis	441
Medical-biologic Model	441
Psychodynamic/Psychoanalytical Model (Freud)	441
Psychosocial Model (Erickson)	442
Interpersonal Model (Sullivan)	442
Therapeutic Nurse-Client Relationship (Peplau)	442
Human Motivation/Need Model (Maslow)	443
Behavioral Model (Pavlov, Skinner)	443
Community Mental Health Model	443
Nursing Process	443
Physical Assessment	443
Mental Status Assessment	444
Emotional Status Assessment	444
Cognitive Assessment	444
Social/Cultural Considerations	444
Analysis	444
Planning and Implementation	444
Goals	444
Interventions	445
Therapeutic Communication	445
Group Therapy	445
Family Therapy	446
Milieu Therapy	446
Crisis Intervention	446
Behavior Modification	446
Psychotropic medications	447
Evaluation	447
Behaviors Related to Emotional Distress	447
Anxiety	447
Defense Mechanisms	448
Disorders of Perception	448
Withdrawal	448
Hostility and Aggression	448
Self-mutilation	450
Suicide	450
<b>Psychiatric Disorders (DSM III)</b>	<b>451</b>
Disorders of Infancy, Childhood, and Adolescence	451
Mental Retardation	452
Anxiety Disorders of Childhood/Adolescence	452
Disorders with Physical Manifestations	452
Infantile Autism	453
Pervasive Developmental Disorder	453
Eating Disorders	453
Sample Questions	453
Organic Mental Disorders (OMD)	454
Sample Questions	455
Substance Use Disorders	455
Psychoactive Substance-Induced Organic Mental Disorders	455
Alcohol Abuse/Dependence	456
Psychoactive Drug Use	457
Schizophrenic Disorders	457
Sample Questions	460
Delusional (Paranoid) Disorders	461
Affective Disorders	461

Bipolar Disorder (Manic Episode)	463
Major Depression	463
Depression with Melancholia	464
Dysthymic Disorder	465
Neurotic Disorders	465
Anxiety Disorders	465
Phobic Disorders	465
Generalized Anxiety Disorder	466
Panic Disorder (Acute Anxiety)	466
Obsessive-Compulsive Disorder/Neurosis	466
Post-traumatic Stress Disorder (PTSD)	466
Sample Questions	466
Somatoform Disorders	467
Somatization Disorder	467
Conversion Disorder	467
Psychogenic Pain	467
Hypochondriasis	467
Dissociative Disorders	467
Psychogenic Amnesia	468
Psychogenic Fugue	468
Personality Disorders	468
Borderline Personality Disorder	468
Antisocial Personality Disorder	468

### Psychologic Aspects of Physical Illness 469

Stress-related Disorders	469
Victims of Abuse	469
Critical Illness	470
Sample Questions	470
Chronic Illness	471
Death and Dying	471
Sample Questions	472

### Ethical and Legal Aspects of Psychiatric and Professional Nursing 473

Overview	473
Ethical Concepts that Apply to Nursing Practice	473
Legal Concepts that Apply to Nursing Practice	473
Legal Concepts Related to Psychiatric-Mental Health Nursing	474
Legal Responsibilities of the Nurse	474
References and Recommended Readings	475
<b>Reprints 477</b>	
"Dealing with drug abusers," by R. Stevenson.	
(RN, April 1985)	478
"Defusing the violent patient—Before he explodes," by D. Barash.	
(RN, March 1984)	481
"Electroshock: Exploding the myths," by M. Fine and M. Jenike.	
(RN, September 1985)	484
"Heading off depression in the chronically ill," by P. Kline and C. Chernecky.	
(RN, October 1987)	488

## UNIT 6: QUESTIONS AND ANSWERS 493

<b>Practice Test 1</b>	<b>495</b>
<b>Practice Test 2</b>	<b>507</b>

### APPENDICES

<b>1: Special Diets</b>	<b>525</b>
<b>2: Drug Administration</b>	<b>535</b>
<b>3: Standards and Ethics</b>	<b>545</b>
<b>4: Answers and Rationales for Sample Questions</b>	<b>549</b>
<b>Index</b>	<b>554</b>

# Tables and Figures

## TABLES

1.1 Alterations in immune functioning	14
2.2 Minerals	17
2.3 Vitamins	18
2.4 Pain assessment	20
2.5 Physical changes of aging	25
2.6 Fluid and electrolyte imbalances	24
2.7 Acid-base imbalances	26
2.8 Complications of IV therapy	27
2.9 Classification of shock	28
2.10 Drugs used to treat shock	29
2.11 Stages of anesthesia	31
2.12 Regional anesthesia	32
2.13 Seven warning signs of cancer	36
2.14 Drugs used in chemotherapy	37
2.15 Cranial nerves	42
2.16 Effects of autonomic nervous system activity	43
2.17 Antiarrhythmic drugs	71
2.18 Antihypertensive drugs	78
2.19 Complications of blood transfusion	90
2.20 Drugs commonly used to treat tuberculosis	108
2.21 Drug therapy for peptic ulcer	125
2.22 Bowel surgeries	130
2.23 Preventing complications of immobility	153
2.24 Hormone functions	163
2.25 Characteristics of insulin preparations	173
2.26 Oral hypoglycemic agents	174
3.1 Communicable childhood diseases	267
3.2 Immunization schedule	268
3.3 Types of seizures	285
4.1 Markers in fetal development	360
4.2 Methods of childbirth	364
4.3 Nonstress test (NST)	365
4.4 Contraction stress test (CST)	365
4.5 Common discomforts during pregnancy	366
4.6 Danger signs of pregnancy	367
4.7 Apgar scoring	377
4.8 Emergency delivery of an infant	380
4.9 Tips for successful breast-feeding	388
5.1 Defense mechanisms	449
5.2 Groups at increased risk for suicide	450
5.3 Lethality Assessment	450
5.4 Commonly abused drugs	458
5.5 Antipsychotic medications	460

5.6 Antidepressant medications	464
5.7 Types of stress: related disorders	469
5.8 Stages of dying	471
5.9 Examples of crimes and torts	474
A.1 Apothecary units of weight and volume	535
A.2 Household units of liquid measure	535
A.3 Approximate equivalents to remember	535

## FIGURES

1.1 Structure of the test plan	5
2.1 Side view of the brain	40
2.2 Pathologic reflex (Babinski)	44
2.3 Glasgow Coma Scale	45
2.4 The valves of the heart	65
2.5 Coronary circulation	66
2.6 The heart valves and areas of auscultation	67
2.7 A typical ECG	69
2.8 The respiratory system	99
2.9 Locations for hearing normal breath sounds	100
2.10 Water-seal drainage	102
2.11 Anterior view of the structures in the GI tract	115
2.12 Gallbladder and ductal system	116
2.13 Abdominal quadrants	118
2.14 Anatomy of the kidney	138
2.15 The nephron	139
2.16 The male reproductive tract	140
3.1 Congenital heart defects	292
3.2 Esophageal defects	313
3.3 Hip spica cast	324
4.1 Anatomy of the female reproductive tract	357
4.2 The menstrual cycle	358
4.3 Nägele's rule	360
4.4 The fetal head	372
4.5 Malpresentations	373
4.6 Positions	373
5.1 Patterns of mood disturbances in affective disorders	462
A.1 Piggyback infusion	538
A.2 Metric prefixes	538
A.3 Disposable medicine containers	540
A.4 Different types of syringes	541
A.5 West's nomogram	542

---

---

# *UNIT 1*

## *PREPARING FOR THE NCLEX EXAMINATION*

by

Anne Waldman, RN, C, MSN

**T**his first unit of the RN BOARD REVIEW FOR NCLEX-RN 1989 will provide you with the important information you need to know about the construction of the National Council Licensure Examination for Registered Nurses (NCLEX-RN, often referred to as "State Boards"), with tips on how to study, and with test-taking techniques you can use to improve your success when writing the examination.



# Understanding the NCLEX Examination

## THE TEST PLAN

The NCLEX-RN examination questions are based on a test plan comprised of phases of the nursing process, categories of client needs, and levels of cognitive skills.

### Phases of the Nursing Process\*

The phases of the nursing process to be measured in the examination for licensure are assessment, analysis, planning, implementation, and evaluation. Because all five categories are of equal importance, questions testing these nursing behaviors are distributed equally throughout the text.

#### Assessment

Establishing a data base.

- A. Gather objective and subjective information relative to the client.
  - 1. Collect verbal and nonverbal information from the client, significant others, health team members, records, and other pertinent resources.
  - 2. Review standard data sources for information.
  - 3. Recognize symptoms and significant findings.
  - 4. Determine client's ability to assume care of daily health needs.
  - 5. Determine health team member's ability to provide care.
  - 6. Assess environment of client.
  - 7. Identify own or staff reactions to client, significant others, or health team members.
- B. Verify data.
  - 1. Confirm observation or perception by obtaining additional information.
  - 2. Question orders and decisions by other health team members when indicated.
  - 3. Check condition of client personally instead of relying upon equipment.
- C. Communicate information gained in assessment.

#### Analysis

Identifying actual or potential health care needs/problems based on assessment.

- A. Interpret data.
  - 1. Validate data.
  - 2. Organize related data.
- B. Collect additional data as indicated.
- C. Identify and communicate client's nursing diagnoses.
- D. Determine congruency between client's needs/problems and health team member's ability to meet client's needs.

#### Planning

Setting goals to meet client's needs; designing strategies to achieve these goals.

- A. Determine goals of care.
  - 1. Involve client, significant others, health team members in setting goals.
  - 2. Establish priorities among goals.
  - 3. Anticipate needs/problems according to established priorities.
- B. Develop and modify plan.
  - 1. Involve client, significant others, health team members in designing strategies.
  - 2. Include all information needed to manage client's care (e.g., age, sex, culture, ethnicity, religion).
  - 3. Plan for client's comfort and maintenance of optimal functioning.
  - 4. Select nursing measures for delivery of client care.
- C. Cooperate with other health team members for delivery of client care.
  - 1. Identify health or social resources in the community for client/significant others.
  - 2. Coordinate care for benefit of client.
  - 3. Delegate actions.
- D. Formulate expected outcomes of nursing interventions.

#### Implementation

Initiating and completing actions necessary to accomplish the defined goals.

- A. Organize and manage client's care.
- B. Perform or assist in performing activities of daily living.
  - 1. Institute measures for client's comfort.
  - 2. Assist client to maintain optimal functioning.
- C. Counsel and teach client, significant others, health team members.

\*Dvorak and Yocom, 1988, pp. 216-218. Adapted with permission.

## 4 UNIT 1: PREPARING FOR THE NCLEX EXAMINATION

1. Assist to recognize and manage stress.
  2. Facilitate client relationships with significant others/health team members.
  3. Teach correct principles, procedures, and techniques for maintenance and promotion of health.
  4. Inform client about his health status.
  5. Refer client, significant others, health team members to appropriate resources.
- D.** Provide care to achieve established goals for client.
1. Use correct techniques in administering client care.
  2. Use precautionary and preventive measures in providing care to client.
  3. Prepare client for surgery, delivery, or other procedures.
  4. Institute action to compensate for adverse responses.
  5. Initiate necessary life-saving measures for emergency situations.
- E.** Provide care to optimize achievement of client's health care goals.
1. Provide an environment conducive to attainment of client's health care goals.
  2. Adjust care in accord with client's expressed or implied needs/problems.
  3. Stimulate and motivate client to achieve self-care and independence.
  4. Encourage client to follow treatment regimen.
  5. Adapt approaches to compensate for own and health care team members' reactions to factors influencing therapeutic relationships with client.
- F.** Supervise, coordinate, and evaluate delivery of client's care provided by nursing staff.
- G.** Record and exchange information.
1. Provide complete, accurate reports on assigned client to other team members.
  2. Record actual client responses, nursing actions, and other information relevant to implementation of care.

### Evaluation

Determining the extent to which goals have been achieved.

- A.** Compare actual outcomes with expected outcomes of therapy.
1. Evaluate responses (expected and unexpected) in order to determine degree of success of nursing interventions.
  2. Determine need for change in goals, environment, equipment, procedures, or therapy.
- B.** Evaluate compliance with prescribed/proscribed therapy.
1. Determine impact of actions on client, significant others, or health team members.
  2. Verify that tests or measurements are done correctly.
  3. Ascertain client's, significant others', or health team members' understanding of information given.
- C.** Record and describe client's response to therapy/care.
- D.** Modify plan as indicated and reorder priorities.

### Categories of Client Needs\*

The health care needs of the client are grouped under four broad

categories, which, together with the weighting assigned to each, are: 1) safe, effective environment (25%–31%); physiologic integrity (42%–48%); psychosocial integrity (9%–15%); and health promotion/maintenance (12%–18).

### Safe, Effective Care Environment

- A.** The nurse meets client needs for a safe and effective environment by providing and directing nursing care to promote
1. Coordinated care
  2. Quality assurance
  3. Goal-oriented care
  4. Environmental safety
  5. Preparation for treatments and procedures
  6. Safe and effective treatments and procedures
- B.** In order to meet client needs for a safe, effective environment, the nurse should possess knowledge, skills, and abilities that include but are not limited to
1. Bio/psycho/social principles
  2. Principles of teaching and learning
  3. Basic principles of management
  4. Principles of group dynamics and interpersonal communication
  5. Expected outcomes of various treatments
  6. General and specific protective measures
  7. Environmental and personal safety
  8. Client rights
  9. Confidentiality
  10. Cultural and religious influences on health
  11. Continuity of care
  12. Spread and control of infectious agents

### Physiologic Integrity

- A.** The nurse meets the physiologic integrity needs of clients with potential life-threatening or chronically recurring physiologic conditions, or who are at risk for development of complications or untoward effects of treatments or management by providing and directing nursing care to promote
1. Physiologic adaptation
  2. Reduction of risk potential
  3. Mobility
  4. Comfort
  5. Provision of basic care
- B.** In order to meet client needs for physiologic integrity, the nurse should possess knowledge, skills, and abilities that include but are not limited to
1. Normal body structure and function
  2. Pathophysiology
  3. Drug administration and pharmacologic actions
  4. Routine nursing measures
  5. Invasive procedures
  6. Documentation
  7. Nutritional therapies
  8. Managing emergencies, expected and unexpected response to therapies
  9. Body mechanics

\*Ibid, pp. 219–220



10. Effects of immobility
11. Activities of daily living
12. Comfort measures
13. Uses of special equipment

### **Psychosocial Integrity**

- A. The nurse meets clients needs for psychosocial integrity in stress and crisis-related situations throughout the life cycle by providing and directing nursing care to promote
  1. Psychosocial adaptation
  2. Coping/adaptation
- B. In order to meet client needs for psychosocial integrity, the nurse should possess knowledge, skills, and abilities that include but are not limited to
  1. Communication skills
  2. Mental health concepts
  3. Behavioral norms
  4. Psychodynamics of behavior
  5. Psychopathology
  6. Treatment modalities
  7. Psychopharmacology
  8. Documentation
  9. Accountability
  10. Principles of teaching and learning
  11. Appropriate community resources

### **Health Promotion/Maintenance**

- A. The nurse meets client needs for health promotion/maintenance throughout the life cycle by providing and directing nursing care to promote (for clients and their significant others)
  1. Continued growth and development
  2. Self-care
  3. Integrity of support systems
  4. Prevention and early treatment of disease
- B. In order to meet client needs for health promotion/maintenance, the nurse should possess knowledge, skills, and abilities that include but are not limited to
  1. Communication skills
  2. Principles of teaching and learning
  3. Documentation
  4. Community resources
  5. Family systems
  6. Concepts of wellness
  7. Adaptation to altered health states
  8. Reproduction and human sexuality
  9. Birthing and parenting
  10. Growth and development, including dying and death
  11. Pathophysiology
  12. Body structure and function
  13. Principles of immunity

### **Levels of Cognitive Ability**

The test also evaluates four of the cognitive abilities defined by Bloom et al. (1956): recall, comprehension, application, and analysis. While all four of these levels are evaluated, emphasis is

placed on the higher functions of application and analysis. The four are defined as

- A. Knowledge base: involves the ability to recall information.
- B. Comprehension: involves the ability to understand what is being communicated and make use of the information without necessarily relating it to other information.
- C. Application: requires the ability to remember and apply principles, procedures, and theories.
- D. Analysis: requires the ability to break down a communication into the hierarchy of its parts and recognize the relationship among the ideas.

### **HOW THE TEST IS CONSTRUCTED**

- A. The National Council of State Boards of Nursing Inc. is the central organization for the independent member Boards of Nursing which includes the 50 states, the District of Columbia, Guam, and the Virgin Islands. The member boards are divided into four regional areas, which supervise the selection of test item writers (representing educators and clinicians), whose names are suggested by the individual state boards of nursing. This provides for regional representation in the testing of nursing practice.
- B. The National Council contracts with a professional testing service to supervise writing and validation of test items by the item writers. This professional service works closely with the Examination Committee of the National Council in the test development process. The National Council and the state boards are responsible for the administration and security of the test.
- C. The test is administered in February and July over a two-day period. It consists of four one-and-a-half-hour sections