



IFOM[®]
International Foundations of Medicine

Clinical Science Examination Content Outline



NBME[®]

International Foundations of
Medicine[®]

National Board of Medical
Examiners[®]

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Physician Tasks/Competencies

Test Specifications

Topic	Range
Medical Knowledge/Scientific Concepts	13%–18%
Patient Care: Diagnosis	43%–48%
Patient Care: Management	32%–37%
Professionalism	1%–2%
Patient Safety	1%–2%
Practice-based Learning	2%–5%

Medical Knowledge/Scientific Concepts

Applying foundational science concepts

Patient Care: Diagnosis

History and physical examination

Laboratory and diagnostic studies

Diagnosis

Prognosis/outcome

Patient Care: Management

Health maintenance and disease prevention

Pharmacotherapy

Clinical interventions

Mixed management

Professionalism

Professionalism/legal/ethical issues in interaction with patients and families

Professionalism/legal/ethical issues in interactions with patients and families related to death and dying

Professionalism/legal/ethical issues in interactions with other health professionals

Patient Safety

Practice-based Learning

Understanding and application of principles of biostatistics, public health, and epidemiology

Understanding of the principles of research ethics and regulatory issues

Content Categories

Test Specifications

Topic	Range
Normal Age-related Findings	1%–3%
Immune System	2%–4%
Blood and Lymphoreticular System	4%–6%
Behavioral Health	3.5%–5.5%
Nervous System and Special Senses	8.5%–10.5%
Skin and Subcutaneous Tissue	3.5%–5.5%
Musculoskeletal System	6%–8%
Cardiovascular System	8%–10%
Respiratory System	8.5%–10.5%
Gastrointestinal System	8%–10%
Renal and Urinary Systems	4.5%–6.5%
Pregnancy, Childbirth, and the Puerperium	4%–6%
Female Reproductive System & Breast	6%–8%
Male Reproductive System	1%–3%
Endocrine System	6%–8%
Multisystem Processes & Disorders	6%–8%
Biostatistics, Epidemiology, and Public/Population Health	3%–5%
Social Sciences	1%–3%

Normal Age-related Findings

Infancy and Childhood (0 to 12 years)

Adolescence (13-17 years)

Adulthood (18-64 years)

Senescence (65 years and older)

Immune System

Disorders associated with immunodeficiency

HIV/AIDS

Immunologically mediated disorders

Adverse effects of drugs on the immune system

Blood and Lymphoreticular System

Infectious and immunologic

Neoplasms

Anemia, cytopenias, and polycythemia

Coagulation disorders (hypocoagulable and hypercoagulable conditions)
Traumatic, mechanical, and vascular disorders
Adverse effects of drugs on the hematologic and lymphoreticular systems

Behavioral Health

Psychotic disorders
Anxiety disorders
Mood disorders
Somatoform disorders
Factitious disorders
Eating disorders and impulse control disorders
Disorders originating in infancy/childhood
Personality disorders
Psychosocial disorders/behaviors
Substance use disorders

Nervous System and Special Senses

Infectious, immunologic, inflammatory disorders
Neoplasms (cerebral, spinal, and peripheral)
Cerebrovascular disease
Disorders relating to the spine, spinal cord, and spinal nerve roots
Cranial and peripheral nerve disorders
Neurologic pain syndromes
Degenerative disorders/amnestic syndromes
Global cerebral dysfunction
Neuromuscular disorders
Movement disorders
Metabolic disorders
Paroxysmal disorders

Sleep disorders

Traumatic and mechanical disorders and disorders of increased intracranial pressure

Congenital disorders

Adverse effects of drugs on the nervous system

Disorders of the eye and the eyelid

Disorders of the ear

Skin and Subcutaneous Tissue

Infectious, immunologic, and inflammatory disorders

Neoplasms

Adnexal disorders (hair and hair follicles, nails, sweat gland, sebaceous glands, oral mucous membranes)

Oral disease

Disorders of pigmentation

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on skin and subcutaneous tissue

Musculoskeletal System

Infectious, immunologic, and inflammatory disorders

Neoplasms

Degenerative and metabolic disorders

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on the musculoskeletal system

Cardiovascular System

Infectious, immunologic, and inflammatory disorders

Neoplasms

Dysrhythmias

Heart failure

Ischemic heart disease

Diseases of the myocardium

Diseases of the pericardium
Valvular heart disease
Hypotension
Hypertension
Dyslipidemia
Vascular disorders
Traumatic and mechanical disorders
Congenital disorders
Adverse effects of drugs on the cardiovascular system

Respiratory System

Infectious, immunologic, and inflammatory disorders
Neoplasms
Obstructive airway disease
Pneumoconiosis/fibrosing/restrictive pulmonary disorders/interstitial lung disease
Respiratory failure/respiratory arrest and pulmonary vascular disorders
Metabolic, regulatory, and structural disorders
Disorders of the pleura, mediastinum, and chest wall
Traumatic and mechanical disorders
Congenital disorders
Adverse effects of drugs on the respiratory system

Gastrointestinal System

Infectious, immunological, and inflammatory disorders
Neoplasms
Signs, symptoms, and ill-defined disorders
Disorders of the oral cavity, salivary glands, and esophagus
Disorders of the stomach, small intestine, colon, rectum, and anus
Disorders of the liver and biliary system, noninfectious
Disorders of the pancreas
Disorders of the peritoneal cavity

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on the gastrointestinal system

Renal and Urinary Systems

Infectious, immunologic, and inflammatory disorders

Neoplasms

Signs, symptoms, and ill-defined disorders

Metabolic and regulatory disorders

Vascular disorders

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on the renal and urinary system

Pregnancy, Childbirth, and the Puerperium

Prenatal care

Obstetric complications

Labor and delivery

Puerperium, including complications

Newborn (birth to 4 weeks of age)

Congenital disorders, neonatal

Adverse effects of drugs on pregnancy, childbirth, and the puerperium

Systemic disorders affecting pregnancy, labor and delivery, and puerperium

Female Reproductive System & Breast

Infectious, immunologic, and inflammatory disorders

Neoplasms of the breast, cervix, ovary, uterus, vagina, and vulva

Fertility and infertility

Menopause

Menstrual and endocrine disorders

Sexual dysfunction

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on the female reproductive system and breast

Male Reproductive System

Infectious, immunologic, and inflammatory disorders

Neoplasms

Metabolic and regulatory disorders, including sexual dysfunction

Traumatic and mechanical disorders

Congenital disorders

Adverse effects of drugs on the male reproductive system

Endocrine System

Diabetes mellitus and other disorders of the endocrine pancreas

Thyroid disorders

Parathyroid disorders

Adrenal disorders

Pituitary disorders

Hypothalamic endocrine disorders

Multiple endocrine neoplasia (MEN1, MEN2)

Congenital disorders

Adverse effects of drugs on the endocrine system

Multisystem Processes & Disorders

Infectious, immunologic, and inflammatory disorders

Neoplasms and related disorders

Signs, symptoms, and ill-defined disorders

Nutrition

Toxins and environmental extremes

Venomous bites and stings

Fluid, electrolyte, and acid-base balance disorders

Abuse

Multiple trauma (e.g., prioritization, blast injury)

Shock, cardiogenic, hypovolemic, neurogenic, septic; sepsis, bacteremia, systemic inflammatory response syndrome (SIRS), refractory, multiorgan dysfunction syndrome

Genetic metabolic and developmental disorders

Adverse effects of drugs on multisystem disorders

Biostatistics, Epidemiology, and Public/Population Health

Epidemiology and public/population health

Measures of disease frequency: incidence/prevalence

Measures of health status

Population pyramids and impact of demographic changes

Disease surveillance and outbreak investigation

Communicable disease transmission

Points of intervention

Study design, types and selection of studies

Measures of association (e.g., relative risk, odds ratio, other)

Principles of testing and screening (e.g., sensitivity and specificity, predictive value, probability)

Study interpretation (e.g., causation, validity, statistical vs. clinical significance)

Research ethics (e.g., informed consent, privacy of patient data, regulatory issues)

Social Sciences

Medical ethics and jurisprudence

Consent to treatment/decision-making capacity

Death and dying and palliative care

Physician-patient relationship

Professional conduct/integrity

Patient safety (including basic concepts and terminology)