



**SUBJECT EXAMINATION PROGRAM**

**Content Area Item Analysis Report**

Subject examinations provide institutions with one tool for measuring examinees' understanding of the basic biomedical and clinical sciences. While responsibility for use of NBME® subject examinations lies with the institution, this document provides information to assist institutions in carrying out that responsibility and offers recommendations regarding use of test scores. Test scores should not be used alone, but rather in conjunction with other indications of examinee performance in determination of grades.

A *Content Area Item Analysis* is available for any subject examination with 10 or more examinees. Item analysis data and content area descriptors of the items, when reviewed together, can be helpful in determining the extent to which your examinees have learned the content of individual items.

For each item, the *Content Area Item Analysis* shows:

- the content area classification, including a description summarizing the general content of the item;
- the proportion of your examinees (Schl) who correctly answered the item;
- the projected proportion of examinees nationally (Natl) who correctly answered the item; and
- the difference between the two proportions (Schl - Natl).

The content area classification may include a Physician Task/Competency that appears at the beginning of the item description. Each Physician Task/Competency is listed below in bold and represents:

- **Foundation:** clinically relevant basic science principles and concepts
- **Diagnosis:** knowledge pertaining to history, exam, diagnostic studies, and patient outcomes
- **Prevention:** health maintenance, disease prevention, and surveillance for disease recurrence
- **Management:** medical or surgical treatment strategies, including pharmacotherapy

Items are listed in ascending order by Schl value: items that were the most difficult for your examinees appear first, followed by items that were increasingly easy. Thus, the *Content Area Item Analysis* provides an item-by-item summary of examinee performance, making it possible to identify areas of high and low achievement. Areas of poorer performance may primarily reflect lack of emphasis in course coverage; this may be useful information for score interpretation.

A *Content Area Item Analysis* is provided solely for faculty use to better understand examinee performance. The written authorization of the NBME must be obtained prior to any other use of the information contained in the analysis.

# CONFIDENTIAL

## National Board of Medical Examiners® Subject Examination Program Content Area Item Analysis Report Comprehensive Basic Science

#000000 - Generic Medical School

Test Date(s): MM/DD/YYYY

This report provides the content area classification for each item on the examination, along with the proportion of the examinees from your institution (SchI) and a projected proportion of examinees nationally (NatI) who answered each item correctly. These proportions (also referred to as p-values) represent the difficulty of the items for the examinees at your institution and for the national group. In addition, differences between the p-values for your examinees and for the national group are shown in the last column (Difference). Items are sorted in ascending order by institution p-value so that the items that were the most difficult for your examinees are listed first.

| Reporting Group  | Test Purpose   | # Examinees | Order ID | # Scored Items                         |             |                               |
|------------------|--|-------------|----------|--|-------------|-------------------------------|
| Medical Students | During Instruction/Training  | 100         | A00000   | 200                                    |             |                               |
|                  |  |             |          | <b>Total Item Difficulty (p-value)</b> |             | <b>Difference (SchI-NatI)</b> |
|                  |  |             |          | <b>Schl</b>                            | <b>Natl</b> |                               |
|                  | <b>Content Area Classification</b>   |             |          |  |             |                               |
|                  | 1 Diagnosis: Endocrine system: multiple endocrine neoplasia                                |             |          | .00                                    | .87         | -.87                          |
|                  | 2 Foundation: Gastrointestinal system: malignant neoplasms                                 |             |          | .06                                    | .87         | -.81                          |
|                  | 3 Diagnosis: Nervous system and special senses: congenital disorders                       |             |          | .06                                    | .86         | -.80                          |
|                  | 4 Foundation: Nervous system and special senses: autonomic nervous system                  |             |          | .06                                    | .72         | -.66                          |
|                  | 5 Foundation: Nervous system and special senses: cerebrovascular disease                   |             |          | .06                                    | .79         | -.73                          |
|                  | 6 Foundation: General Principles: parasite structure                                       |             |          | .06                                    | .74         | -.68                          |
|                  | 7 Foundation: Multisystem processes and disorders: heavy metals                            |             |          | .06                                    | .76         | -.70                          |
|                  | 8 Diagnosis: Endocrine system: diabetes mellitus   |             |          | .06                                    | .83         | -.77                          |
|                  | 9 Diagnosis: Blood and lymphoreticular system: neoplasms of blood and lymphatic system     |             |          | .13                                    | .91         | -.78                          |
|                  | 10 Management: Musculoskeletal system: neoplasms   |             |          | .13                                    | .87         | -.74                          |
|                  | 11 Foundation: Multisystem processes and disorders: intracellular accumulations            |             |          | .13                                    | .76         | -.63                          |
|                  | 12 Foundation: General Principles: antibacterial agents                                    |             |          | .13                                    | .91         | -.78                          |
|                  | 13 Foundation: Immune System: HIV/AIDS   |             |          | .13                                    | .71         | -.58                          |
|                  | 14 Diagnosis: Renal and urinary system: vascular disorders                                 |             |          | .13                                    | .61         | -.48                          |
|                  | 15 Foundation: Female reproductive and breast: benign neoplasms and cysts                  |             |          | .13                                    | .86         | -.73                          |
|                  | 16 Foundation: Multisystem processes and disorders: bacterial infections                   |             |          | .13                                    | .81         | -.68                          |
|                  | 17 Diagnosis: Gastrointestinal system: disorders of the pancreas                           |             |          | .13                                    | .86         | -.73                          |
|                  | 18 Diagnosis: Endocrine system: adrenal disorders  |             |          | .13                                    | .93         | -.80                          |
|                  | 19 Foundation: Nervous system and special senses: neuromuscular disorders                  |             |          | .13                                    | .78         | -.65                          |
|                  | 20 Management: Gastrointestinal system: disorders of the biliary system                    |             |          | .13                                    | .57         | -.44                          |
|                  | 21 Diagnosis: Endocrine system: pituitary disorders  |             |          | .19                                    | .71         | -.52                          |
|                  | 22 Foundation: Multisystem processes and disorders: vitamin deficiencies and/or toxicities |             |          | .19                                    | .79         | -.60                          |
|                  | 23 Foundation: Multisystem processes and disorders: vitamin deficiencies and/or toxicities |             |          | .19                                    | .91         | -.72                          |
|                  | 24 Foundation: Endocrine system: diabetes mellitus   |             |          | .19                                    | .70         | -.51                          |
|                  | 25 Foundation: Female reproductive and breast: menopause                                   |             |          | .19                                    | .63         | -.44                          |
|                  | 26 Foundation: Gastrointestinal system: disorders of the esophagus                         |             |          | .19                                    | .73         | -.54                          |
|                  | 27 Foundation: Cardiovascular system: ischemic heart disease                               |             |          | .19                                    | .90         | -.71                          |