

# COTA

**EXAMINATION**

**Review Manual**

**SECOND EDITION**

**M. Teresa Mohler**

# *COTA Examination Review Manual*

## *A Practical Guide to Receiving Professional Certification*

*Second Edition*

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# *Preface*

Many of my occupational therapy assistant students, as well as new graduates, have sought guidance regarding the preparation for the Certification Examination. This book of questions and answers has been written to provide a review tool to meet those needs. It is an attempt to include comprehensive coverage of occupational therapy theory and intervention. Best of luck to all of you.

*M. Teresa Mohler*

# *Preparation Guidelines for the Certification Exam*

Dear graduates of an occupational therapy program:

During your academic life you likely had sufficient experience in studying for tests, and you also acquired a specific learning style. Nevertheless, it is with anxiety, which is considered commonplace, that you await the certification examination. A few practical suggestions will help you manage the exam.

1. Upon conclusion of Fieldwork II your focus is on the exam, and you must know how to handle the stress that is peculiar to this situation. The use of relaxation techniques is a concrete way to face the future with confidence.
  - a. Recall the successful moments in your life and allow yourself a “pat on the back.”
  - b. Use positive reinforcers such as “pep talks” when you reach your goals, motivating you to continue the study process.
  - c. Establish support systems among family members and friends, and voice your concerns and feelings for reassurance.
  - d. Perform physical exercise every day, such as walking, in combination with deep breathing, which relaxes tense muscles.
  - e. Think about activities that are very pleasant to you; e.g., swimming, going on vacation, running, etc.
  - f. Follow a healthy and consistent schedule of getting up early in the morning and going to bed early at night.
2. The material that you need to study is primarily from the following sources: the textbooks studied during your school years, the handouts received in this period of time, the notes taken in the classroom, and the cumulative knowledge acquired in community services, Fieldwork I, and Fieldwork II. Do not try to read every piece of material that you collected during the academic years because you will be overwhelmed. Rather, make priority lists based on the “examination content outline for certified occupational therapy assistants” shown here at the end of the guidelines.
3. You must set specific, realistic study goals and attempt to achieve them as closely as you would when recording patient documentation. It will be helpful if you establish a schedule of study to fulfill your objectives: consistency, discipline, and organization are key words to develop good study habits.
4. The National Board of Certification in Occupational Therapy, Inc. (NBCOT) (formerly the American Occupational Therapy Certification Board [AOTCB]) has current information concerning the certification examination review mini courses offered at various

locations, (usually OT schools) throughout the United States. These conferences last 1 to 2 days and are extremely valuable as they focus on the priority areas of the exam. For more information contact the NBCOT directly at:

800 S. Frederick Avenue

Suite 200

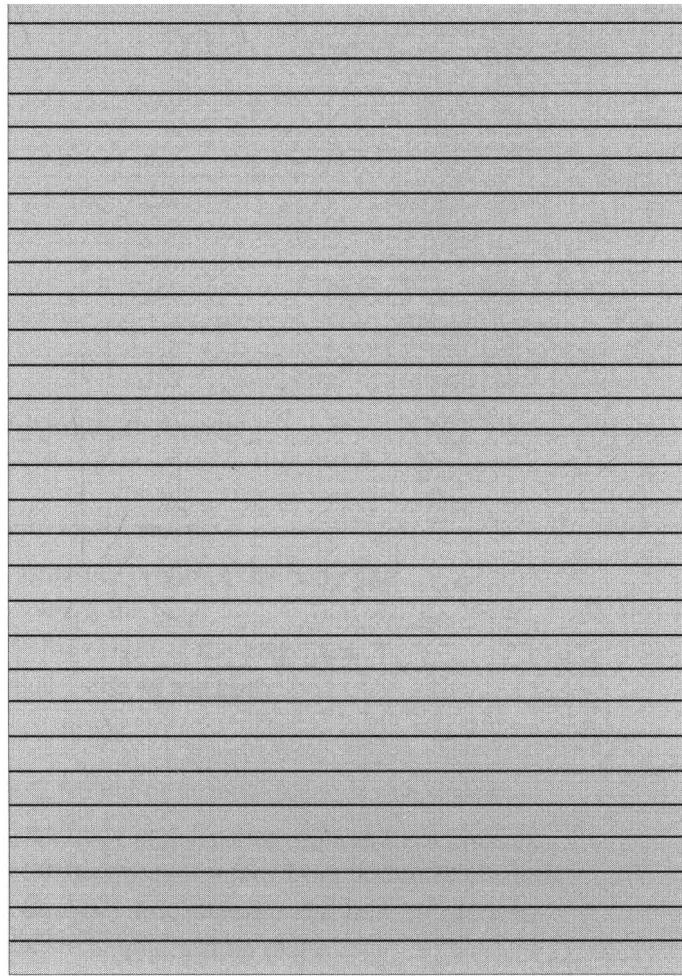
Gaithersburg, MD 20877-4150

5. Many applicants find it useful to study for the examination periodically, together with a friend, or in a group, so the knowledge can be exchanged based on the diversified field-work experiences of the various members. If you decide to study with others, be sure to choose people with whom you are compatible. Keep in mind that each group must have a leader in order to function efficiently.
6. It is strongly recommended that every applicant receive a good night's sleep before the examination so the mind is clear and refreshed. Do not try to study in the morning when writing the exam. Instead of helping you it will only be confusing.
7. If you feel that you are not sure of the correct answer to a question, do not panic, move on, and come back to it later. Be very careful when changing answers, you must be quite sure when doing so. Do not waste time on subjects that you do not know but try to make the best guess. If you leave the answer blank, it is scored wrong. Read the question without overinterpreting it, and consider the four options carefully before choosing one. Bring several sharpened number 2 pencils with erasers to save time.
8. The certification examination has a total of 200 multiple choice questions, with four options each, to be answered in a 4-hour period. As a result, one must pace oneself in such a way that by the end of the first hour, approximately 50 questions have been answered. It is of the utmost importance to budget one's time in order to be able to complete the exam without hurrying at the end. Running out of time is very disturbing and frustrating. The questions as they appear in the exam are not distributed according to subject materials, they are all mixed together to simulate the patient/client load that you will be treating in actual practice.
9. After the completion of the exam do not worry unnecessarily about the outcome, because you cannot change anything. You did your best and as such should feel good about it.
10. Within 4 to 6 weeks the results will be mailed to you and no one else. On occasion, the candidate must notify his or her employer immediately to address liability problems. You should also contact the support systems, or even consider professional help to cope with the depression that may follow. Do not feel self-conscious about it because most everyone needs this type of help at various times in their lives. In 6 months you can retake the exam, so you must discipline yourself to study and review, the sooner the better. You must analyze yourself to assess what went wrong the first time, and correct those weaknesses. Concentrate on the areas that you know less, rather than the ones you are strong in. The second time around you will know a little more of what to expect and this in itself, is comforting.
11. For your information, the following six pages are the approximate percentages of questions, documented in their entirety by the NBCOT.

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# **SECTION I**

# **Kinesiological**

# **Concepts**



Select the Most Appropriate Answer

1. The word “proximal” means:
  - A. Farther from the origin of the body part
  - B. Above, toward the head
  - C. Closer to the origin of the body part
  - D. On the outer side of the body
  
2. The anatomical frontal or coronal plane is one which:
  - A. Divides the body equally into right and left portions
  - B. Divides the body equally into front and back portions
  - C. Divides the body into superior and inferior portions
  - D. Is parallel to the midsagittal plane
  
3. A multiaxial joint is one of the following:
  - A. Ball and socket
  - B. Pivot
  - C. Ginglymus
  - D. Gliding
  
4. Abduction of the wrist is provided by the:
  - A. The palmaris longus
  - B. The flexor carpi radialis
  - C. The extensor carpi radialis brevis
  - D. The extensor carpi radialis longus
  - E. B and D
  - F. A and C
  
5. Innervation of the biceps is:
  - A. Musculocutaneous
  - B. Axillary
  - C. Ulnar
  - D. Median

#### 4 ☐ **Kinesiologic Concepts**

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6. The tendon of the palmaris longus can be palpated in the anterior area of the wrist:
  - A. On the radial side
  - B. On the ulnar side
  - C. In between A and B
  - D. None of the above
  
7. The function(s) of the lumbricals are:
  - A. Flexion of the metacarpophalangeal joints (MCPJs) and proximal interphalangeal joints (PIPJs)
  - B. Flexion of the PIPJs and distal interphalangeal joints (DIPJs)
  - C. Flexion of the MCPJs and extension of the PIPJs and DIPJs
  - D. Flexion of the DIPJs and extension of the MCPJs and DIPJs
  
8. The wrist extensors are innervated by the:
  - A. Radial
  - B. Ulnar
  - C. Median
  - D. Axillary
  
9. Innervation of the adductor pollicis is:
  - A. Median
  - B. Radial
  - C. Musculocutaneous
  - D. Ulnar
  
10. The flexor pollicis brevis is innervated by the:
  - A. Ulnar nerve
  - B. Radial nerve
  - C. Median and ulnar nerves
  - D. Median nerve
  
11. Key pinch is a prehension pattern in which:
  - A. One uses the palmar area of the index finger and thumb tips
  - B. One uses the radial area of the index finger and the palmar side of the thumb
  - C. One uses the ulnar side of the index finger and the palmar side of the thumb
  - D. One uses the radial side of the index finger and the thumb

12. The word supination means:
- A. Turning on an axis
  - B. Turning the palm up
  - C. Turning the palm down
  - D. Turning toward the fifth finger side of the hand
13. The periosteum is:
- A. The lining of the medullary canal
  - B. The membrane that covers osseous tissue
  - C. The growth plate of the bone
  - D. The membrane that covers the external area of the heart
14. When flexion of the elbow is graded "fair," it means that the:
- A. Patient is able to perform the movement antigravity
  - B. Patient is able to perform the movement antigravity plus moderate resistance
  - C. Patient is unable to perform the movement
  - D. Patient is able to perform the movement with gravity eliminated
15. When a person is in standing anatomical position, the wall facing him or her is:
- A. In the transverse plane
  - B. In the frontal plane
  - C. In the sagittal plane
  - D. In the parasagittal plane
16. In standing position, flex the right shoulder and elbow to a 90° angle each, and extend the wrist and fingers pointing to the ceiling, with the forearm in neutral position. In which plane is the right upper extremity located?
- A. The transverse
  - B. The frontal
  - C. The parasagittal
  - D. None of the above
17. In anatomical position, abduct the left shoulder and flex the elbow to a 90° angle each. Extend the wrist and fingers pointing to the front with the palm down. In which plane is the left upper extremity located?
- A. The frontal
  - B. The transverse
  - C. The sagittal
  - D. None of the above

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18. How many bones are in a normal adult human hand, excluding the wrist?
- A. 18
  - B. 13
  - C. 27
  - D. 19
19. Which of these movements are performed by the wrist joint?
- A. Flexion and extension
  - B. Supination and abduction
  - C. Radial and ulnar deviation
  - D. Pronation and flexion
  - E. A and D
  - F. A and C
20. The two main functions of the hand are:
- A. Feeding and pinch
  - B. Resting and opposition
  - C. Circumduction and grasp
  - D. Pinch and grasp
21. Which two muscles in the arm work mainly at the elbow joint?
- A. The levator scapulae and the triceps brachii
  - B. The serratus anterior and the biceps brachii
  - C. The triceps and the biceps femoris
  - D. The biceps brachii and the triceps brachii
22. Which two bones compose the skeleton of the forearm?
- A. The clavicle
  - B. The radius
  - C. The scapula
  - D. The ulna
  - E. The tibia
  - F. The fibula

23. The three most important motor nerves in the hand are: (select 3 answers)
- A. The ulnar
  - B. The sciatic
  - C. The radial
  - D. The musculocutaneous
  - E. The femoral
  - F. The abducent
  - G. The median
24. The deltoid muscle is divided into three portions; what are they? (select 3 answers)
- A. Superior
  - B. Anterior
  - C. Posterior
  - D. Inferior
  - E. Middle
  - F. Ventral
25. When one is in standing anatomical position, the ceiling is in the:
- A. Coronal plane
  - B. Sagittal plane
  - C. Horizontal plane
  - D. Vertical plane
26. Which of the prehension patterns does one use when writing?
- A. Key
  - B. Fingertip
  - C. Palmar tripod
  - D. Lateral
  - E. Cylindrical
27. A ligament attaches:
- A. Muscle to bone
  - B. Muscle to muscle
  - C. Bone to bone
  - D. Muscle to tendon

## 8 ☐ Kinesiology Concepts

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28. The brachioradialis is the prime mover on the flexion of the elbow when:
- A. The forearm is in neutral position
  - B. The forearm is in complete supination
  - C. The forearm is in complete pronation
  - D. It does not matter
29. The average measurement of the MCPJ of the second finger is:
- A. 0° to 90°
  - B. 0° to 70°
  - C. 0° to 60°
  - D. 0° to 105°
30. The average measurement of elbow flexion is:
- A. 0° to 90°
  - B. 0° to 100°
  - C. 0° to 135°
  - D. None of the above
31. The hamstrings are muscles that work at the knee and hip joints. They are which of the following?
- A. The tibialis anterior and the biceps femoris
  - B. The semitendinosus and the tibialis posterior
  - C. The tibialis posterior and the tibialis anterior
  - D. The sartorius and the semimembranosus
  - E. The biceps femoris
  - F. The semimembranosus and the semitendinosus
  - G. A and B
  - H. E and F
32. Muscles that perform adduction of the fingers are called:
- A. The adductor pollicis
  - B. The dorsal interossei
  - C. The palmar interossei
  - D. The lumbricals
33. The movements that occur at the elbow are:
- A. Supination, flexion, and extension
  - B. Flexion and extension
  - C. Flexion, extension, and pronation
  - D. Pronation and supination



34. Inversion of the ankle is a combination of two other movements; they are:
- A. Supination and adduction
  - B. Supination and abduction
  - C. Pronation and adduction
  - D. Pronation and abduction
35. Which of the following muscles abducts the shoulder?
- A. The posterior deltoid
  - B. The serratus anterior
  - C. The middle deltoid
  - D. The pectoralis major
36. Which of the following is one of the quadriceps?
- A. Semitendinosus
  - B. Biceps femoris
  - C. Hipstring
  - D. Rectus femoris
37. The trapezius is a big muscle of the shoulder girdle that has three portions called:
- A. Anterior, medial, and posterior
  - B. Lower, middle, and upper
  - C. Anterior, upper, and posterior
  - D. Anterior, middle, and posterior
38. The shoulder girdle has movements of its own that occur at the following joints:
- A. Glenohumeral
  - B. Sternoclavicular
  - C. Acromioclavicular
  - D. B and C
  - E. A and B
39. Which of the following is *not* a movement performed by the shoulder girdle?
- A. Upward rotation
  - B. Internal rotation
  - C. Abduction of the scapula
  - D. Elevation of the shoulder