



College of
Chiropractors
of Ontario

Registration Examination Package

Table of Contents

1.0	Registration Examination Details	3
1.1	Part A: Written	3
1.2	Part B: Objective Structured Clinical Evaluation (O.S.C.E.)	3-4
1.3	Part C: Clinical	4
2.0	Examination Rules	5
2.1	Written Examination	5
2.2	Objective Structured Clinical Evaluation	6
2.3	Clinical Examination	6
3.0	Preparation for the Examinations	7
3.1	Competencies	7
3.2	Subject Areas	7
3.3	Recommended Texts/Reference Material	7-8
4.0	Clinical Evaluation Criteria (Registration Examination, Part D)	9
4.1	Antiseptic Precautions	10
4.2	Nail Care	10
4.3	Scalpel Technique	10
4.4	Diagnosis	10
4.5	Therapeutic Objectives	10
4.6	Application of Drugs and Dressings	11
4.7	Use of Equipment	11
4.8	Professionalism	11
5.0	Sample Questions	12
5.1	Written Examinations	12
5.2	Objective Structured Clinical Evaluation	12-12

1.0 Registration Examination Details

Candidates will be required by the College to sit a three part examination. A pass standing is required by the College of Chiropractors to fulfill the registration requirements and become a member of the College.

1.1 Part A: Written

The examination is composed of 200 questions. The questions will all be linked and based on the Profile of Competencies document of the College of Chiropractors of Ontario dated January 2002 and updated in 2010.

The examination will be weighted as follows (note references to categories in Profile of Competencies document):

- | | |
|---|-----|
| • Jurisprudence (“Professional Ethics”)(Categories 1,4,5) | 15% |
| • Assessment (Category 2) | 30% |
| • Implementation of Treatment (Category 3) | 30% |
| • Pharmacotherapy (Category 7) | 20% |
| • Disease Prevention & Health Promotion (Category 6) | 5% |

All candidates are required to complete Part A of the examination. All of the examination is composed of multiple choice questions and matching questions. **Each candidate must pass the jurisprudence component of Part A of the examination in order to register with the College.** Passing scores will be determined using the Angoff method.

It is IMPORTANT to note that EACH question will be based on ONE competency from within the competency document. Therefore, it is vital that each candidate be completely understanding of ALL competencies within the Profile of Competencies document. This document is the SINGLE MOST IMPORTANT DOCUMENT to use in the preparation of the registration exam.

1.2 Part B: Objective Structured Clinical Evaluation (O.S.C.E.)

This evaluation will test clinical competencies, and will be composed of a number of stations at which the candidate will have a specified time to complete a task and/or answer questions.

For example:

- The candidate may be asked to take a patient’s history and at the next station answer a series of related questions.
- The candidate may be asked to evaluate a cast and at the next station answer a series of related questions.
- At the same station the candidate may be asked to evaluate and answer questions related to a radiograph.

1.3 Part C: Clinical

This component of the examination will consist of a three-hour clinical session involving patient treatment.

During this time, all aspects of patient care, including history taking, physical examination, diagnosis and treatment of the patient, will be assessed by the examiners. The candidate will also be expected to discuss the case with particular emphasis on diagnosis and management.

Broad criteria to guide each candidate are contained in section 4.0 of this document.

2.0 Examination Rules

2.1 Written Examination

1. The examinations will be administered only on the day and at the times scheduled.
2. No person shall be allowed in an examination room during an examination except for the candidate and those invigilating the examination.
3. **The invigilator will check photo ID of each candidate. Candidates who are unable to present such identification will not be permitted to take the examination.**
4. The invigilator has the authority to assign seats to the candidates.
5. Candidates must be seated in the examination room 5 minutes before the start of the examination.
6. The examination will start promptly and finish at the times scheduled.
7. Permission to enter the examination room after the start of the examination shall be at the discretion of the invigilator within the first 30 minutes of the commencement of the examination. Candidates will not be permitted to enter the examination room later than 30 minutes after the examination has begun.
8. Bags and books are to be deposited in areas designated by the invigilator, and under no circumstances are to be taken to the examination desk.
9. No other unauthorized material shall be taken to the examination desk.
10. Candidates who bring any unauthorized materials into an examination room, or who assist or obtain assistance from other candidates or from any unauthorized source, will not be permitted to continue writing the examination.
11. Cell phones must be turned off.
12. Computers are not allowed in the examination room unless special permission has been granted by the College of Chiropodists.
13. Candidates will require 2 HB lead pencils for the examination.
14. No questions concerning the content of the examination may be asked during the examination.
15. Candidates shall not be permitted to leave the examination room, except under supervision.
16. Candidates shall answer examination questions according to the instructions provided by the invigilators.
17. At the conclusion of the examination, all writing will cease and the invigilator may invalidate the papers of any candidate who fails to observe this requirement.
18. A candidate will be dismissed from the examination for any of the following reasons:
 - If admission to the exam is unauthorized
 - If a candidate commits any form of misdemeanor
 - If a candidate attempts to bring in or remove any text material
 - If an individual impersonates a candidate

2.2 Objective Structured Clinical Evaluation (O.S.C.E.)

1. The candidate will follow the directions of the examiners at all times.
2. No person shall be allowed in the examination area except the candidates, the examiners and any patients, actors or staff that are required for the smooth running of the examination.
3. During the examination, the candidate may interact with patients as directed but may not, under any circumstances, interact with other candidates during any period of the examination.
4. Due to the nature of the O.S.C.E., permission to enter the examination room after the start of the examination shall be denied.
5. Bags, books and other sources of information are to be deposited in areas designated by the examiners, and under no circumstances should be taken by the candidates to the stations of the examination.
6. The candidates will require an HB lead pencil for the multiple choice questions and a pen with which to answer the short answer questions.
7. for reading and interpreting these instructions during the examination, and no questions concerning the content of the evaluation may be asked during the examination period.
8. Candidates shall not be permitted to leave the examination area except under supervision
9. A candidate may be dismissed from the examination for any of the following reasons:
 - If admission to the exam is unauthorized
 - If a candidate commits any form of misdemeanor
 - If a candidate attempts to remove any text material
 - If an individual impersonates a candidate.

2.3 Clinical Examination

1. You will be expected to adhere to the policies and procedures of the institution in which the clinical examination is held. Your examiners are aware that you will not be familiar with these policies and procedures and will guide you in this respect.
2. Candidates should present themselves for the examination in acceptable clinical attire.
3. Candidates will be expected to bring with them any examination instruments which they wish to utilize during the course of the assessment and treatment of a general practice / high risk category of patient. If requested, the examiners will provide you with instruments that are available in the clinic. Please notify the College of this need at least three weeks prior to the exam date.
4. If, at any time, the examiners are of the opinion that the patient is being endangered by the actions of the candidate, the examiners will dismiss the candidate from the examination and will complete the treatment of the patient concerned.
5. A candidate may be dismissed from the examination for any of the following reasons:
 - If admission to the exam is unauthorized
 - If a candidate commits any breach of professional or ethical conduct
 - Patient endangerment

3.0 Preparation for the Examinations

3.1 Competencies

The College of Chiropractors registration examination process is intended to evaluate your competency as it relates to clinical practice in Ontario. In this context, it is important that you review *The Profile of Competencies*, dated January 2002 and updated 2010, knowledge of which is required of all members of the College of Chiropractors of Ontario. The document is included in this mailing.

3.2 Subject Areas

The registration examinations relate to the provision of comprehensive chiropractic care of the patient. In preparation for this, candidates should review relevant information related to the following subject areas:

- Anatomy
- Physiology
- Microbiology
- Immunology
- Radiology
- Pharmacotherapy
- Pathophysiology
- Biomechanics
- Physical Therapy
- Emergency Care
- Jurisprudence
- Disease Prevention
- Sports Medicine
- Paediatrics
- Anaesthesia
- Surgery
- Diabetology
- Rheumatology
- Vascular Disease
- Neurological Disease
- Pathomechanics
- Dermatology

It is important to note that the previously mentioned competencies/subject areas may be examined during more than one of the components of the examination.

3.3 Recommended Texts/Reference Material

College of Chiropractors of Ontario Reference Material

All references to the College of Chiropractors of Ontario are found at the website www.cocoo.on.ca. Particularly for the Jurisprudence (or “ethics”) portion of the examination, the candidate must be familiar with all of the college’s ACT, REGULATIONS, BYLAWS, STANDARDS OF PRACTICE, GUIDELINES AND POLICIES. .

Title and Edition

REFERENCES

- A. Shai. (2005) *Wound Healing and Ulcers of the Skin*.
 Adelaar, R. S. (1999) *Complex Foot and Ankle Trauma*.

- Alexander, I. (1996) The Foot: Examination, Diagnosis and Conservative Care, 2nd Ed.
- Bergan JJ, Yao JST. (1984) Evaluation and Treatment of Upper and Lower Extremity Circulatory Disorders.
- Braunwald E, Fauci AS, Kasper DL, Hauser ST, Longo DL, Jameson JL. (2001) Harrison's 15th Edition. Principles of Internal Medicine.
- Canadian Pharmacists Association. (2008) Compendium of Pharmaceuticals and Specialties
- Carmine D. Clemente. (1987) Anatomy. 3rd Edition.
- Coughlin, M.J. & Mann, R.A. (1999) Surgery of the Foot and Ankle. 7th Edition.
- David Marcinko. (1992) Medical and Surgical Therapeutics of Foot and Ankle.
- Davies AH, Lees TA, Lane IF. (2006) Venous disease simplified.
- Dockery GL. (1997) Cutaneous Disorders of the Lower Extremity.
- Dockery, G.L. and Crawford, M.E. (1999) Color Atlas of Foot & Ankle Dermatology.
- Dockery, G.L. and Crawford, M.E. (2006) Lower Extremity Soft Tissue & Cutaneous Plastic Surgery.
- Ellsworth, A.J. et al. (2001) Mosby's 2001-2002 Medical Drug Reference.
- Fitzpatrick JE. (1996) Dermatology Secrets.
- Gawkroger DJ. (2008) Dermatology 4th Edition.
- Government of Ontario. (1996) Health care consent act
- Gumann G. (2004) Fractures of the Foot and Ankle.
- Harkless, L.B. & Felder-Johnson, K. (1998) Foot and Ankle Secrets.
- Harvey R & Champe P. (2000) Pharmacology 2nd Edition.
- Howland, R.D. & Mycek, M.J. (2000) Lippencott's Illustrated Reviews: Pharmacology 3rd ed.
- Hughes M, Miller T. (2007) Crash Course 3rd Edition. Nervous System
- Inglis TJJ. (2003) Microbiology and Infection 2nd Edition.
- Jay RM. (1999) Pediatric Foot & Ankle Surgery
- Jay, R.M. (2002) Foot and ankle pearls.
- Jeffrey Yale (1987) Yale's Podiatric Medicine. Third Edition.
- Johnson, W. (2003) Handbook of Lower extremity Infections.
- Joseph WS. (1990) Handbook of Lower Extremity Infections.
- Joseph WS. (2003) Handbook of Lower Extremity Infections 2nd Edition.
- Kirby, K.A. (1997) Foot and Lower Extremity Biomechanics.
- Klaus Buckup (2000) Clinical Tests for the Musculoskeletal System.
- Kumar P, Clark M. (2005) Clinical Medicine 6th Edition.
- Kushner, D. Podiatric Medicine and Surgery Part II. 2nd Edition.
- Levitz, S. Functional Anatomy.
- Lormier, D.L. et al. (1997) Neale's Common Foot Disorders: Diagnosis and Management.
- Magee, D.J. (1997) Orthopaedic Physical Assessment. 3rd edition.
- McCarthy DJ. (1986) Podiatric Dermatology.
- McGlamary, Banks, Downey, Martin and Miller. (2001) McGlamary's comprehensive textbook of Foot and Ankle Surgery. Third Edition.
- McMinn, M.H. et. al. (1996) Color Atlas of Foot & Ankle Anatomy. 2nd edition.
- McRae R. (2006) Pocketbook of Orthopaedics and Fractures.
- Merck & Co. (2004) The Merck Manual. 17th edition.
- Merriman, L.M. (1996) Assessment of the Lower Limb.
- Michaud, T.C. (1997) Foot Orthoses and Other Forms of Conservative Foot Care.
- Oloff. (1994) Musculoskeletal Disorders of the Lower Extremities. Saunders.
- Olson, J.M. (1998) Clinical Pharmacology Made Ridiculously Simple.
- Perry, J. (1992) Gait Analysis: Normal and Pathological Function.
- PodiatryNetwork.com (2006) PodiatryNetwork.com.
- Ranawat CS, Positano RG. (1999) Disorders of the Heel, Rearfoot, and Ankle.
- Satterfield, K. (2006) A Guide To Understanding The Various Wound Classification Systems, vol. 19.
- Tax HR. (1985) Podopediatrics 2nd Ed.
- Thomas Berquist (1989) Radiology of the Foot and Ankle.
- Thomas Fitzpatrick (1990) Color Atlas and Synopsis of Clinical Dermatology.
- Thompson, J.C. Netter's Concise Atlas of Orthopedic Anatomy.

- Thompson, P. & Volpe R.G. (2001) Introduction to Podopediatrics.
Thomson P, VolpeR. (2001) Introduction to Podopediatrics 2nd Edition.
Thomson. C & Gibson J.N. (2002) 50 Foot Challenges: Assessment and management.
Valmassy, R. (1996) Clinical Biomechanics of the Lower Extremities.
Whitet, M.W. (2003) Gait analysis: an introduction 3rd edition.
Yale JF. (1987) Yale's Podiatric Medicine 3rd Edition.
Yassin G. (2007) Crash Course 3rd Edition. Pharmacology.
Zier BG. (1990) Essentials of Internal Medicine in Clinical Podiatry.

4.0 Clinical Evaluation Criteria

(Registration Examination, Part D)

Note: All applicable objectives must be achieved.

4.1 Antiseptic Precautions

Candidates will employ and maintain strict antiseptic precautions throughout all aspects of patient treatment.

4.2 Nail Care

Candidates will provide appropriate nail care for the presenting case in a safe, efficient and effective manner.

4.3 Scalpel Technique

Candidates will appropriately reduce all lesions in a safe, efficient and effective manner.

4.4 Diagnosis

1. Candidates will identify the presenting condition.
2. Candidates will employ an appropriate interview technique and physical examination enabling them to reach an accurate diagnosis.
3. Candidates will formulate a differential diagnosis.

4.5 Therapeutic Objectives

1. Candidates will select pharmaceuticals appropriate to the presenting conditions.
2. Candidates will justify their choice of pharmaceuticals.
3. Candidates will demonstrate a comprehensive knowledge of all pharmaceuticals regularly applied in chiropody and be able to suggest alternatives.
4. Candidates will select appropriate padding and strapping.
5. Candidates will justify their choice of padding and strapping indicating its function in relation to the lesion/condition to which it is applied.
6. Candidates will be able to provide and rationalize a long and short term management plan, including reference to orthotics
7. Candidates will advise patients appropriately.
8. Candidates will assess and discuss the patient's footwear.
9. Candidates will state a return date and discuss a prognosis.
10. The candidate will recognize when a condition exceeds the scope of chiropodial practice and suggest an appropriate referral.

4.6 Application of Drugs and Dressings

1. Candidates will apply pharmaceuticals and dressings in a safe and effective manner.
2. Padding and strapping will be applied in such a manner that maximum function is achieved.

4.7 Use of Equipment

1. Candidates will use and maintain all equipment in a safe and efficient manner, whilst maximizing patient and practitioner comfort.
2. Candidates will follow the correct procedure in the collection of specimens required for laboratory analysis, i.e. fungal samples, C&S swabs, etc.

4.8 Professionalism

1. The candidate will utilize effective communication skills when interacting with patients, colleagues and other members of the health care team.
2. The candidate will demonstrate problem-solving ability, applying knowledge and experience as required.
3. The candidate will demonstrate a professional appearance and demeanor.
4. The candidate will demonstrate ethical behaviour (i.e. by respecting patient confidentiality, respecting the rights of other health care professionals, etc.).
5. The candidate will demonstrate organizational skills.
6. The candidate will utilize relevant information obtained from the patient's chart.

5.0 Sample Questions

5.1 Written Examinations

5.1.1 Multiple Choice Questions

1. Which of the following muscles should be strengthened when treating chondromalacia patellae?
 - a. Rectus femoris
 - b. Gastrocnemius
 - c. Vastus medialis
 - d. Sartorius

2. Match the following antibiotic drugs to their mechanisms of action.
 1. Sulfamethoxazole/trimethoprim
 2. Ciprofloxacin
 3. Clindamycin
 4. Amoxicillin
 - a. Suppresses protein synthesis in the bacterial ribosome
 - b. Interferes with the enzyme DNA gyrase
 - c. Inhibits bacterial cell wall synthesis
 - d. Inhibits bacterial synthesis of folic acid

6.1 Objective Structured Clinical Evaluation

6.2.1 Station 1A

Interview the “patient” in front of you and obtain a patient history. Do not perform any physical examination and do not remove your patient’s shoes/socks. You may make notes for your reference at station 1B, and no marks/grade will be assigned to your notes.

6.2.2 Station 1B

Based on the patient history obtained at station 1A, answer the following questions on your answer card.

1. The patient currently takes the following medications:
 - i. ciprofloxacin 250 mg q 12 h.
 - ii. clindamycin 150 mg tid.
 - iii. cephalexin 250 mg qid.
 - iv. amoxicillin 500 mg tid.

2. The patient's chief complaint is:
 - i. ingrown toe nail
 - ii. heel spur
 - iii. fallen arches
 - iv. turf toe

We wish you success in the examination and look forward to your registration with the College.