

APPENDIX A

COT Exam Content Areas Effective August 2013

COA, COT and COMT CONTENT AREA PERCENTAGES

CONTENT AREA	COA %	COT %	COMT %
History Taking	8	6	3
Pupillary Assessment	3	5	4
Contact Lenses	2	3	0
Equipment Maintenance and Repair	4	4	3
Lensometry	3	5	6
Keratometry	3	5	3
Medical Ethics, Legal and Regulatory Issues	5	3	5
Microbiology	2	3	5
Pharmacology	8	5	8
Ocular Motility	3	5	11
Assisting in Surgical Procedures	7	6	3
Ophthalmic Patient Services and Education	16	7	10
Ophthalmic Imaging	3	7	6
Refractometry	6	7	6
Spectacle Skills	3	3	0
Supplemental Skills	8	9	10
Tonometry	4	5	5
Visual Assessment	8	6	6
Visual Fields	4	6	6

Skill Areas for the COT Skill Evaluation

Candidates will be asked to demonstrate their skill in each of the following seven areas:

- Lensometry - Demonstrate the ability to perform non-automated lensometry to determine the strength of the distance correction and the bifocal or trifocal add.
- Visual Fields - Demonstrate the ability to perform an automated visual field on a specified automated visual field test as determined by JCAHPO.
- Ocular Motility - Demonstrate the ability to detect a phoria or tropia, and identify the direction of the deviation using appropriate cover tests.
- Keratometry - Demonstrate the ability to perform keratometry.
- Retinoscopy - Demonstrate the ability to perform retinoscopy.
- Refinement - Demonstrate the ability to perform refinement.
- Tonometry - Demonstrate the ability to perform applanation tonometry.

Skill Areas for the COMT Performance Test

Candidates will be asked to demonstrate their skill in each of the following five areas:

- Measure patient's ocular motility using prism and cover tests at a distance.
- Perform manual lensometry: Identify and measure prism.
- Perform fundus photography and identify fluorescein angiography phases.
- Measure, compare, and evaluate pupil function at a distance.
- Evaluate versions and ductions, identifying any abnormalities

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COA, COT and COMT SUB-CONTENT AREAS

Higher level examinations may contain areas also found in lower level examinations.

CONTENT AREAS	COA	COT	COMT
HISTORY TAKING	Ocular Medical Medication Social Family	Ocular Medical Medication Social Family	Ocular Medical Medication Social Family
PUPILLARY ASSESSMENT	Measure Compare Evaluate RAPD	Measure Compare Evaluate RAPD	Measure Compare Evaluate RAPD
CONTACT LENSES	Measure Patient Instruction Patient Counsel Fitting	Measure Patient Instruction Patient Counsel Fitting	
EQUIPMENT MAINTENANCE & REPAIR	Ophthalmic Lenses, Instruments and equipment i. Clean and lubricate ii. Tighten screws iii. Replace parts	Ophthalmic Lenses, Instruments and equipment i. Clean and lubricate ii. Tighten screws iii. Replace parts iv. Maintenance	Ophthalmic Lenses, Instruments and equipment i. Clean and lubricate ii. Tighten screws iii. Replace parts iv. Maintenance
LENSOMETRY	Neutralize Spectacles i. Automated ii. Manual	Neutralize Spectacles i. Automated ii. Manual Fresnel Ground-in prism Slab-off	Neutralize Spectacles i. Automated ii. Manual Fresnel Ground-in prism Slab-off
KERATOMETRY	Corneal Curvature	Corneal Curvature Keratometer	Corneal Curvature Keratometer
MEDICAL ETHICS, LEGAL AND REGULATORY ISSUES	Third party coding Government and institutional rules and regulations Quality assurance Ethical & legal standards Scribing Confidentiality Informed consent	Third party coding Government and institutional rules and regulations Quality assurance Ethical & legal standards Scribing Confidentiality Informed consent	Third party coding Government and institutional rules and regulations Quality assurance Ethical & legal standards Scribing Confidentiality Informed consent
MICROBIOLOGY	Office antisepsis Universal precautions	Office antisepsis Universal precautions Specimens and biopsies Cultures	Office antisepsis Universal precautions Specimens and biopsies Cultures
PHARMACOLOGY	Ocular medications (instilling and identifying) Educate patients on medications Drug reactions	Ocular medications (instilling and identifying) Educate patients on medications Drug reactions	Ocular medications (instilling and identifying) Educate patients on medications Drug reactions
OCULAR MOTILITY	Version and Ductions i. Functions i. Anomalies Cover Tests Stereoaucuity Nystagmus	Version and Ductions i. Functions i. Anomalies Near point convergence Near point accommodation Fusional convergence amplitudes Cover Tests Strabismus with prisms Worth 4-Dot test Maddox Red Krimsky Stereoaucuity Nystagmus Amblyopia therapy Convergence training	Version and Ductions i. Functions i. Anomalies Near point convergence Near point accommodation Fusional convergence amplitudes Cover Tests Strabismus with prisms Worth 4-Dot test Maddox Red Krimsky Stereoaucuity Nystagmus Amblyopia therapy Convergence training

APPENDIX A (Continued)

COA, COT and COMT SUB-CONTENT AREAS

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CONTENT AREAS	COA	COT	COMT
ASSISTING IN SURGICAL PROCEDURES	Instrument preparation Refractive surgery Sterile fields Aseptic technique Non-refractive laser therapy Intraocular injections Yag laser Sterilization Surgical site identification Laser safety Assist with surgical procedures	Instrument preparation Refractive surgery Sterile fields Aseptic technique Non-refractive laser therapy Intraocular injections PDT procedures Yag laser Sterilization Surgical site identification Scrub technician duties Surgical ophthalmic equipment <ul style="list-style-type: none"> i. Phacoemulsifier ii. Vitrectomy units iii. Laser automated keratometer Laser safety Assist with surgical procedures Refractive surgical procedures	Instrument preparation Refractive surgery Sterile fields Aseptic technique Non-refractive laser therapy Intraocular injections PDT procedures
OPHTHALMIC PATIENT SERVICES & EDUCATION	Patient Education <ul style="list-style-type: none"> i. Surgery ii. Systemic & ocular diseases iii. Anatomy & physiology (general) iv. Anatomy & physiology (ocular) v. Safety glasses Patient Instruction <ul style="list-style-type: none"> i. Medication ii. Tests iii. Procedures iv. Treatments Eye Dressings Patient flow Triage CPR Forms & Manuals Legal forms for government services Vital signs CPR	Patient Education <ul style="list-style-type: none"> i. Surgery ii. Systemic & ocular diseases iii. Anatomy & physiology (general) iv. Anatomy & physiology (ocular) v. Safety glasses Patient Instruction <ul style="list-style-type: none"> i. Medication ii. Tests iii. Procedures iv. Treatments Eye Dressings Patient flow Triage CPR Forms & Manuals Legal forms for government services Vital signs CPR	Patient Education <ul style="list-style-type: none"> i. Surgery ii. Systemic & ocular diseases iii. Anatomy & physiology (general) iv. Anatomy & physiology (ocular) v. Safety glasses Patient Instruction <ul style="list-style-type: none"> i. Medication ii. Tests iii. Procedures iv. Treatments Eye Dressings Patient flow Triage CPR Forms & Manuals Legal forms for government services Vital signs CPR
OPHTHALMIC IMAGING	Slit lamp/anterior segment photography Fundus photography External photography Diagnostic/standardized A-scan Corneal topography Scanning laser tests for glaucoma/retina <ul style="list-style-type: none"> i. HRT ii. GDX iii. OCT 	Slit lamp/anterior segment photography Fundus photography Fluorescein angiography External photography Imaging artifacts Diagnostic/standardized A-scan B-Scan Corneal topography Scanning laser tests for glaucoma/retina <ul style="list-style-type: none"> i. HRT ii. GDX iii. OCT Endothelial cell count	Slit lamp/anterior segment photography Fundus photography Fluorescein angiography External photography Imaging artifacts Diagnostic/standardized A-scan B-Scan Corneal topography Scanning laser tests for glaucoma/retina <ul style="list-style-type: none"> i. HRT ii. GDX iii. OCT Endothelial cell count
REFRACTOMETRY	Refractive error (automated) Manifest refractometry	Refractive error (automated) Manifest refractometry Retinoscopy	Refractive error (automated) Manifest refractometry Retinoscopy
SPECTACLE SKILLS	Transpose cylinder readings	Transpose cylinder readings Prescriptions Vertex distance <ul style="list-style-type: none"> i. Measure ii. Conversion 	

APPENDIX A (Continued)

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CONTENT AREAS	COA	COT	COMT
SUPPLEMENTAL SKILLS	IOL power calculation A/C depth Pachymetry Calibrate biometry instruments Tear Tests <ol style="list-style-type: none"> i. Schirmer ii. BUT iii. Rose Bengal Glare testing Color vision testing Contact A-scan Laser interferometry (IOL Master)	IOL power calculation Low vision A/C depth Pachymetry Calibrate biometry instruments Tear Tests <ol style="list-style-type: none"> i. Schirmer ii. BUT iii. Rose Bengal Calibration Topography unit calibration Anterior chamber depth Exophthalmometry Glare testing Color vision testing Contact A-scan Laser interferometry (IOL Master) Wavefront diagnostics Corneal sensitivity testing	IOL power calculation Low vision A/C depth Pachymetry Calibrate biometry instruments Tear Tests <ol style="list-style-type: none"> i. Schirmer ii. BUT iii. Rose Bengal Calibration Topography unit calibration Anterior chamber depth Exophthalmometry Glare testing Color vision testing Contact A-scan Immersion A-scan Laser interferometry (IOL Master) Wavefront diagnostics Corneal sensitivity testing
TONOMETRY	Goldmann applanation tonometer <ol style="list-style-type: none"> i. Clean ii. Disinfect iii. Calibrate 	Goldmann applanation tonometer <ol style="list-style-type: none"> i. Clean ii. Disinfect iii. Calibrate Intraocular pressure	Goldmann applanation tonometer <ol style="list-style-type: none"> i. Clean ii. Disinfect iii. Calibrate Intraocular pressure
VISUAL ASSESSMENT	Visual acuity Potential acuity meter measurement Pinhole acuity	Visual acuity <ol style="list-style-type: none"> i. Optotype ii. Special situations iii. ETDRS iv. EVA Projection chart Contrast sensitivity testing Potential acuity meter measurement Laser interferometer test Pinhole acuity	Visual acuity <ol style="list-style-type: none"> i. Optotype ii. Special situations iii. ETDRS iv. EVA Projection chart Contrast sensitivity testing Potential acuity meter measurement Laser interferometer test Pinhole acuity
VISUAL FIELDS	Amsler Grid Confrontation fields Automated perimetry	Amsler Grid Goldmann perimetry Confrontation fields Automated perimetry	Amsler Grid Goldmann perimetry Confrontation fields Automated perimetry