

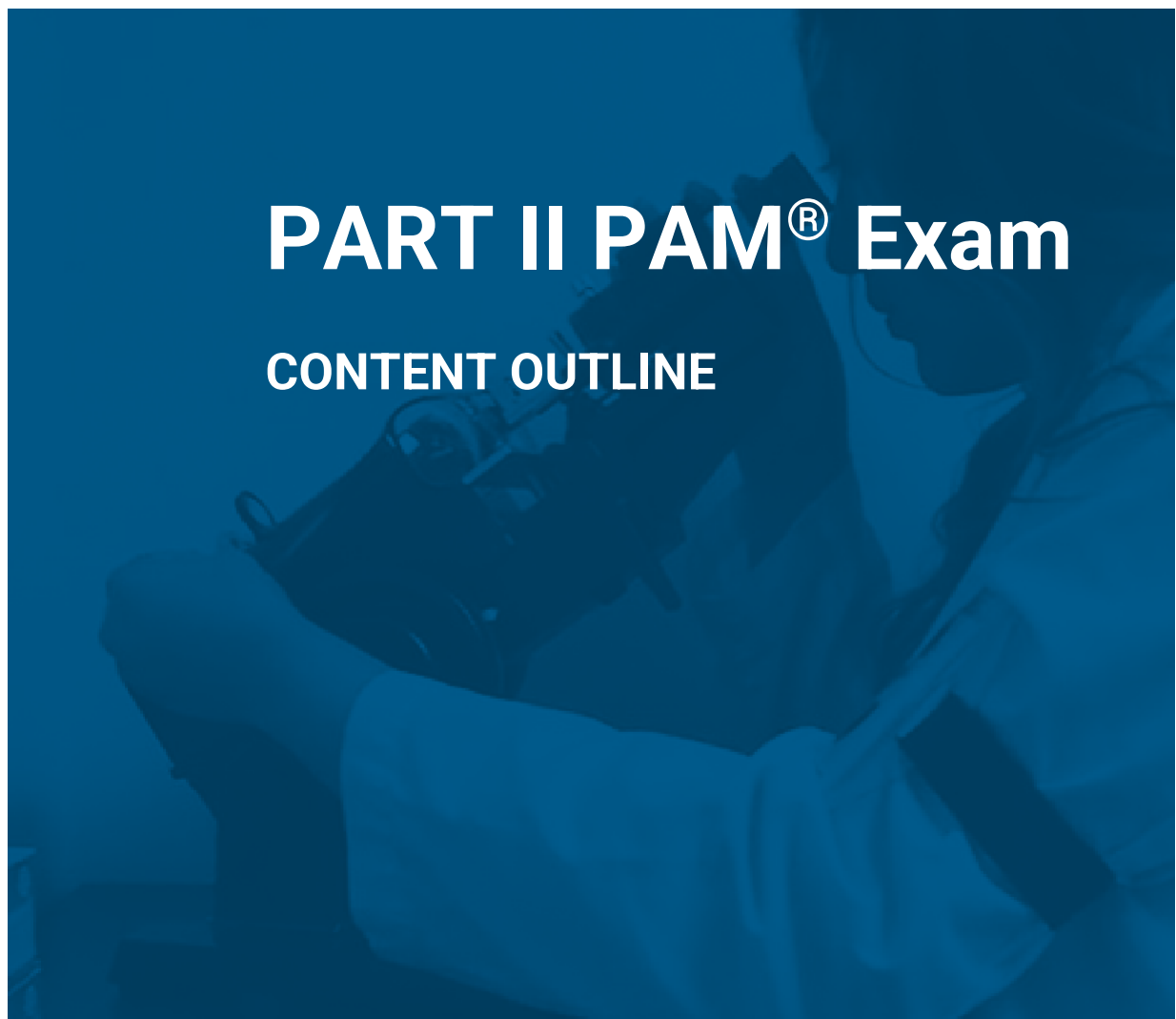


# NBEO

NATIONAL BOARD OF EXAMINERS IN OPTOMETRY

## PART II PAM<sup>®</sup> Exam

### CONTENT OUTLINE



# Part II PAM Content Outline

The Part II PAM examination consists of 350 items administered as patient cases. The distribution of items by content area is indicated in the tables below.

Refractive / Sensory Processes / Oculomotor Processes (30% - 40% of items)	Item Count
Ametropia	11 – 22
Ophthalmic Optics / Spectacles	6 – 17
Contact Lenses	17 – 28
Low Vision	6 – 17
Accommodative / Vergence / Oculomotor Anomalies	20 – 25
Amblyopia / Strabismus	6 – 17
Perceptual Function / Color Vision	6 – 17
Visual and Human Development	0 – 6*

Normal Health / Disease / Trauma (60% - 70% of items)	Item Count
Lids / Lashes / Lacrimal System / Ocular Adnexa / Orbit	11 – 22
Conjunctiva / Cornea / Refractive Surgery	33 – 44
Lens / Cataract / IOL / Pre- and Post-Operative Care	17 – 28
Episclera / Sclera / Anterior Uvea	11 – 22
Retina / Choroid / Vitreous	33 – 44
Optic Nerve / Neuro-Ophthalmic Pathways	28 – 38
Glaucoma	16 – 27
Emergencies / Trauma	11 – 22
Systemic Health	11 – 22

\* Items pertaining to visual and human development may appear in cases in other categories.

The table below describes the types of items that will appear on the Part II PAM examination. Candidates are also assessed in the area of Clinical Presentation by virtue of the interpretation and application of history, signs, and symptoms included in each case.

Type of Test Items	Content
Clinical Correlation of Basic Science Principles	Pathophysiology/etiology, anatomy, biochemistry, physiology, immunology/microbiology/pathology, optics, pharmacology
Diagnosis	Most appropriate diagnosis
Related to Diagnosis	Indicate data supporting or correlating with diagnosis; correlation of possible additional data; or indicate additional data or next test needed
Treatment/Management	Most appropriate treatment/management
Related to Treatment/Management	Treatment mechanism, additional data needed to treat effectively, additional data or next test needed, patient education, follow-up, or prognosis
Legal Issues / Ethics	Licensure and governmental regulation of optometry, standards of professional ethics, doctor-patient relationship, professional liability
Public Health	Epidemiology, biostatistics and measurement, environmental vision, health care policy and administration

## **EMBEDDED TREATMENT AND MANAGEMENT OF OCULAR DISEASE (TMOD) ITEMS**

Approximately 120 of the 350 items on the Part II PAM exam are categorized as Treatment and Management of Ocular Disease (TMOD) items. Candidates who complete the Part II PAM exam will receive an overall pass/fail decision as well as a separate TMOD breakout score and pass/fail decision.

To be classified as a TMOD item, the content of the item must pertain to one or more of the following:

- Formulation of most appropriate disease diagnosis which will be treated and/or managed
- Selection of treatment/management, including systemic considerations
- Dose, form, schedule, and duration of treatment
- Contraindications and side effects of medication, including systemic considerations
- Follow-up and prognosis, including reassessment of diagnosis after initiating treatment
- Treatment and management of ocular emergencies and urgencies

## **DESCRIPTION OF PART II PAM CASE AND ITEM FORMAT**

The examination is an image-intensive, case-based format. Each case consists of a patient scenario including demographic data, chief and secondary complaints, personal and family ocular and medical history, and clinical findings. These data usually include at least one image. The scenarios are followed by 3-6 related multiple-choice items per case, each with 3-10 answer options.

Items on the exam are targeted to assess competence at the point of licensure. Therefore, cases generally focus on either typical presentation of relatively high-frequency conditions or conditions with low frequency but high criticality. When low-frequency, high-criticality cases are presented, they will be portrayed in a pathognomonic manner.

"Review of systems" entries are current symptoms reported by the patient. The patient's current medical conditions and diagnoses are recorded as "Patient medical history" entries. All patients with diabetes mellitus will have an HgbA1c value as part of the medical history. Interpretation of HgbA1c values is considered an entry level skill; therefore, additional interpretation and/or normal ranges will not be given.

In multiple cases on the exam, "BVA" data are included in the patient scenarios. The abbreviation "BVA" refers to "best visual acuity" or "best-corrected visual acuity" measurement, which may be accomplished by refraction, pinhole testing, etc. Thus, all BVA entries refer to the best achievable visual acuity by the patient depicted in the scenario. If the BVA is reduced (e.g., worse than 20/20), no pinhole entry will be included in the BVA clinical data since it is implied via the BVA terminology that this has already been done. Candidates should assume that VA at near was tested at 16 inches unless otherwise noted.

Patient case images typically provide a considerable amount of essential patient information. Photos may supply normal or abnormal case details; candidates are expected to correctly interpret the visually presented findings. Images may include, but are not limited to, color photographs and testing results such as VFs, FAs, OCTs, ultrasonography, radiologic imaging, etc.

When visual field images are displayed side-by-side, the right visual field will be on the right and the left visual field will be on the left. Therefore, the image numbers will appear to be out of sequence (see Sample Case 4 as an example). This occurs because images are numbered sequentially as referenced in the case scenario, and the OD is always referenced before the OS in the clinical findings section. In some instances, it is necessary to display the visual fields vertically; in these instances, the right visual field will be on top followed by the left visual field below.

Case items may be multiple-choice, with a single correct answer, or they may be multiple-response, with up to 4 correct answers. In a multiple-response item, candidates must select all of the correct answers, and only the correct answers, to receive credit. The question portion (stem) of each multiple-response item indicates to the candidate how many of the options should be selected. For example, when an item stem asks, "Which three of the following ...," the stem concludes with the phrase (Select 3) to make it unmistakable to candidates that this is a multiple-response item that requires 3 correct responses.

Candidates should assume that all items in the case refer specifically to the patient depicted in the scenario. If the item is not referencing the depicted patient, it will be stated clearly in the item stem. For example: "Which of the following is the most likely cause of this condition in the general population?" or "In most patients complaining of these symptoms ..."