# Modal and Harmonized Modal Scales for the Spanish Guitar

## with notes on underlying theory

C. Nelson

*- fourth edition -*

**Modal and Harmonized Modal Scales for the Spanish Guitar**

These scales are written in all modes along with the associated harmonic and melodic minors of each distinct diatonic key signature over the full range of the Spanish guitar. Following each basic scale are harmonized triads and seventh chords covering a single octave. While the scales are fully fingered for the left hand, variations on both fingering and harmonization are possible. Empty staves have been supplied at the end of each section for possible use by the reader. Notation of accidentals follows the convention that they are cancelled in following measures unless explicitly re-written. A preface outlines theory underlying these scales and defines some basic chord structures.

The scales should be played using right hand techniques and rhythmic patterns appropriate to individual styles and possible weaknesses to be strengthened. Single note scales may be played both with the thumb and with alternations of two or more fingers. It is recommended that *apoyando* strokes (wherein the thumb or finger rests on the adjacent string after each stroke) be used to develop precision, strength and speed. Harmonized scales may be played with various arpeggio, tremolo and strumming techniques.

Application to these scales will bestow benefits in addition to mere stretching and strengthening of the hands. Such benefits include increased facility in reading over the full range of the guitar and enhanced awareness of the sonic relationships between sequences of notes and triads which will be of benefit in composition and improvisation. It is suggested that the scales be integrated into a daily regimen in which, perhaps, all scales in one key signature are played. All keys may be so covered over a cycle of 12 days. It is also possible to give emphasis to specific keys or to scales of specific modes such as the Ionian (major), melodic minor or if, for example, flamenco is of specific interest, the Phrygian. In general, however, it is probably best to broaden the advice of Andres Segovia, of whose Diatonic Major and Minor Scales this work is an extension, and recommend that equal attention be given to all modes in all keys.

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Preliminary edition - August, 1996
First edition - October, 1996
Second edition - June, 1998
Third edition – February, 2002
Fourth Edition – September, 2003



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## NOTES ON THEORY

Music for the guitar is written an octave high for convenience in distributing the range of the instrument around the treble clef. For example, middle C is written within the staff lines rather than on the line below them, where it appears for the piano.

Intervals between notes are measured from the lower of two notes to the higher and are called unisons, 2nds, ..., 7ths, octaves and beyond according to the inclusive number of letter names they span.

An interval is said to be a ***major interval*** (M) if the upper note falls in the major key whose tonic is the lower except that the unison, octave and 4ths and 5ths which do so are said to be ***perfect intervals*** (P). A ***minor interval*** (m) is a major interval reduced by a half tone. A perfect or minor interval reduced by a half tone is said to be a ***diminished interval*** (d). An ***augmented interval*** (A) is formed by increasing a major or perfect interval by a half tone.

| **int. name** | uni-son | m2 | M2/ d3 | A2/ m3 | M3/ d4 | A3/ P4 | A4/ d5 | P5/ d6 | A5/ m6 | M6/ d7 | A6/ m7 | M7 | oc-tave |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **tones** | 0 | 1/2 | 1 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 |

An interval is said to be ***inverted*** when the upper note of the interval is decreased by an octave or the lower note is increased by an octave. Inverted perfect intervals are themselves perfect intervals while inverted major intervals become minor intervals, augmented become diminished and vice-versa. The sum of an interval and its inversion is 9 while the sum of the spans of their tones is 6.

Various ***pentatonic (5 tone) scales*** may be constructed using major 2nds and minor 3rds. ***Whole note scales*** (of 6 tones) are built with major 2nds. Many other possibilities exist but dominant European melodic tradition is based on the following ***modes***, 7 note scales built on major and minor 2nds as shown:

| | | |
|---|---|---|
| ***Ionian*** | MMmMMMm | (scales in the Ionian mode are called ***major scales***. Note that each |
| ***Dorian*** | MmMMMmM | of the following modes uses the same cycle of intervals starting on |
| ***Phrygian*** | mMMMmMM | respectively increasing degrees) |
| ***Lydian*** | MMMmMMm | |
| ***Mixolydian*** | MMmMMmM | |
| ***Aeolian*** | MmMMmMM | (scales in the Aeolian mode are called ***natural minor scales***) |
| ***Locrian*** | mMMmMMM | |

***Relative minor scales*** begin on the 6th degree of the related major scale. The natural minor scale uses the exact notes of the related major scale. The ***harmonic minor scale*** sharps the 7th degree of the natural minor. The ***melodic minor scale*** sharps both the 6th and 7th degrees on the ascending scale but uses the natural minor on the descending.

### Major and minor key signatures

(entries in angle brackets are enharmonic (tonally equivalent) keys not normally used;
sharps accumulate from left to right and flats from right to left)

| **sharps or flats** | **0 -** | **1(F) -** | **2(C) -** | **3(G) -** | **4(D) -** | **5(A) <7(F)>** | **6(E) <6(C)>** | **<7(B)> 5(G)** | **- 4(D)** | **- 3(A)** | **- 2(E)** | **- 1(B)** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **major** | C | G | D | A | E | B<C♭> | F♯<G♭> | <C♯>D♭ | A♭ | E♭ | B♭ | F |
| **minor** | A | E | B | F♯ | C♯ | G♯<A♭> | D♯<E♭> | <A♯>B♭ | F | C | G | D |

A note is said to be ***diatonic*** if it lies on the conventional scale of a given key signature. ***Non-diatonic, chromatic*** or, loosely speaking, ***"accidental"*** notes are those which do not.

Diatonic notes are based on division of a octave. The physics of this is such that half tones are not exactly half-way in frequency between two tones and, furthermore, that a "sharp" of a note is not exactly equal to the "flat" of the note above it. Any instrument ***"justly"*** (precisely) tuned to a given key will sound more or less noticeably out of tune in any other. This gave rise, at around the time of J. S. Bach and the advent of sophisticated instruments capable of being played in any key but not easily tunable, to the idea of ***"temperament,"*** wherein semitones of an octave are de-tuned slightly so that they are close to being in tune in any key.

This leads to the question of tuning. It can be said, with reference to the idea of temperament, that no typical western musical instrument is ever in tune. The open strings of the guitar in standard tuning are a case in point: they are tuned from the bottom "E" up a $4^{th}$ to "A," another $4^{th}$ to "D," a $4^{th}$ to "G," a $3^{rd}$ to "B" and a final 4th to the top "E." The problem with this is that it is impossible – if the major $3^{rd}$ between "G" and "B" is justly tuned then the resulting "B" and the top "E" will be out of tune with the bottom three strings. The guitar, however, is commonly tuned in this way with the result then informally "tempered" to suit the musician and the music being played.

An approach I prefer can be called *Pythagorean tuning*: The lower $4^{th}$s are tuned as above but the interval between "G" and "B" is ignored, "B" is tuned to an octave above the $5^{th}$ above the bottom "E" and the top "E" is tuned to the $5^{th}$ over "A." The result is a slightly sharped $3^{rd}$ between "G" and "B" but the result is a good start and can be tempered as above. Fretting raises such questions to a higher level of complexity but, since that is out of the control of any but guitar makers, perhaps it is best left simply at "if it sounds good, it is good."

As a final note on tuning, it has been said that the guitar and piano "don't sound good together." I do not find this to be true but one must remember that the piano is a tempered instrument. In playing with tempered (and effectively untuneable) instruments one must tune not for theory or harmonic purity but rather to the instruments one is accompanying.

***Enharmonic*** notes are those which are identical in a so-called ***equal tempered*** scale but which are written or ***"spelled"*** differently – C sharp and D flat, for example. But enharmonic notes are not, in fact, identical. For this and other reasons, spelling conventions for chromatic notes have evolved.

A common convention for major keys is that the $2^{nd}$, $3^{rd}$, $6^{th}$ and $7^{th}$ tones of the scale are flatted while the $4^{th}$ is sharped in order to notate the 12 semitones of the octave. For the relative minor the convention is different. The $2^{nd}$ (the $7^{th}$ of the corresponding major key) is flatted while the $3^{rd}$, $4^{th}$, $6^{th}$ and $7^{th}$ are sharped. Thus, for example, the semitone between G and A may be written as A flat in the key of C major. In A minor, however, it would be written as G sharp.

In practice, however, these conventions are widely ignored, particularly in cases such as when the chromatic note written according to them would be bracketed by the diatonic note with the same letter name. The sequence A–A flat–A would, for example, normally appear as A–G sharp–A. In cases where enharmonic substitution is made for such reasons it is common to propagate it in the immediate vicinity to minimize designating the same note in different ways.

## DEFINITIONS OF THE BASIC TRIADS AND SOME EXTENDED CHORDS

| CHORD NAME | SYMBOL | LOWER INT. OR CHORD | UPPER INT. | OUTER INT. | INTERVAL STRUCTURE |
|---|---|---|---|---|---|
| **major triad** | M or Maj | maj 3rd | min 3rd | perf 5th | I-III-V |
| **minor triad** | m or min | min 3rd | maj 3rd | perf 5th | I-♭III-V |
| **diminished triad** | ° or dim | min 3rd | min 3rd | dim 5th | I-♭III-♭V |
| **suspended 4th triad** | sus4 | perf 4th | maj 2nd | perf 5th | I-IV-V |
| **augmented triad** | + or aug | maj 3rd | maj 3rd | aug 5th | I-III-♯V |
| **aug. (Italian) 6th** | +6 | maj 3rd | aug 4th | aug 6th | I-III-♯VI |
| **minor 6th** | m6 | min triad | maj 2nd | maj 6th | I-♭III-V-VI |
| **major 6th** | 6 or M6 | maj triad | maj 2nd | maj 6th | I-III-V-VI |
| **dominant 7th** | 7 | maj triad | min 3rd | min 7th | I-III-V-♭VII |
| **seven/six** | 7/6 | partial M6 | min 2nd | min 7th | I-III-VI-♭VII |
| **dom 7th with susp 4th** | 7sus4 | sus4 triad | min 3rd | min 7th | I-IV-V-♭VII |
| **dom 7th with flat 5th** | 7-5 | maj ♭5th triad | maj 3rd | min 7th | I-III-♭V-♭VII |
| **major 7th** | M7 | maj triad | maj 3rd | maj 7th | I-III-V-VII |
| **minor 7th** | m7 | min triad | min 3rd | min 7th | I-♭III-V-♭VII |
| **minor major 7th** | mM7 / m+7 | min triad | maj 3rd | maj 7th | I-♭III-V-VII |
| **half-diminished 7th** | ø7 / m7♭5 | dim triad | maj 3rd | min 7th | I-♭III-♭V-♭VII |
| **diminished 7th** | °7 / dim7 | dim triad | min 3rd | dim 7th | I-♭III-♭V-𝄫VII |
| **dom 7th augmented** | 7+ | aug triad | dim 3rd | min 7th | I-III-♯V-♭VII |
| **major 7th augmented** | M7+ | aug triad | min 3rd | maj 7th | I-III-♯V-VII |
| **major added 9th** | add9 | maj triad | perf 5th | maj 9th | I-III-V-IX |
| **major 9th** | M9 | M7 | min 3rd | maj 9th | I-III-V-VII-IX |
| **dominant 9th** | 9 | 7 | maj 3rd | maj 9th | I-III-V-♭VII-IX |
| **six/nine** | 6/9 | M6 | perf 4th | maj 9th | I-III-V-VI-IX |
| **dom 9th with susp 4th** | 9sus4 | 7sus4 | maj 3rd | maj 9th | I-IV-V-♭VII-IX |
| **dom 7th with flat 9th** | 7-9 | 7 | min 3rd | min 9th | I-III-V-♭VII-♭IX |
| **minor added 9th** | madd9 | min triad | perf 5th | maj 9th | I-♭III-V-IX |
| **minor 9th** | m9 | m7 | maj 3rd | maj 9th | I-♭III-V-♭VII-IX |
| **minor major 9th** | mM9 / m+9 | mM7 | min 3rd | maj 9th | I-♭III-V-VII-IX |
| **dominant 11th** | 11 | 9 | min 3rd | maj 11th | I-III-V-♭VII-IX-XI |
| **augmented 11th** | +11 | 9 | maj 3rd | aug 11th | I-III-V-♭VII-IX-♯XI |
| **minor 11th** | m11 | m9 | min 3rd | maj 11th | I-♭III-V-♭VII-IX-XI |
| **dominant 13th** | 13 | 11 | maj 3rd | maj 13th | I-III-V-♭VII-IX-XI-XIII |
| **minor 13th** | m13 | m11 | maj 3rd | maj 13th | I-♭III-V-♭VII-IX-XI-XIII |

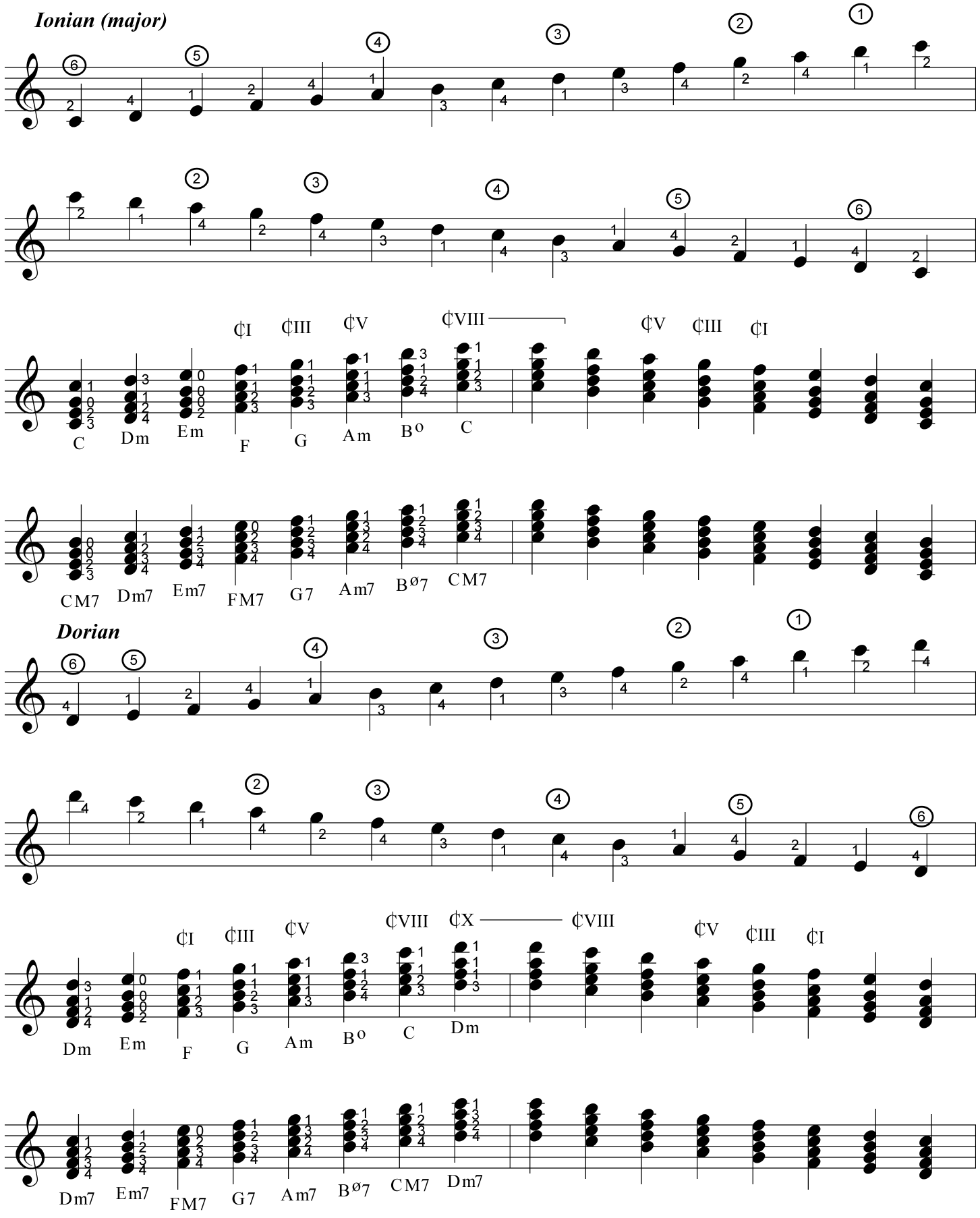
**Inverted chords** are formed by raising the root, root and third or root, third and fifth (in the case of chords of 4 notes) one octave. These are the **1st, 2nd** and **3rd inversions**, respectively. "Internal" inversions, such as raising the third of a triad an octave, are also possible and often required in fingering for the guitar. Root and inverted triads may be denoted by following a chord symbol with either a letter or numbers showing lower and outer intervals as follows -

root form: a or $^{5}_{3}$
1st inversion: b or $^{6}_{3}$
2nd inversion: c or $^{6}_{4}$

## TRIADS AND SEVENTH CHORDS OF THE HARMONIZED MODAL AND MINOR SCALES

| ROOT / MODE | I tonic | II super-tonic | III mediant | IV sub-dominant | V dominant | VI sub-mediant | VII leading tone |
|---|---|---|---|---|---|---|---|
| **Ionian (major)** | major M7 | minor m7 | minor m7 | major M7 | major 7 | minor m7 | diminished ø7 |
| **Dorian** | minor m7 | minor m7 | major M7 | major 7 | minor m7 | diminished ø7 | major M7 |
| **Phrygian** | minor m7 | major M7 | major 7 | minor m7 | diminished ø7 | major M7 | minor m7 |
| **Lydian** | major M7 | major 7 | minor m7 | diminished ø7 | major M7 | minor m7 | minor m7 |
| **Mixolydian** | major 7 | minor m7 | diminished ø7 | major M7 | minor m7 | minor m7 | major M7 |
| **Aeolian (nat. minor)** | minor m7 | diminished ø7 | major M7 | minor m7 | minor m7 | major M7 | major 7 |
| **harmonic minor** | minor mM7 | diminished ø7 | augmented M7+ | minor m7 | major 7 | major M7 | diminished o7 |
| **asc. melodic minor** | minor mM7 | minor m7 | augmented M7+ | major 7 | major 7 | diminished ø7 | diminished ø7 |
| **Locrian** | diminished ø7 | major M7 | minor m7 | minor m7 | major M7 | major 7 | minor m7 |

# Modal and Minor Scales (natural)



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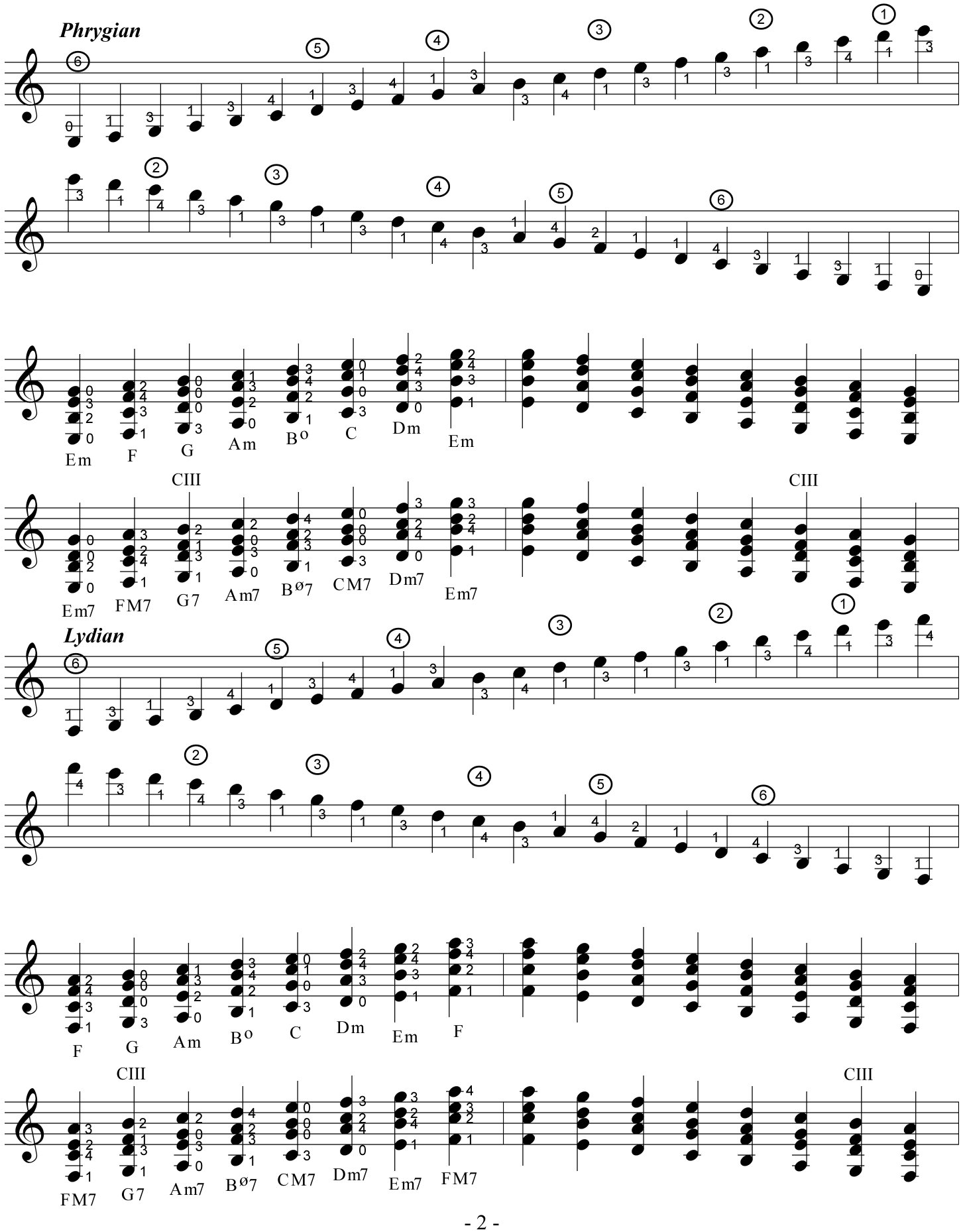
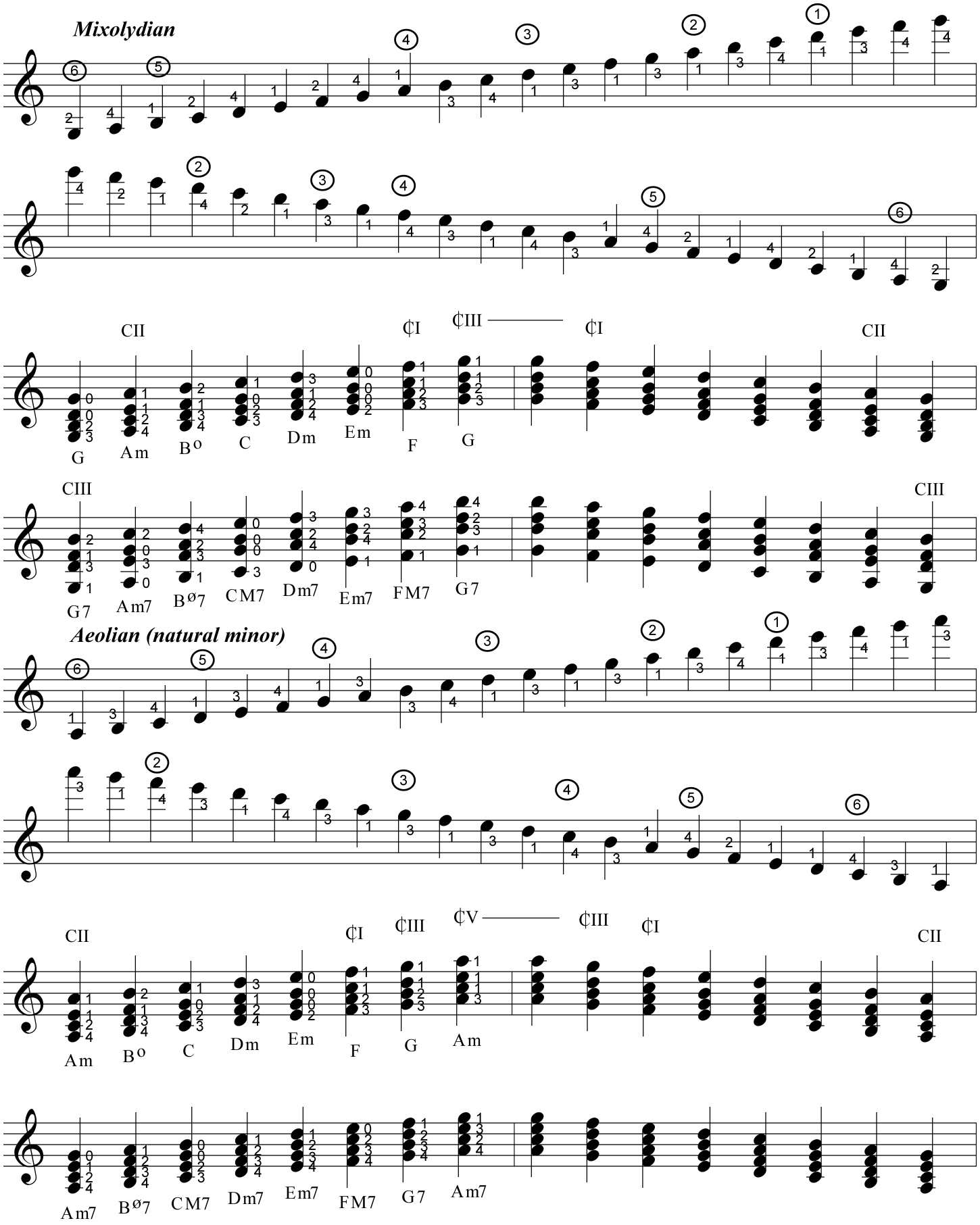
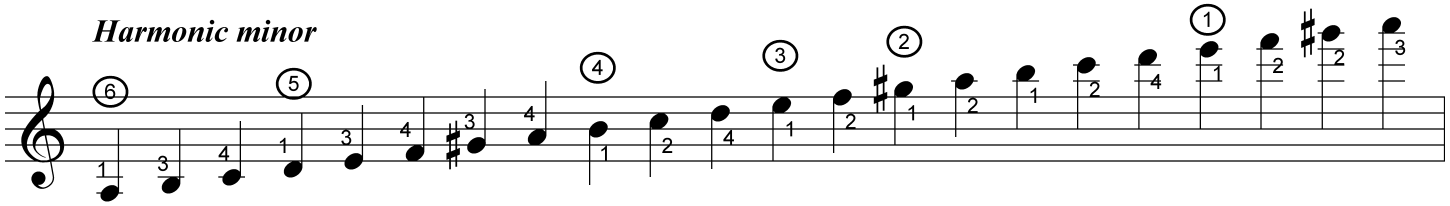
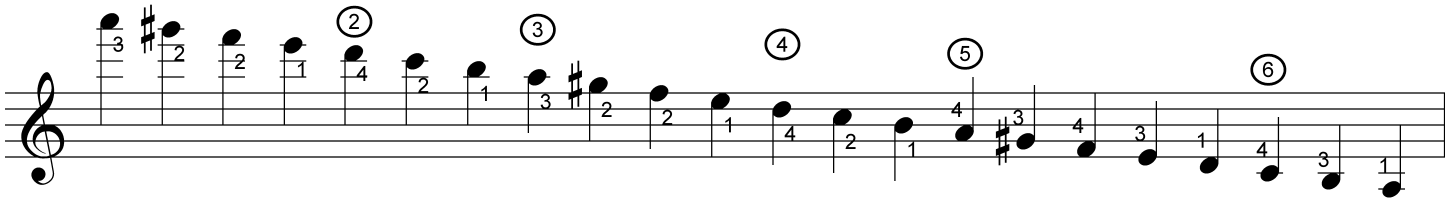
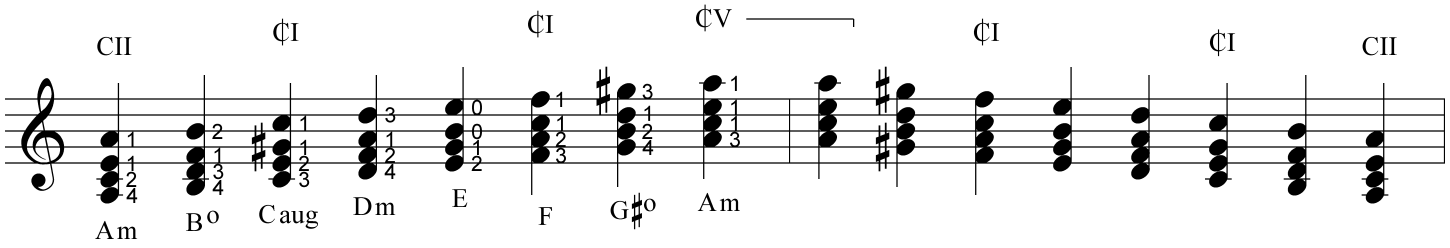

Phrygian
Em F G Am B° C Dm Em
CIII
Em7 FM7 G7 Am7 Bø7 CM7 Dm7 Em7
CIII
Lydian
F G Am B° C Dm Em F
CIII
FM7 G7 Am7 Bø7 CM7 Dm7 Em7 FM7
CIII

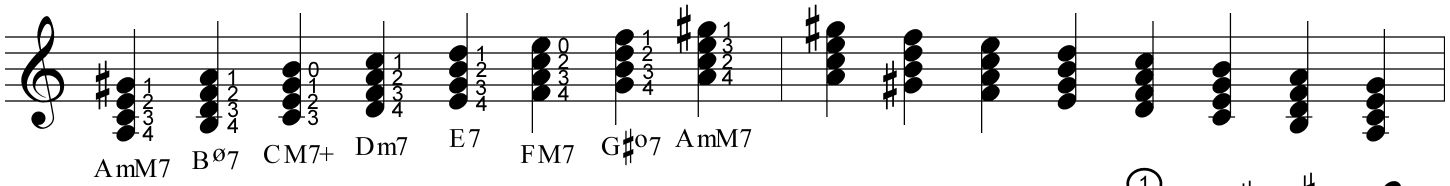

Mixolydian
CII
¢I
¢III
¢I
CII
G
Am
B°
C
Dm
Em
F
G
CIII
CIII
G7
Am7
Bø7
CM7
Dm7
Em7
FM7
G7
Aeolian (natural minor)
CII
¢I
¢III
¢V
¢III
¢I
CII
Am
B°
C
Dm
Em
F
G
Am
Am7
Bø7
CM7
Dm7
Em7
FM7
G7
Am7

***Harmonic minor***

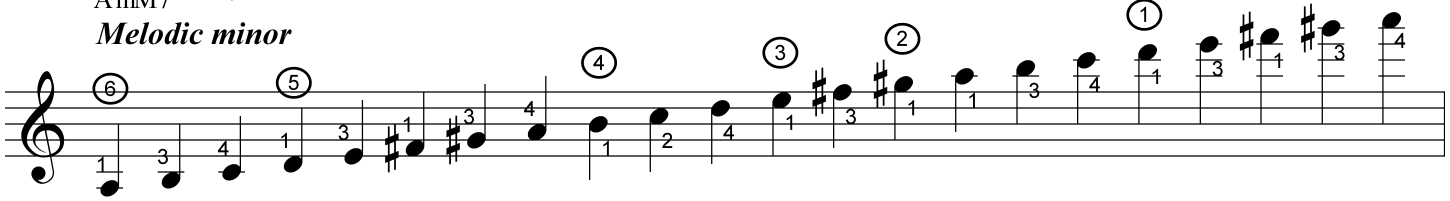


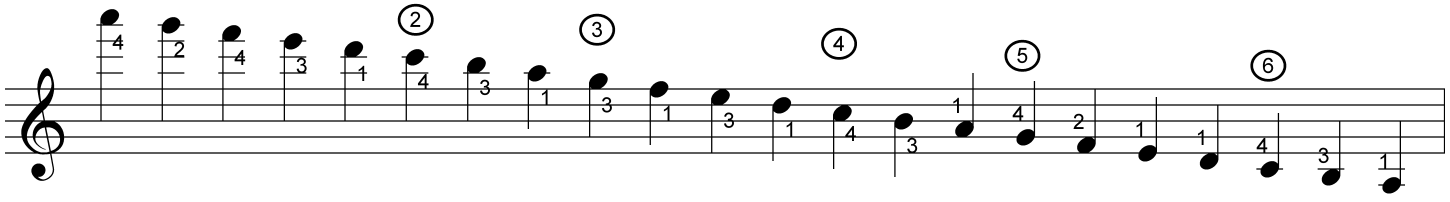


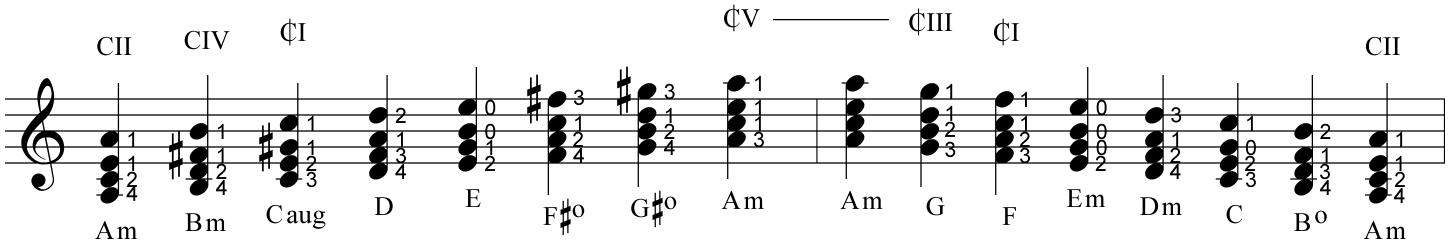


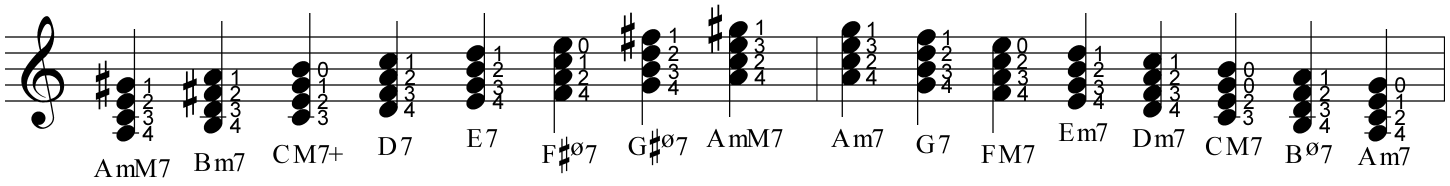



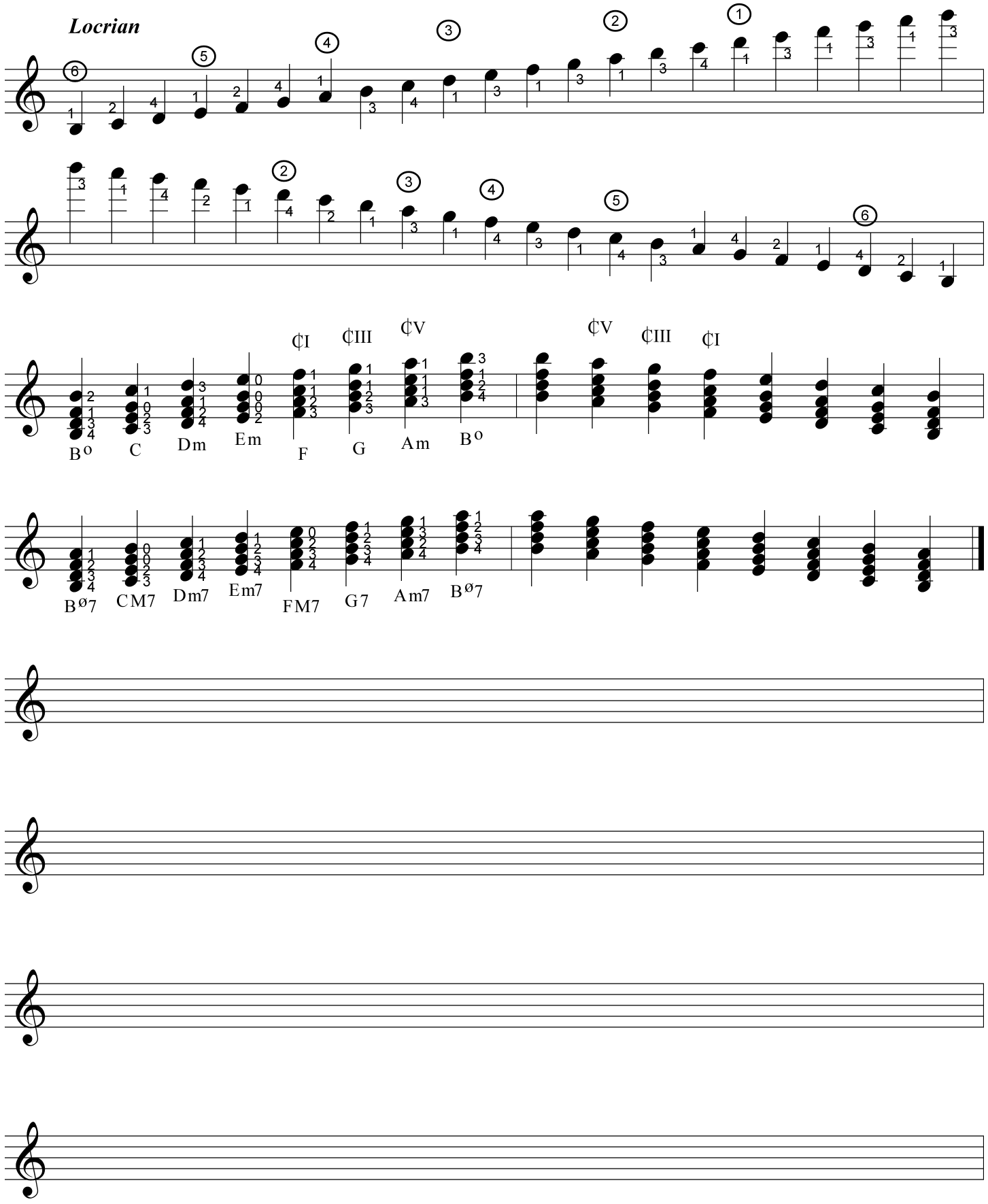

***Melodic minor***



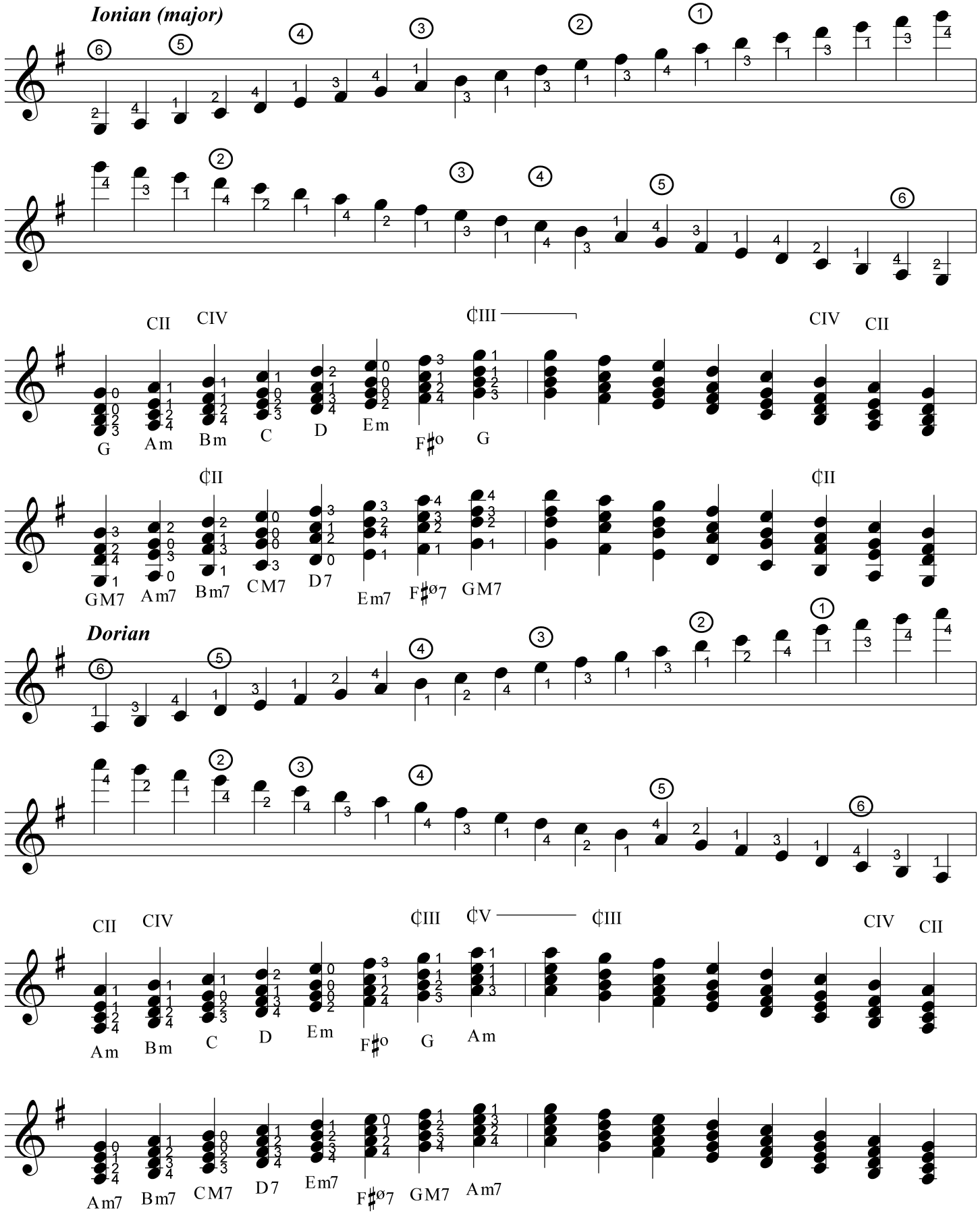





Locrian
B°
C
Dm
Em
F
G
Am
B°
B°7
CM7
Dm7
Em7
FM7
G7
Am7
B°7

## Modal and Minor Scales (one sharp)



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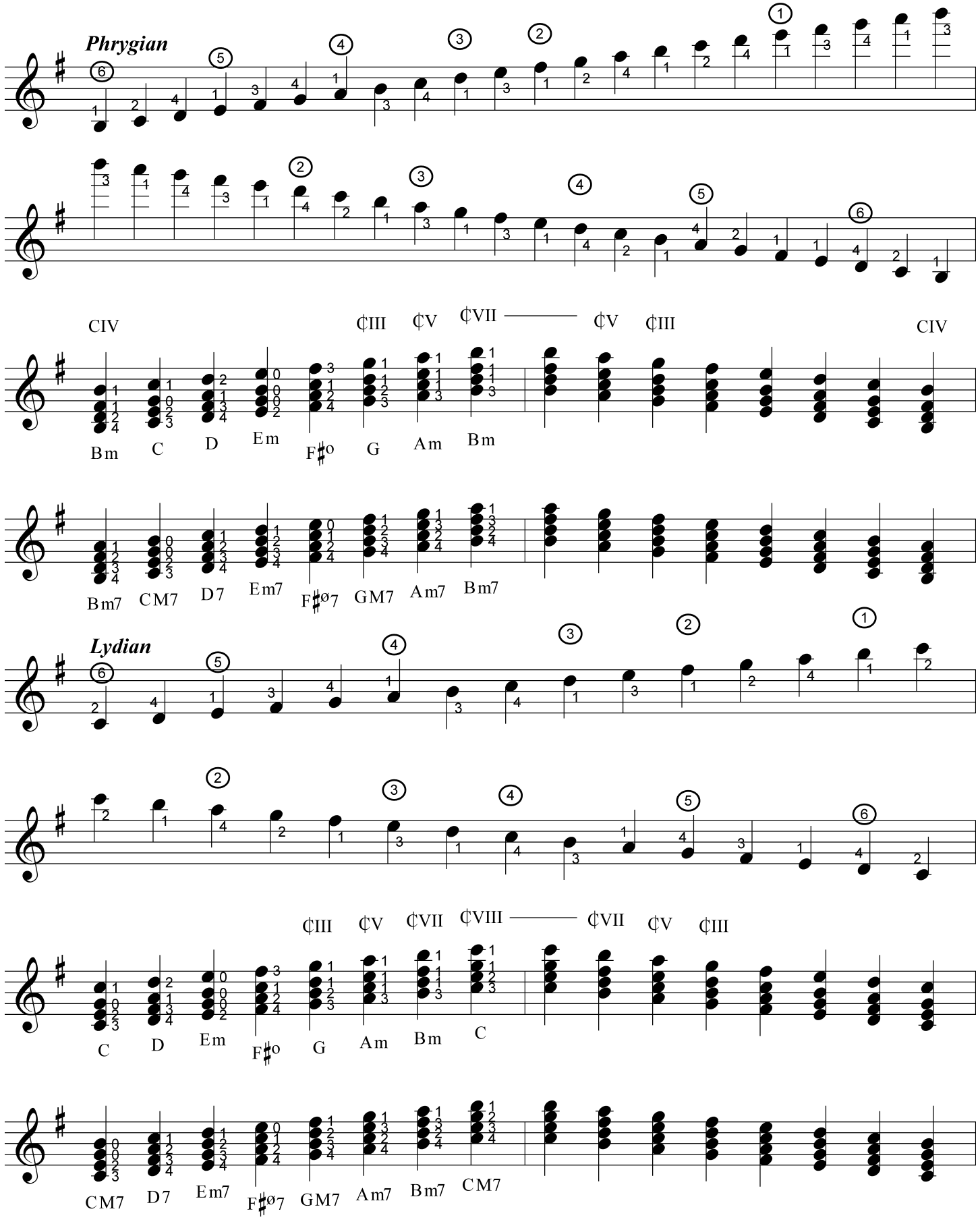
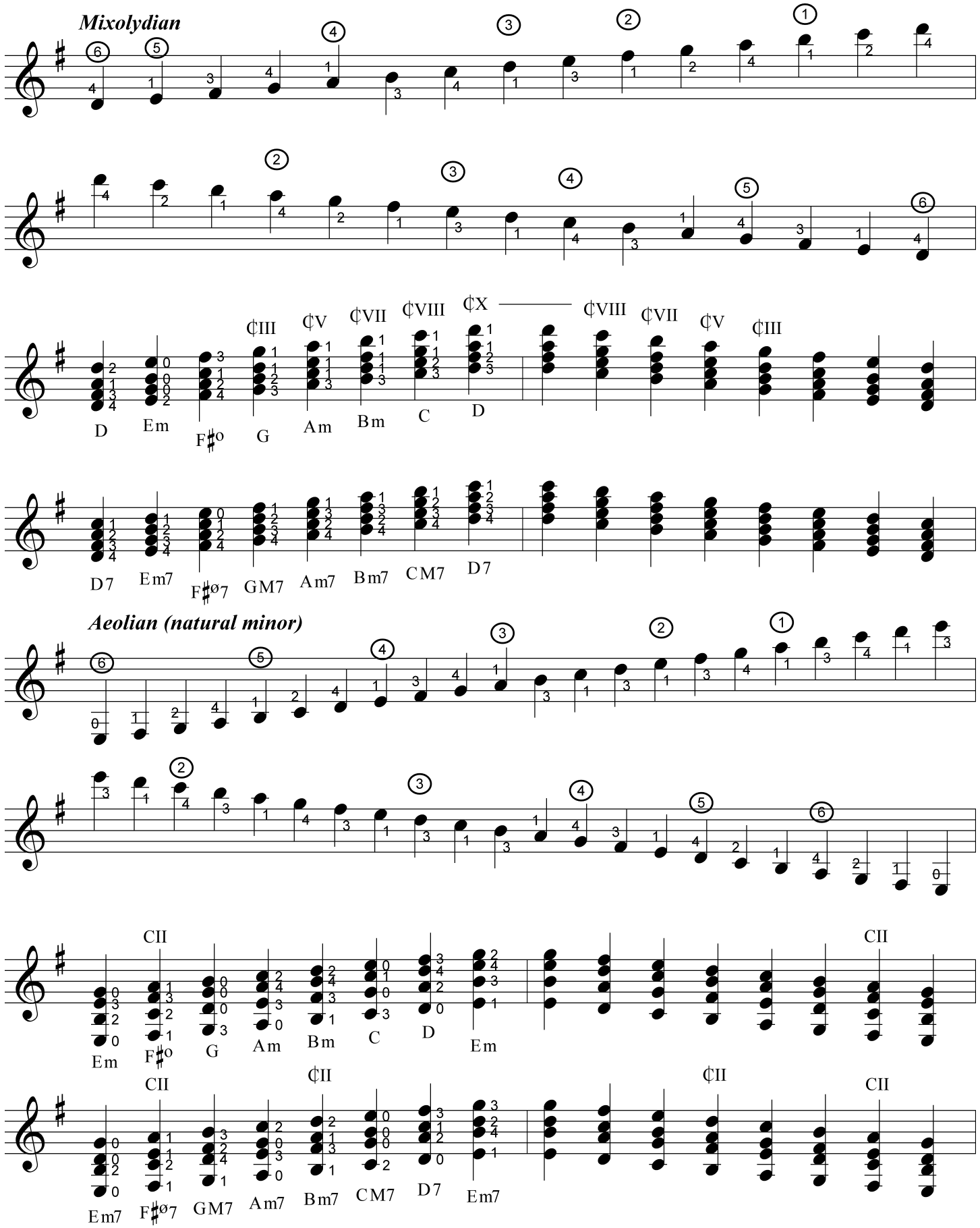
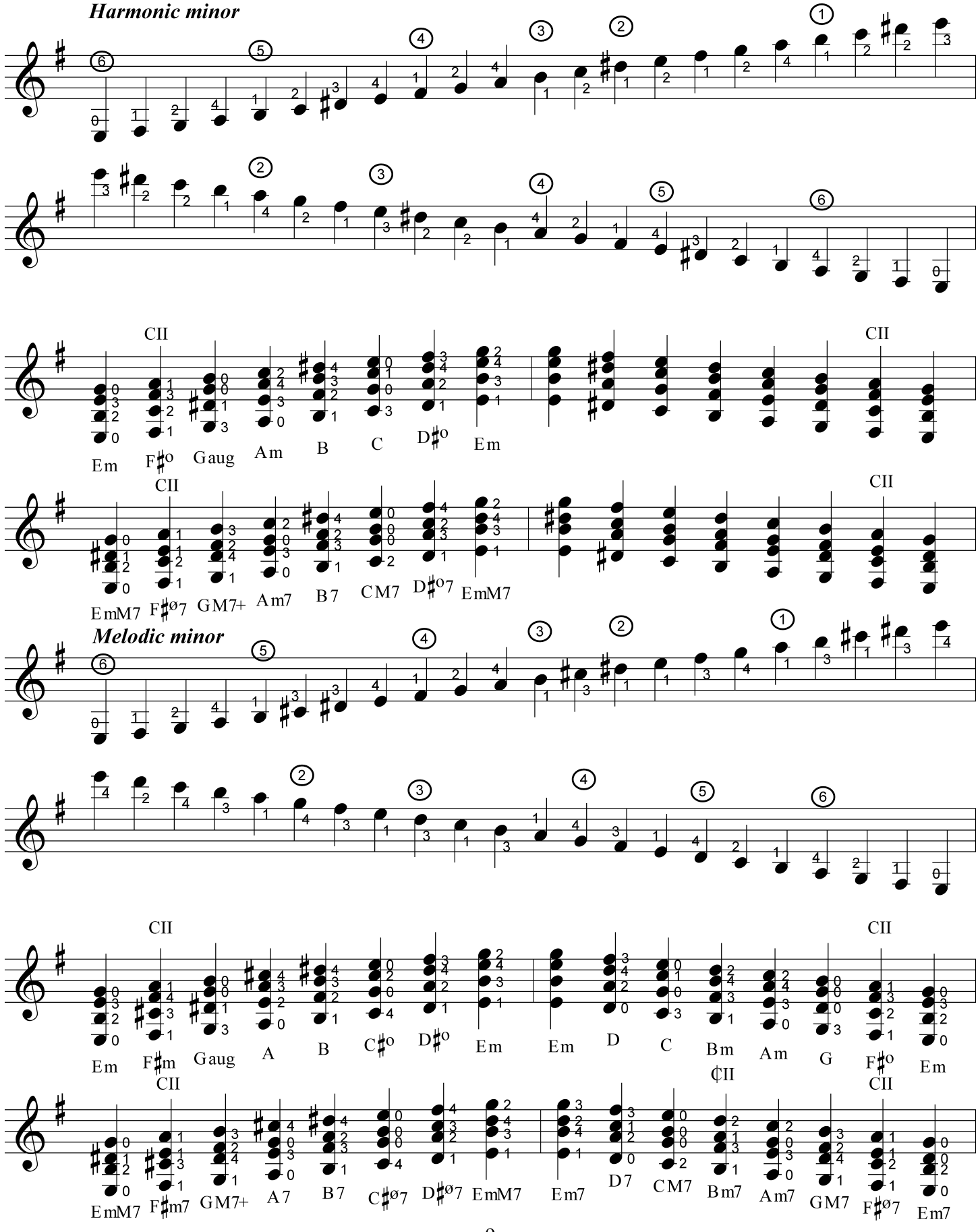
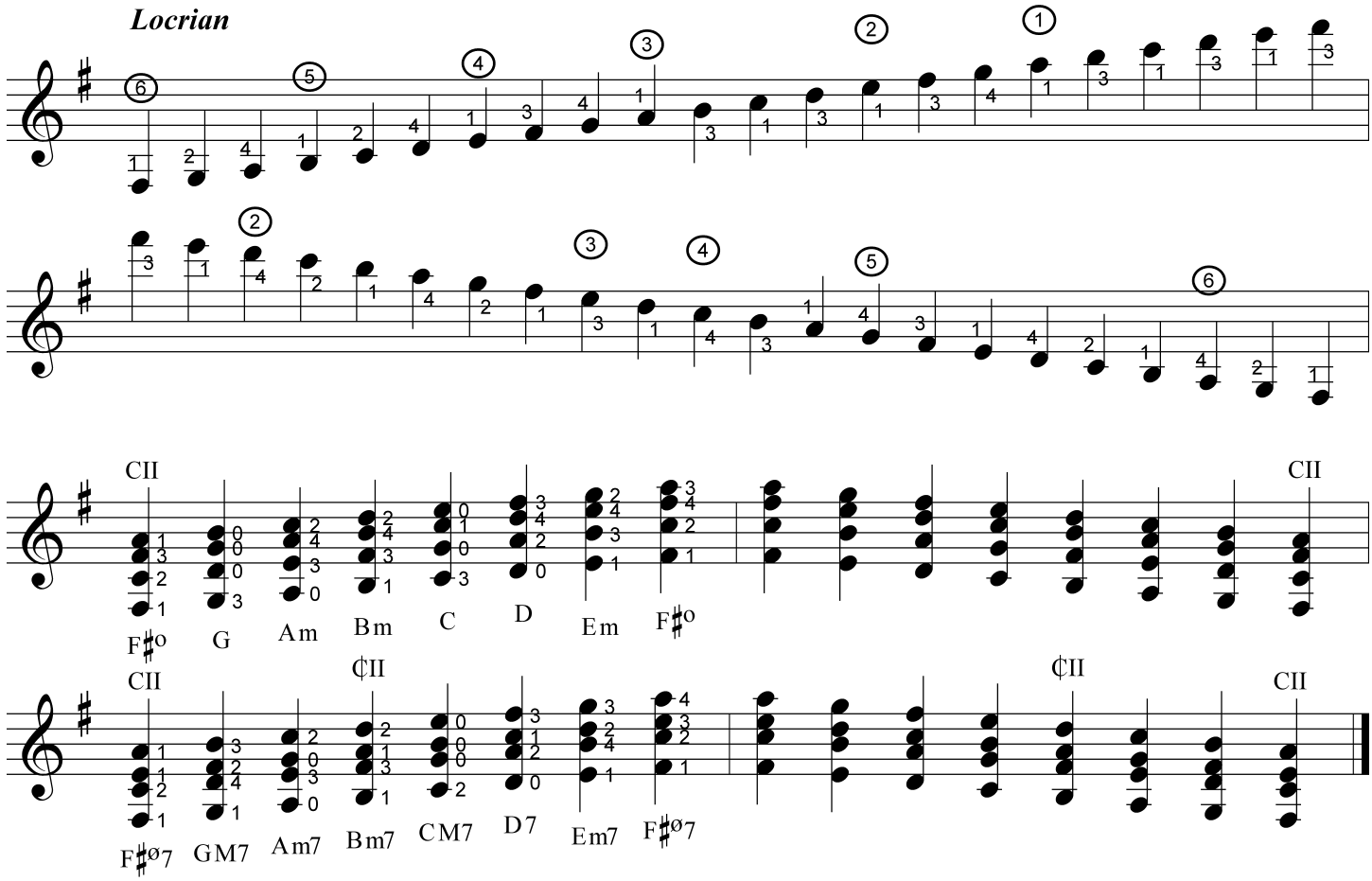
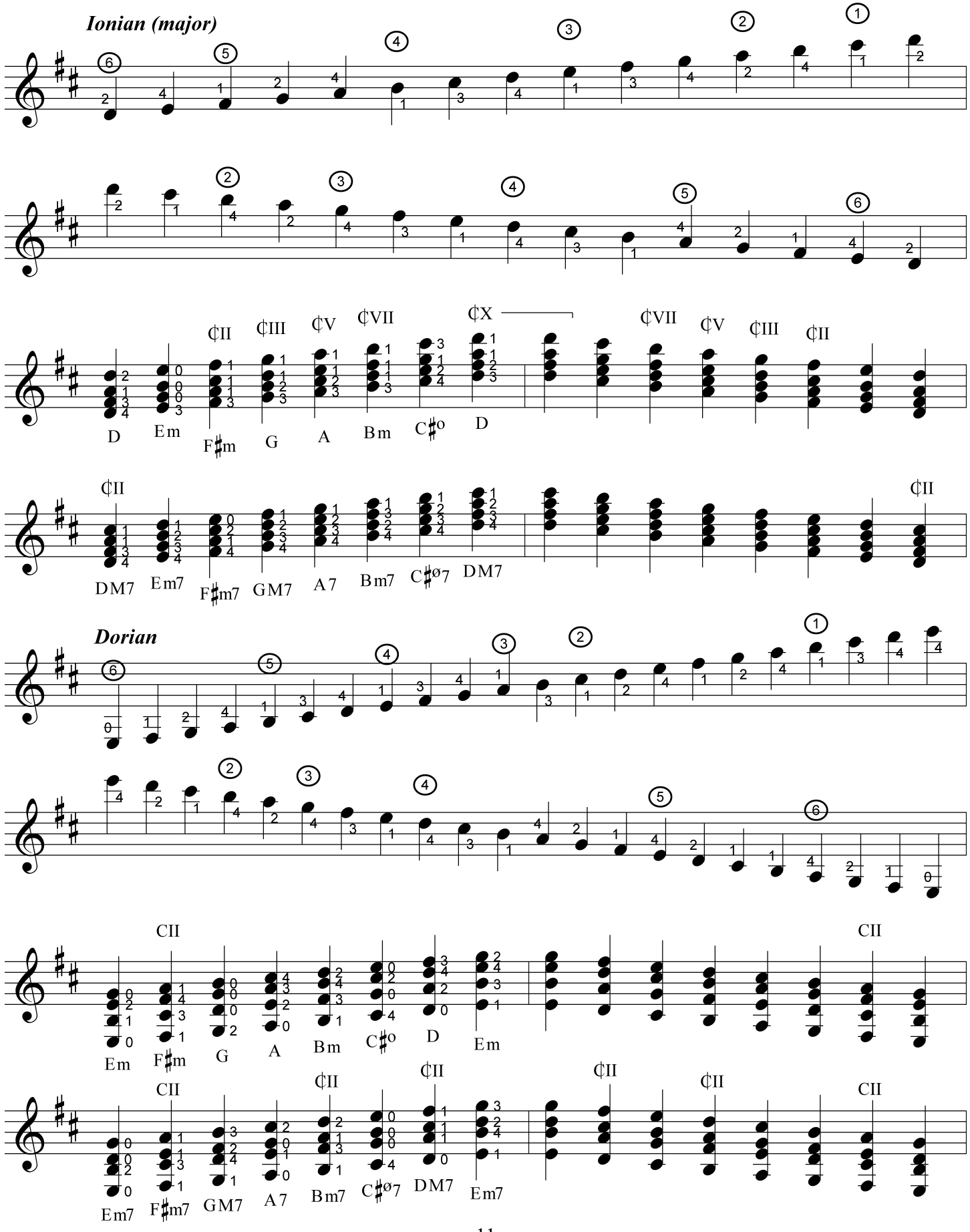

Phrygian
CIV
¢III ¢V ¢VII ¢V ¢III CIV
Bm C D Em F♯o G Am Bm
Bm7 CM7 D7 Em7 F♯ø7 GM7 Am7 Bm7
Lydian
¢III ¢V ¢VII ¢VIII ¢VII ¢V ¢III
C D Em F♯o G Am Bm C
CM7 D7 Em7 F♯ø7 GM7 Am7 Bm7 CM7


Mixolydian
¢III ¢V ¢VII ¢VIII ¢X ¢VIII ¢VII ¢V ¢III
D Em F♯o G Am Bm C D
D7 Em7 F♯ø7 GM7 Am7 Bm7 CM7 D7
Aeolian (natural minor)
CII ¢II CII
Em F♯o G Am Bm C D Em
Em7 F♯ø7 GM7 Am7 Bm7 CM7 D7 Em7


Harmonic minor
CII
Em F♯o Gaug Am B C D♯o Em
CII
EmM7 F♯ø7 GM7+ Am7 B7 CM7 D♯o7 EmM7
CII
Melodic minor
CII
Em F♯m Gaug A B C♯o D♯o Em Em D C Bm Am G F♯o Em
CII
CII
EmM7 F♯m7 GM7+ A7 B7 C♯ø7 D♯ø7 EmM7 Em7 D7 CM7 Bm7 Am7 GM7 F♯ø7 Em7


Locrian
CII
F♯o
G
Am
Bm
C
D
Em
F♯o
CII
CII
F♯ø7
GM7
Am7
Bm7
CM7
D7
Em7
F♯ø7
♭II
♭II
CII

## Modal and Minor Scales (two sharps)



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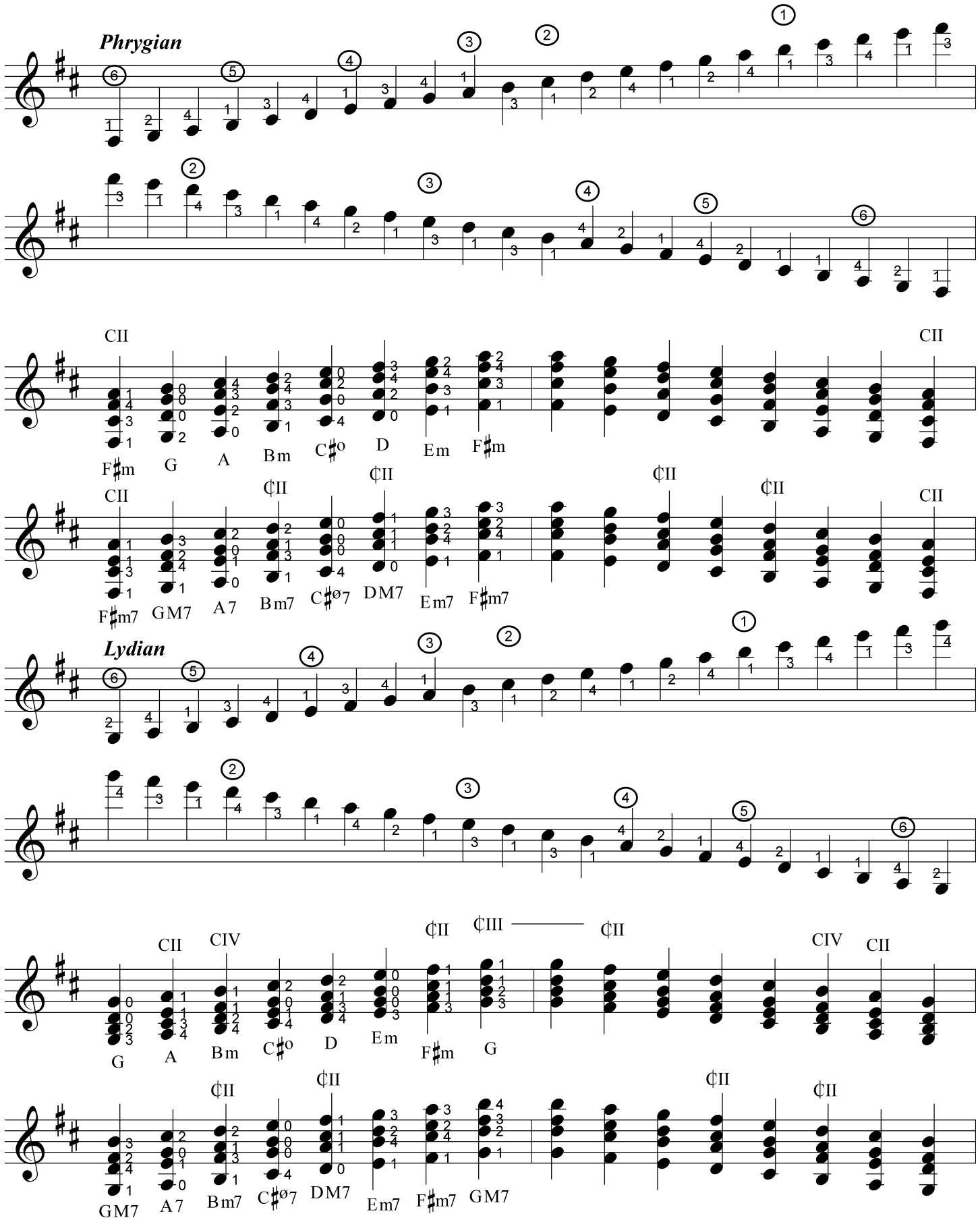
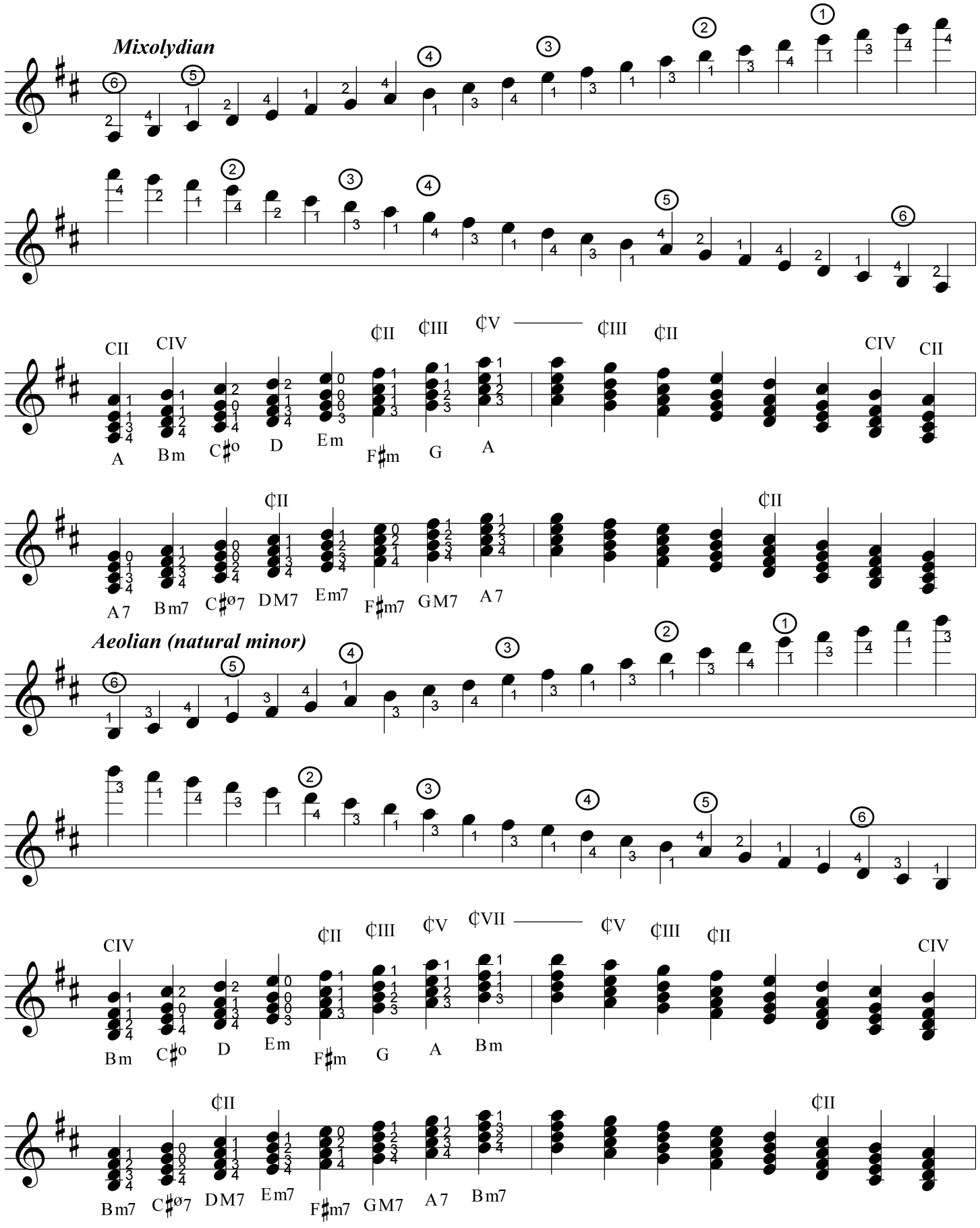
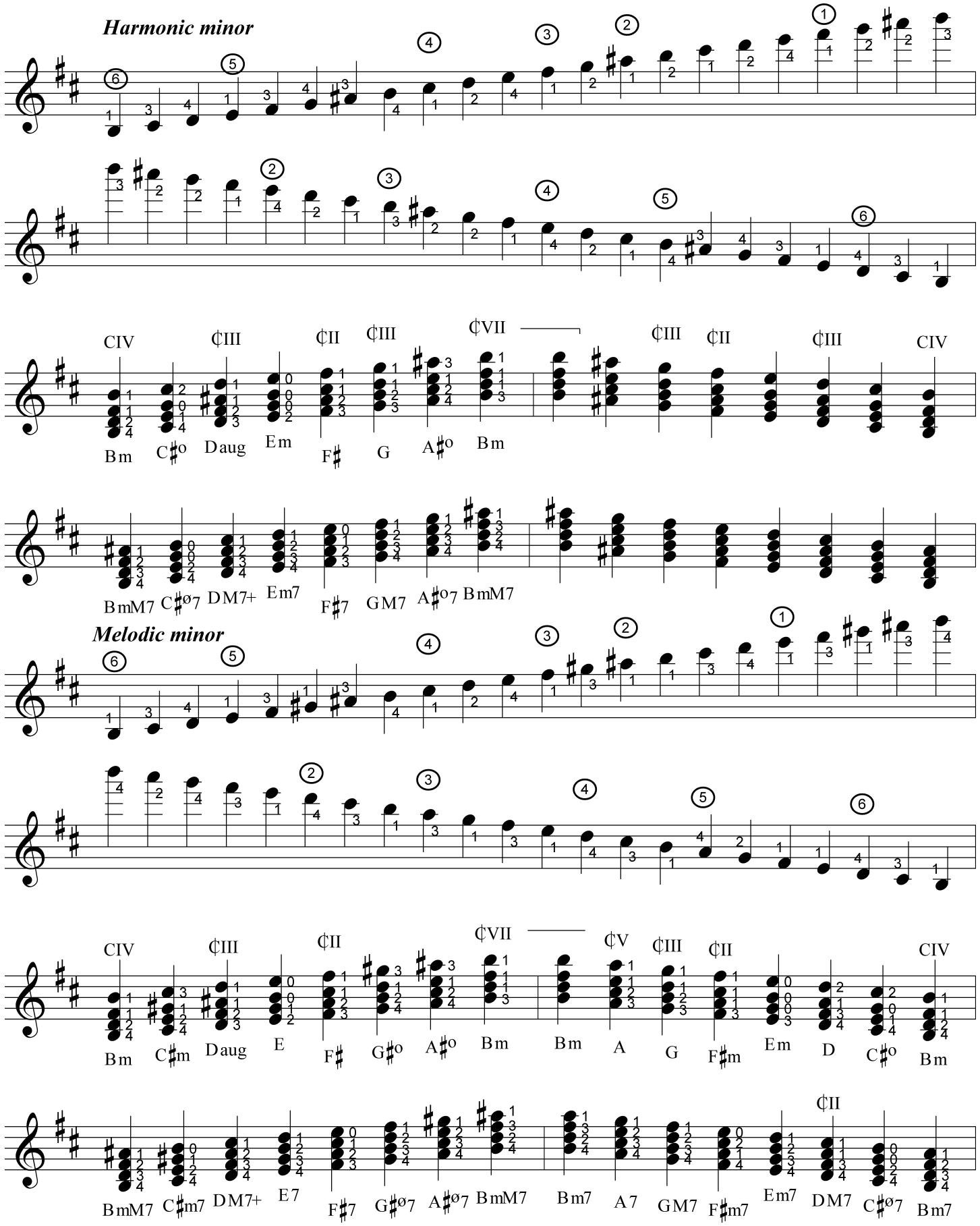
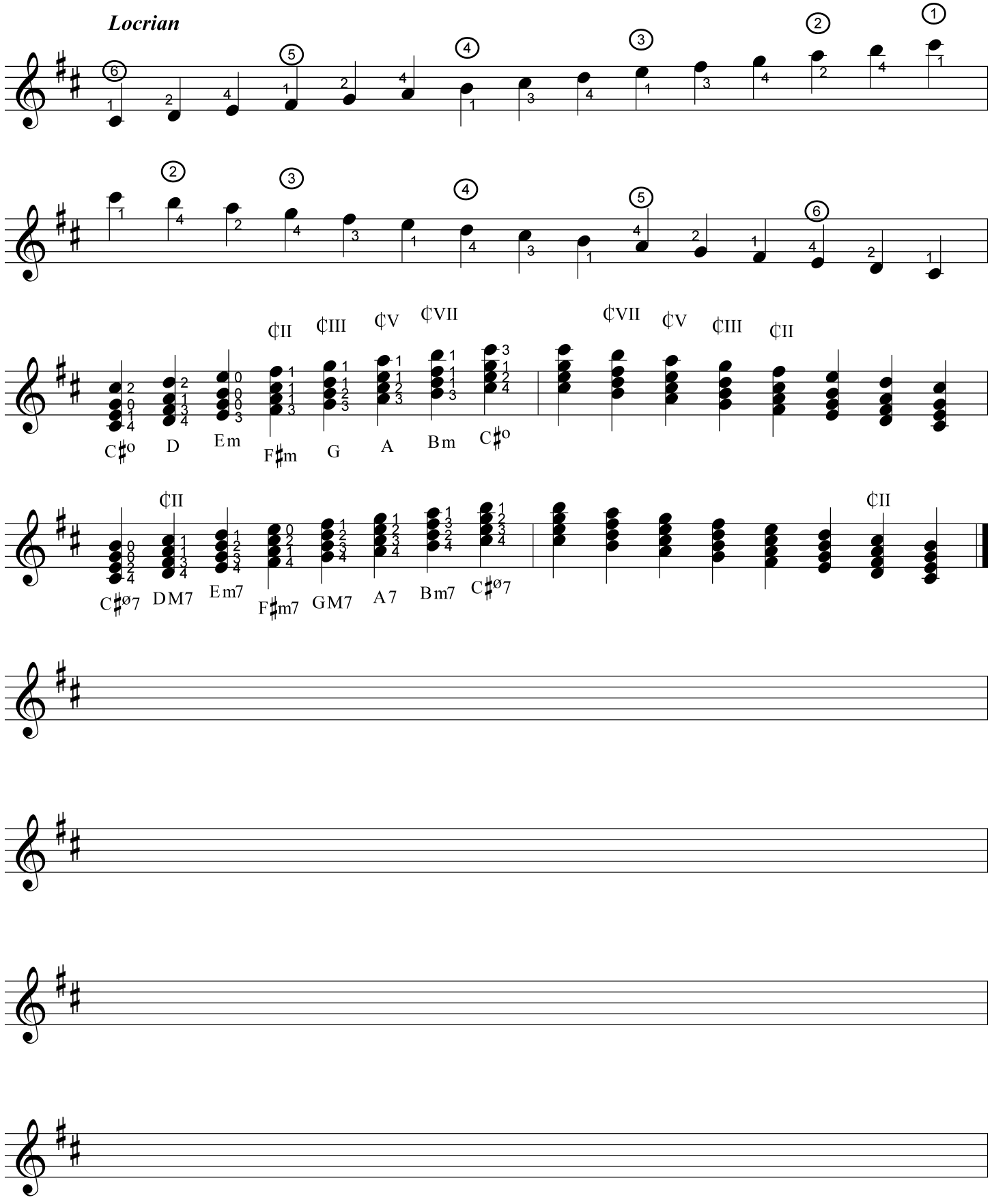
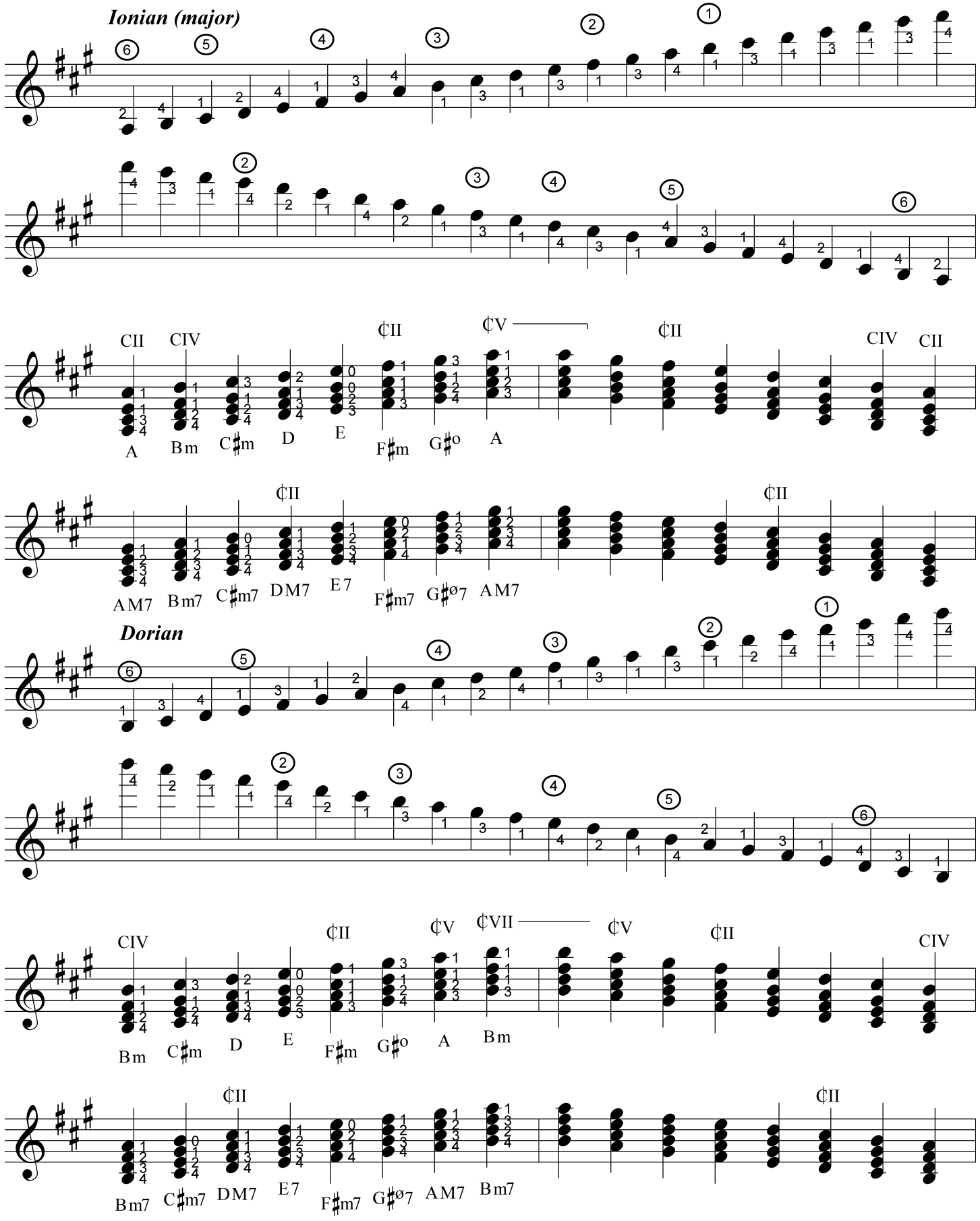

Phrygian
CII
F♯m G A Bm C♯o D Em F♯m
CII
CII
¢II
¢II
¢II
¢II
CII
F♯m7 GM7 A7 Bm7 C♯ø7 DM7 Em7 F♯m7
Lydian
CII CIV
¢II ¢III
¢II
CIV CII
G A Bm C♯o D Em F♯m G
¢II
¢II
¢II
¢II
GM7 A7 Bm7 C♯ø7 DM7 Em7 F♯m7 GM7


Mixolydian
CII CIV ¢II ¢III ¢V ¢III ¢II CIV CII
A Bm C♯o D Em F♯m G A
A7 Bm7 C♯ø7 DM7 Em7 F♯m7 GM7 A7
Aeolian (natural minor)
CIV ¢II ¢III ¢V ¢VII ¢V ¢III ¢II CIV
Bm C♯o D Em F♯m G A Bm
Bm7 C♯ø7 DM7 Em7 F♯m7 GM7 A7 Bm7


Harmonic minor
CIV ¢III ¢II ¢III ¢VII ¢III ¢II ¢III CIV
Bm C♯o Daug Em F♯ G A♯o Bm
BmM7 C♯ø7 DM7+ Em7 F♯7 GM7 A♯o7 BmM7
Melodic minor
CIV ¢III ¢II ¢VII ¢V ¢III ¢II CIV
Bm C♯m Daug E F♯ G♯o A♯o Bm Bm A G F♯m Em D C♯o Bm
BmM7 C♯m7 DM7+ E7 F♯7 G♯ø7 A♯ø7 BmM7 Bm7 A7 GM7 F♯m7 Em7 DM7 C♯ø7 Bm7


Locrian
C♯o
D
Em
F♯m
G
A
Bm
C♯o
C♯ø7
DM7
Em7
F♯m7
GM7
A7
Bm7
C♯ø7

## Modal and Minor Scales (three sharps)



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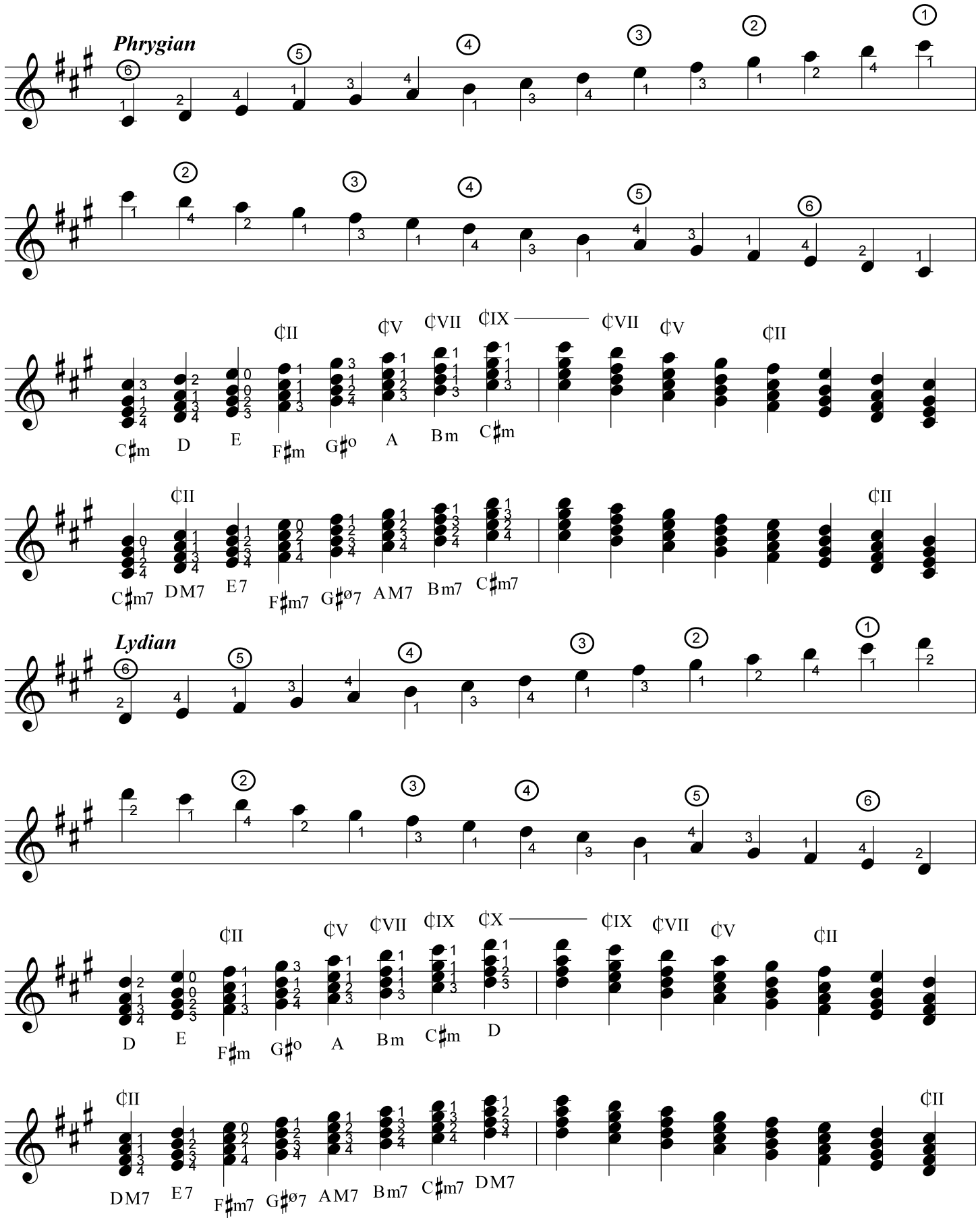
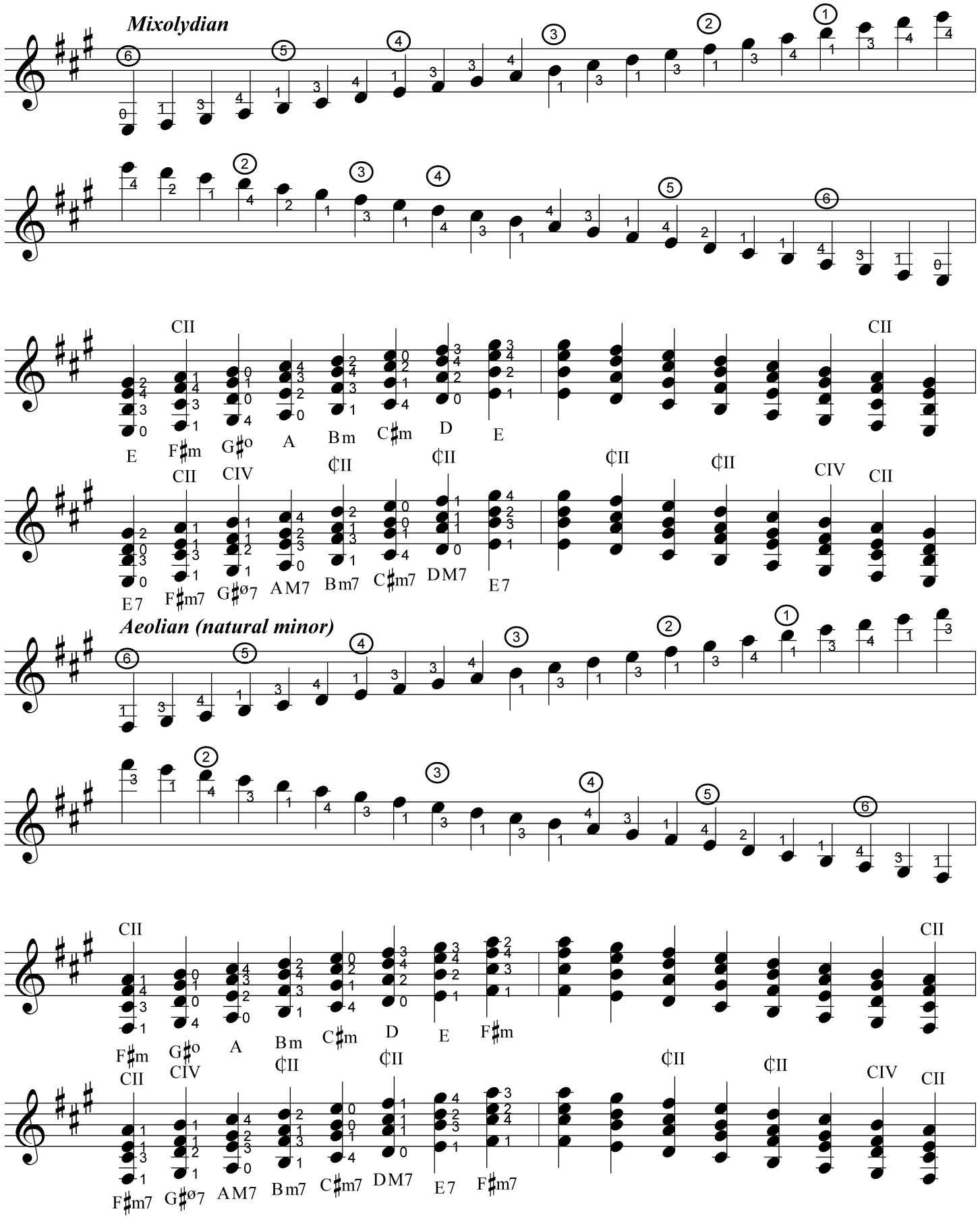
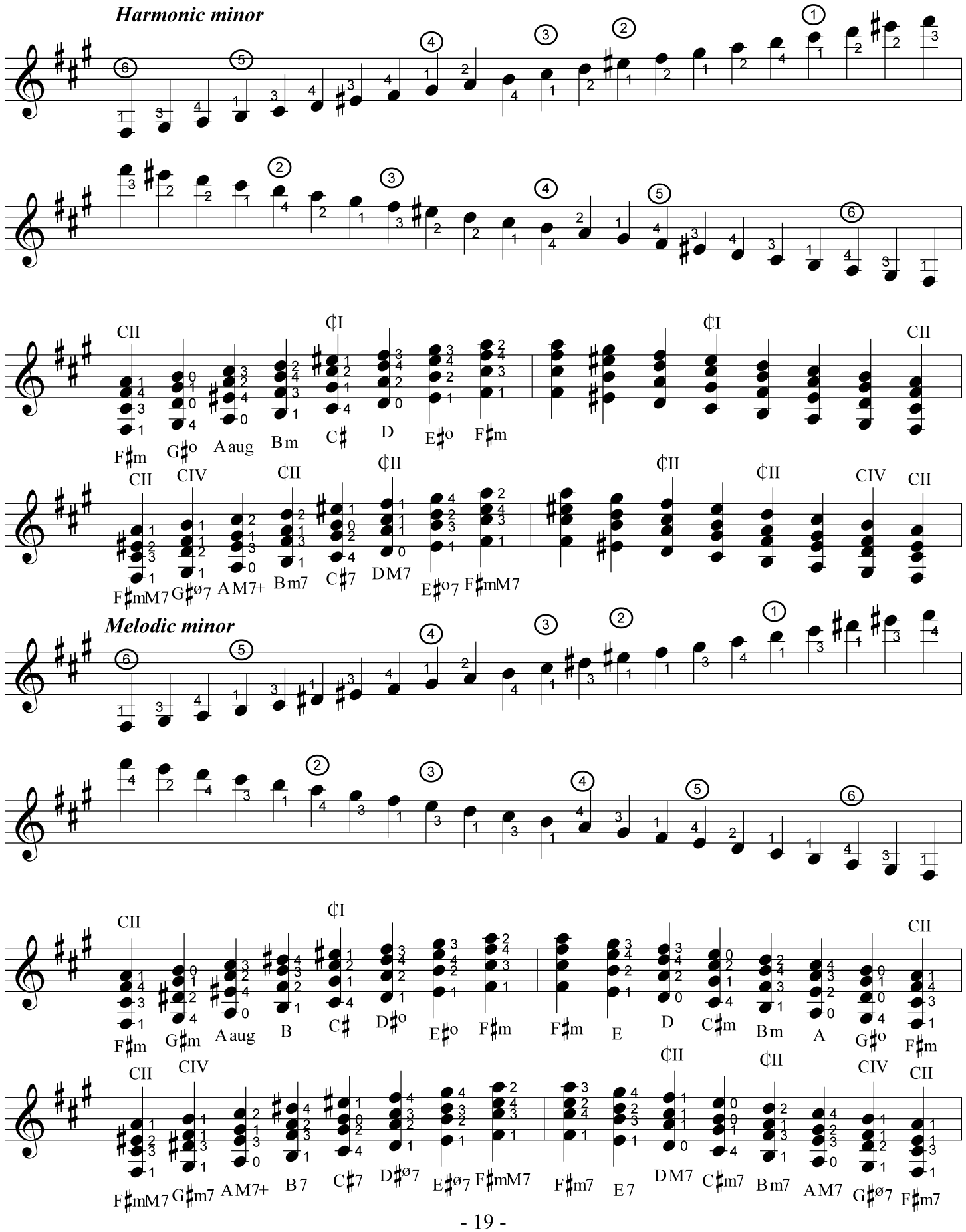
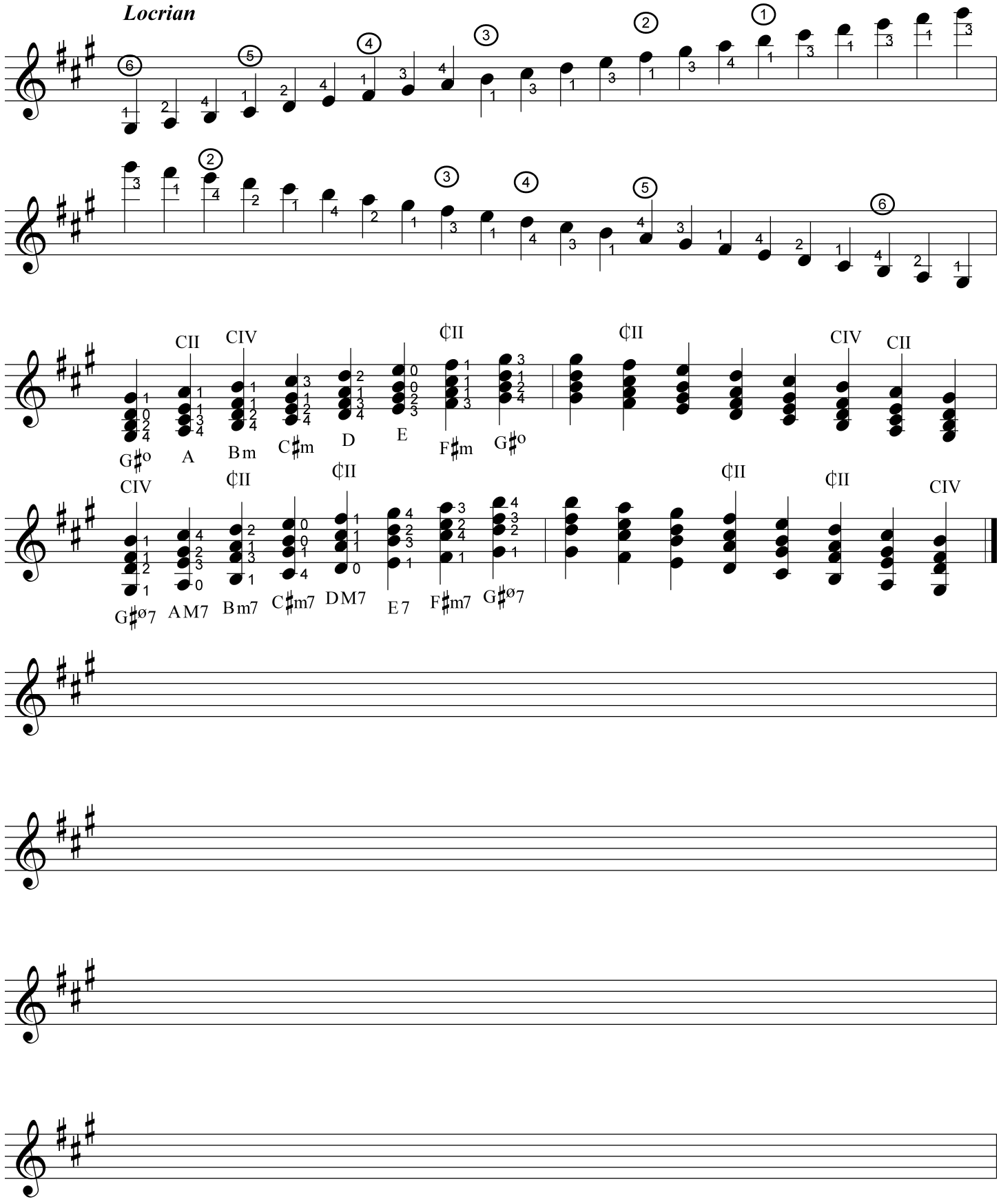
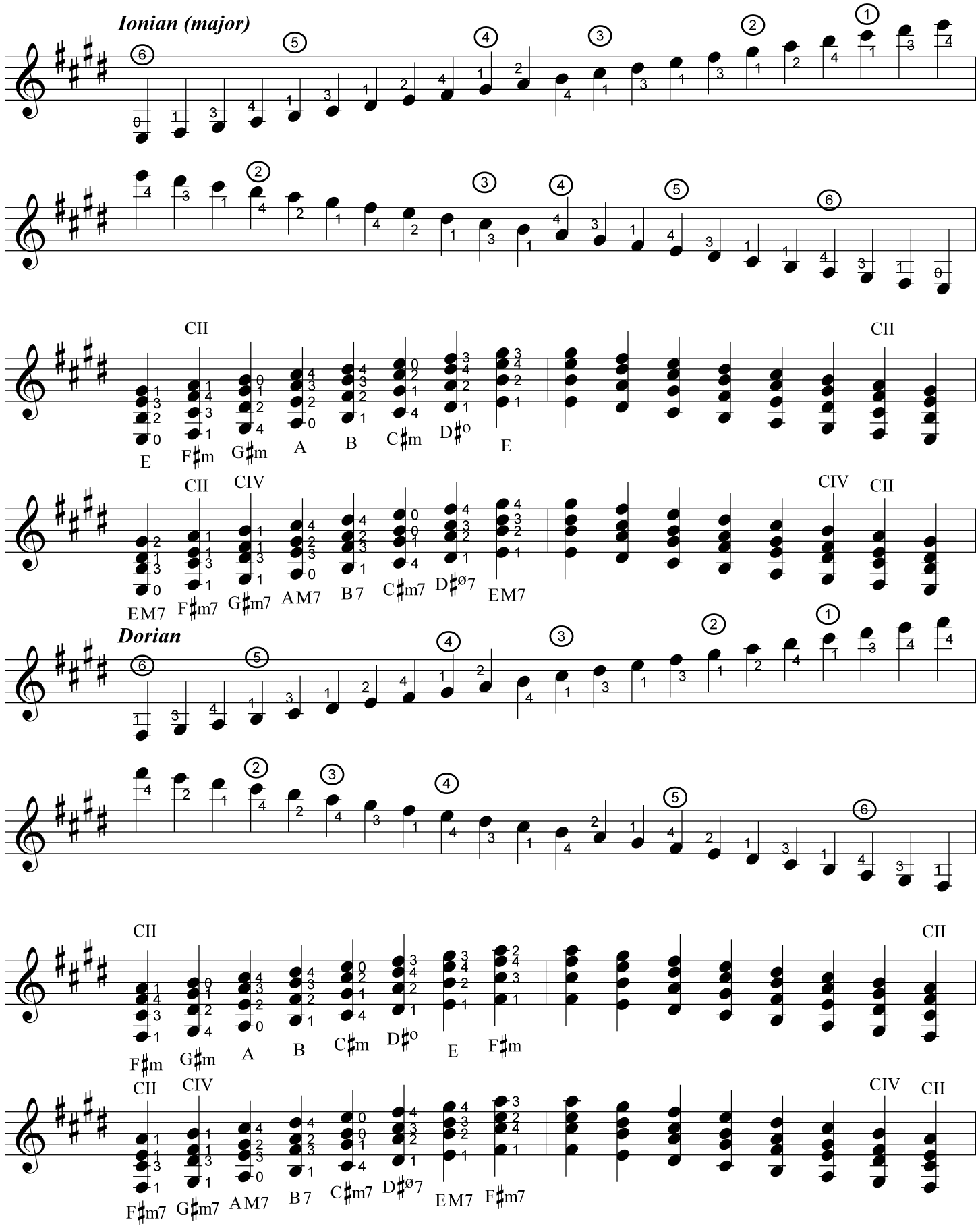

Phrygian
C♯m D E F♯m G♯o A Bm C♯m
C♯m7 DM7 E7 F♯m7 G♯ø7 AM7 Bm7 C♯m7
Lydian
D E F♯m G♯o A Bm C♯m D
DM7 E7 F♯m7 G♯ø7 AM7 Bm7 C♯m7 DM7


Mixolydian
CII
E
F♯m
G♯o
A
Bm
C♯m
D
E
CII
CII
CIV
♭II
♭II
♭II
CIV
CII
E7
F♯m7
G♯ø7
AM7
Bm7
C♯m7
DM7
E7
Aeolian (natural minor)
CII
F♯m
G♯o
A
Bm
C♯m
D
E
F♯m
CII
CII
CIV
♭II
♭II
♭II
CIV
CII
F♯m7
G♯ø7
AM7
Bm7
C♯m7
DM7
E7
F♯m7


Harmonic minor
CII ¢I ¢I CII
F♯m G♯o Aaug B m C♯ D E♯o F♯m
CII CIV ¢II ¢II ¢II ¢II CIV CII
F♯mM7 G♯ø7 AM7+ B m7 C♯7 DM7 E♯o7 F♯mM7
Melodic minor
CII ¢I CII
F♯m G♯m Aaug B C♯ D♯o E♯o F♯m F♯m E D C♯m B m A G♯o F♯m
CII CIV ¢II ¢II CIV CII
F♯mM7 G♯m7 AM7+ B7 C♯7 D♯ø7 E♯ø7 F♯mM7 F♯m7 E7 DM7 C♯m7 B m7 AM7 G♯ø7 F♯m7


Locrian
CII
CIV
♭II
♭II
CIV
CII
G♯o
A
Bm
C♯m
D
E
F♯m
G♯o
CIV
♭II
♭II
♭II
CIV
G♯ø7
AM7
Bm7
C♯m7
DM7
E7
F♯m7
G♯ø7

## Modal and Minor Scales (four sharps)



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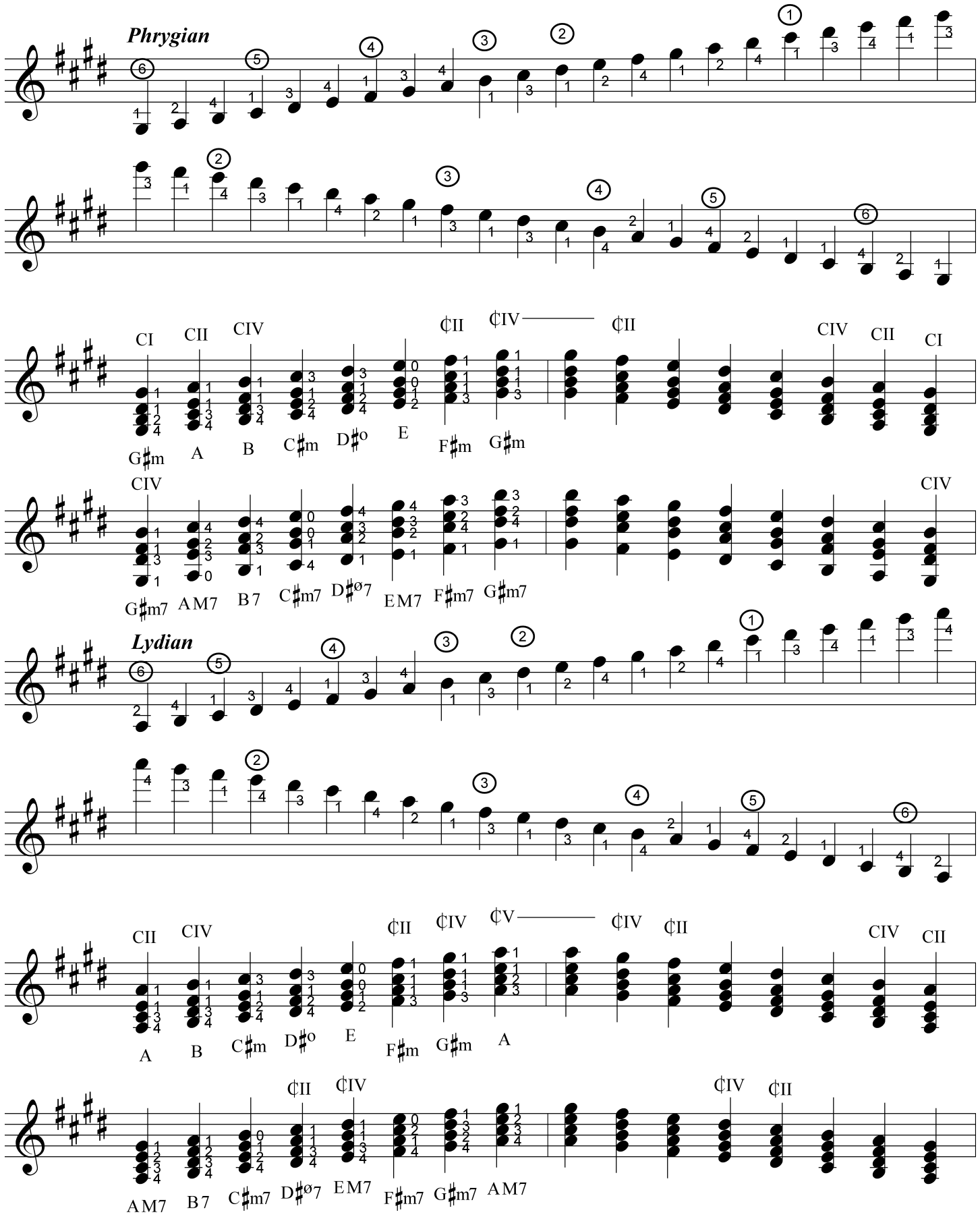
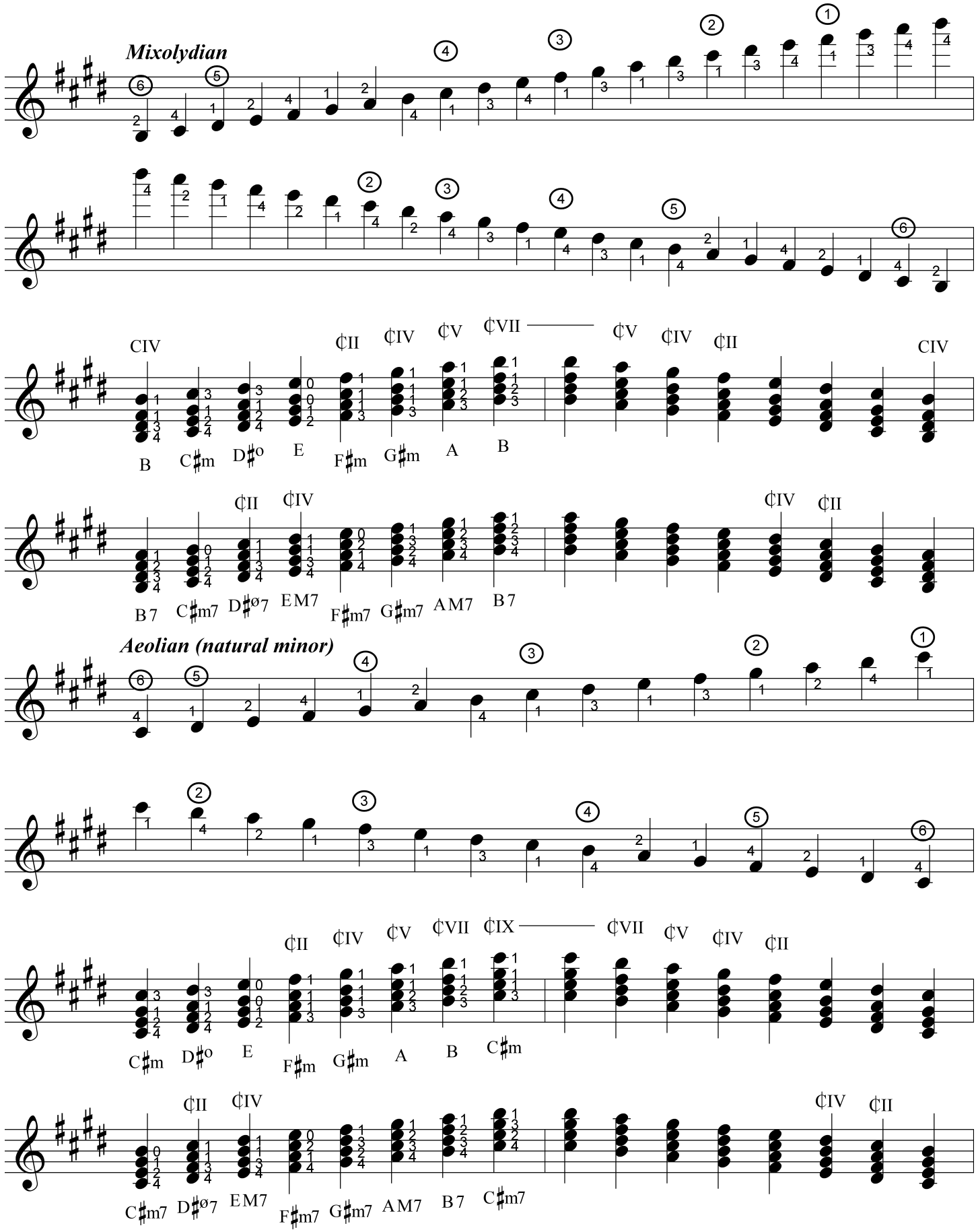
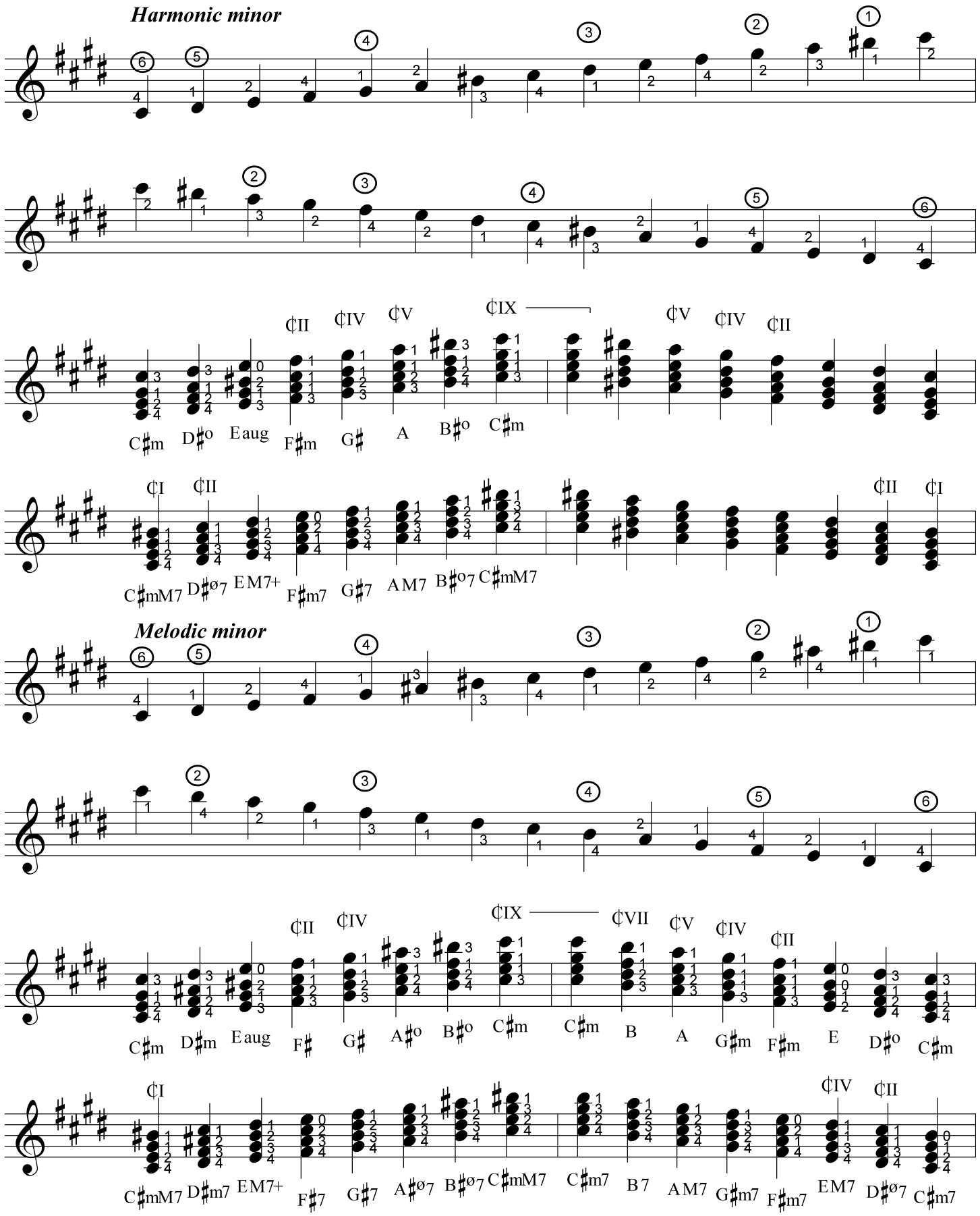
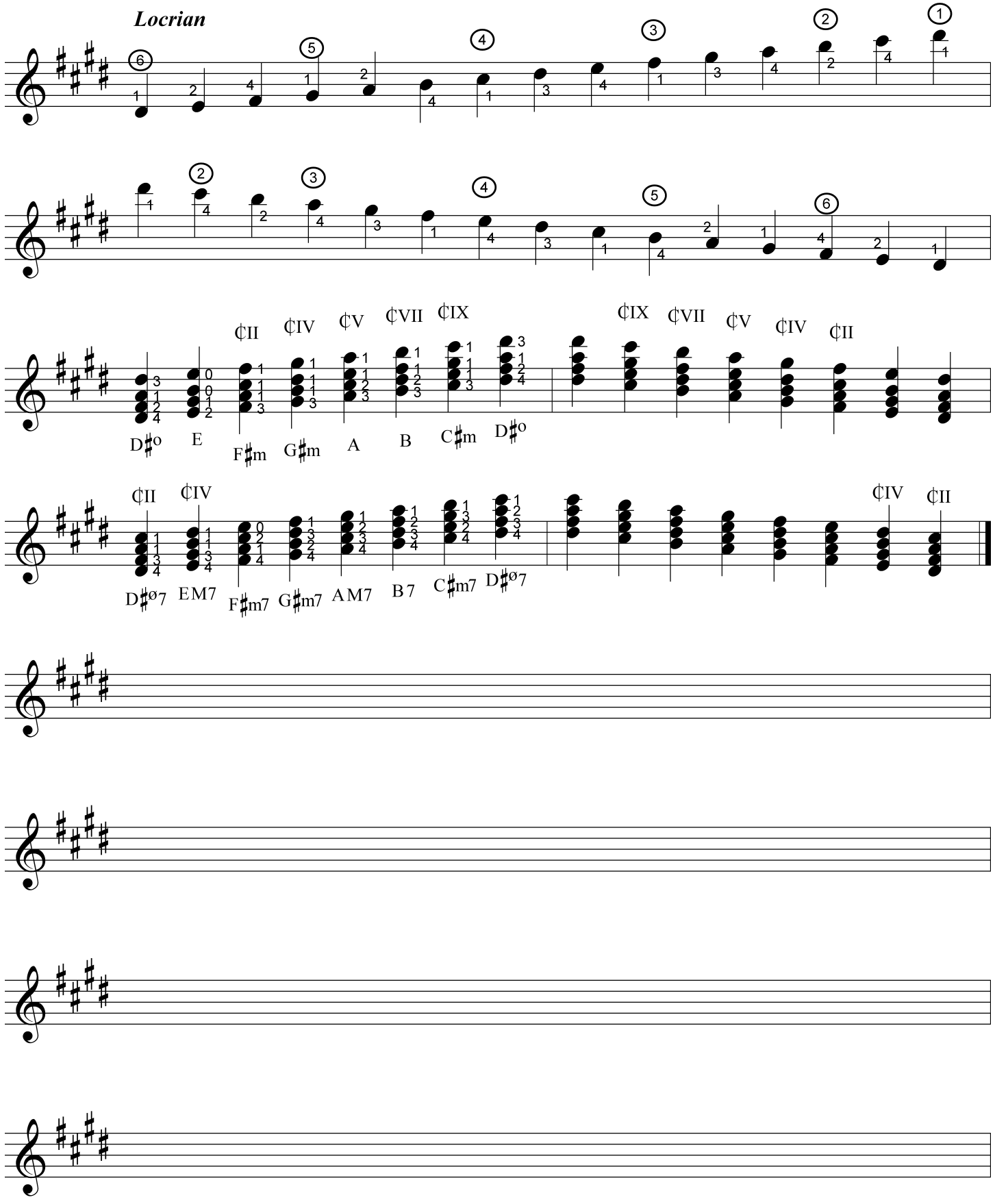
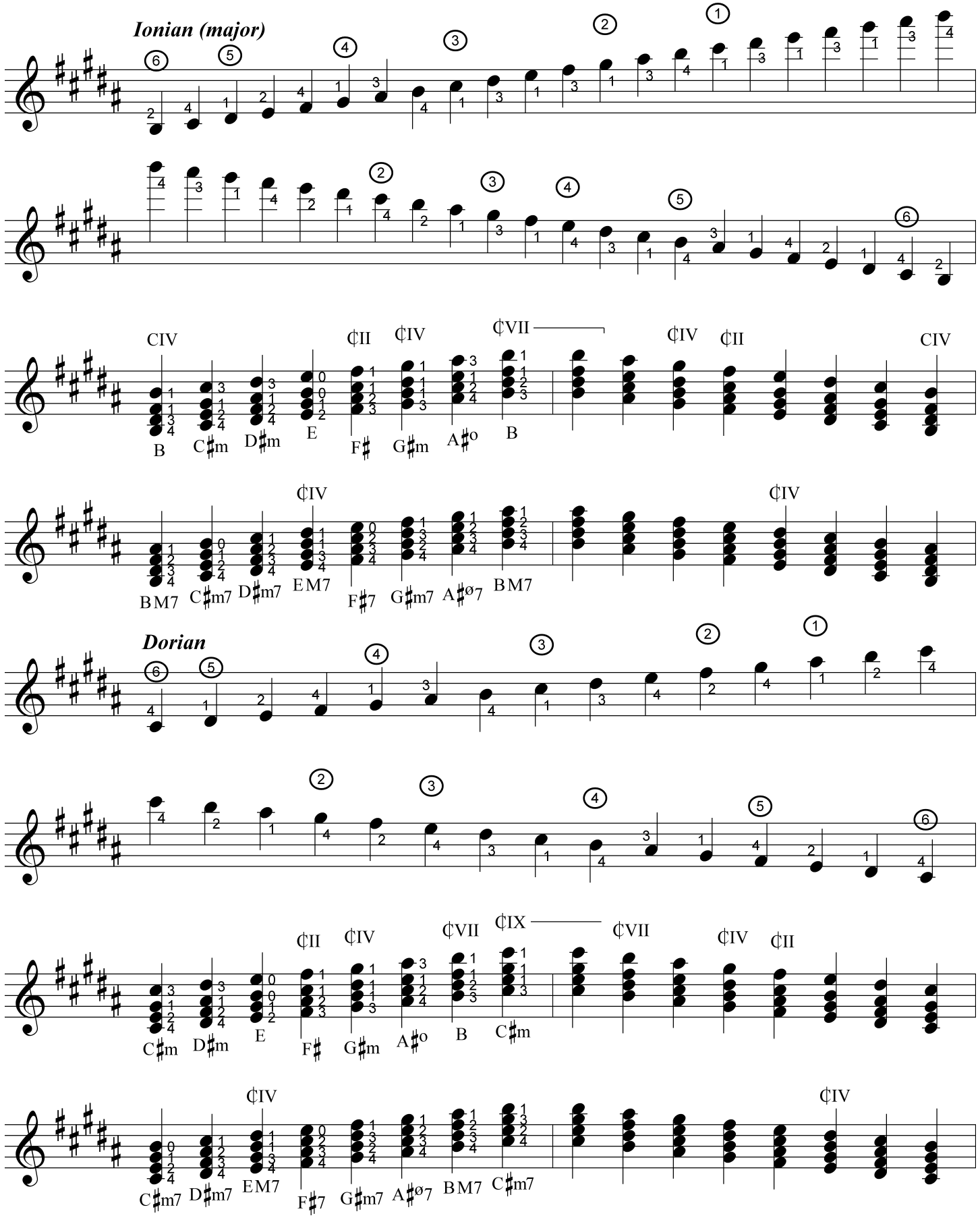

Phrygian
CI CII CIV ¢II ¢IV ¢II CIV CII CI
G♯m A B C♯m D♯o E F♯m G♯m
CIV CIV
G♯m7 AM7 B7 C♯m7 D♯ø7 EM7 F♯m7 G♯m7
Lydian
CII CIV ¢II ¢IV ¢V ¢IV ¢II CIV CII
A B C♯m D♯o E F♯m G♯m A
¢II ¢IV ¢IV ¢II
AM7 B7 C♯m7 D♯ø7 EM7 F♯m7 G♯m7 AM7


Mixolydian
CIV ¢II ¢IV ¢V ¢VII ¢V ¢IV ¢II CIV
B C♯m D♯o E F♯m G♯m A B
¢II ¢IV ¢IV ¢II
B7 C♯m7 D♯ø7 EM7 F♯m7 G♯m7 AM7 B7
Aeolian (natural minor)
¢II ¢IV ¢V ¢VII ¢IX ¢VII ¢V ¢IV ¢II
C♯m D♯o E F♯m G♯m A B C♯m
¢II ¢IV ¢IV ¢II
C♯m7 D♯ø7 EM7 F♯m7 G♯m7 AM7 B7 C♯m7


Harmonic minor
C♯m D♯o Eaug F♯m G♯ A B♯o C♯m
C♯mM7 D♯ø7 EM7+ F♯m7 G♯7 AM7 B♯o7 C♯mM7
Melodic minor
C♯m D♯m Eaug F♯ G♯ A♯o B♯o C♯m C♯m B A G♯m F♯m E D♯o C♯m
C♯mM7 D♯m7 EM7+ F♯7 G♯7 A♯ø7 B♯ø7 C♯mM7 C♯m7 B7 AM7 G♯m7 F♯m7 EM7 D♯ø7 C♯m7


Locrian
D♯o
E
F♯m
G♯m
A
B
C♯m
D♯o
D♯ø7
EM7
F♯m7
G♯m7
AM7
B7
C♯m7
D♯ø7

## Modal and Minor Scales (five sharps)



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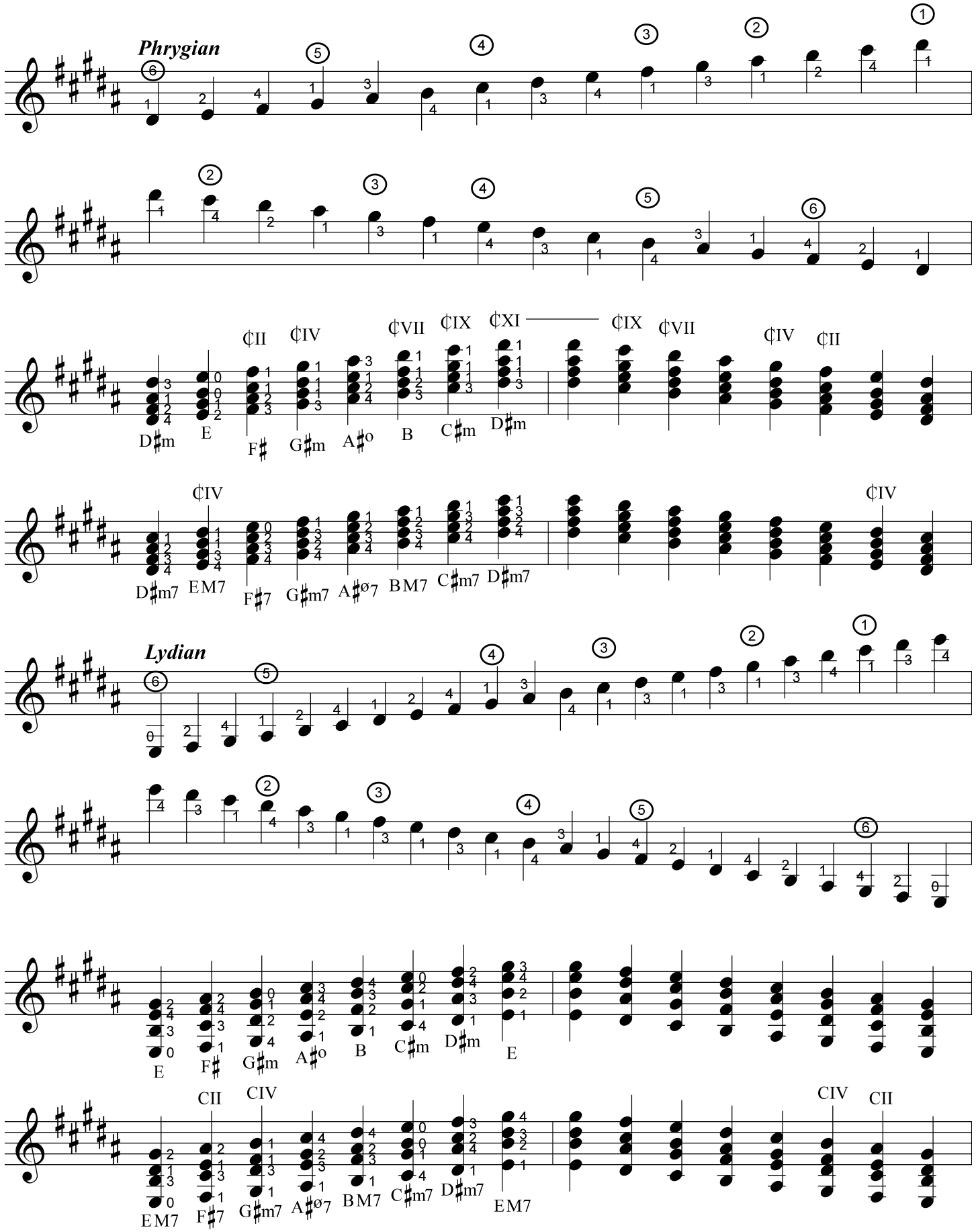
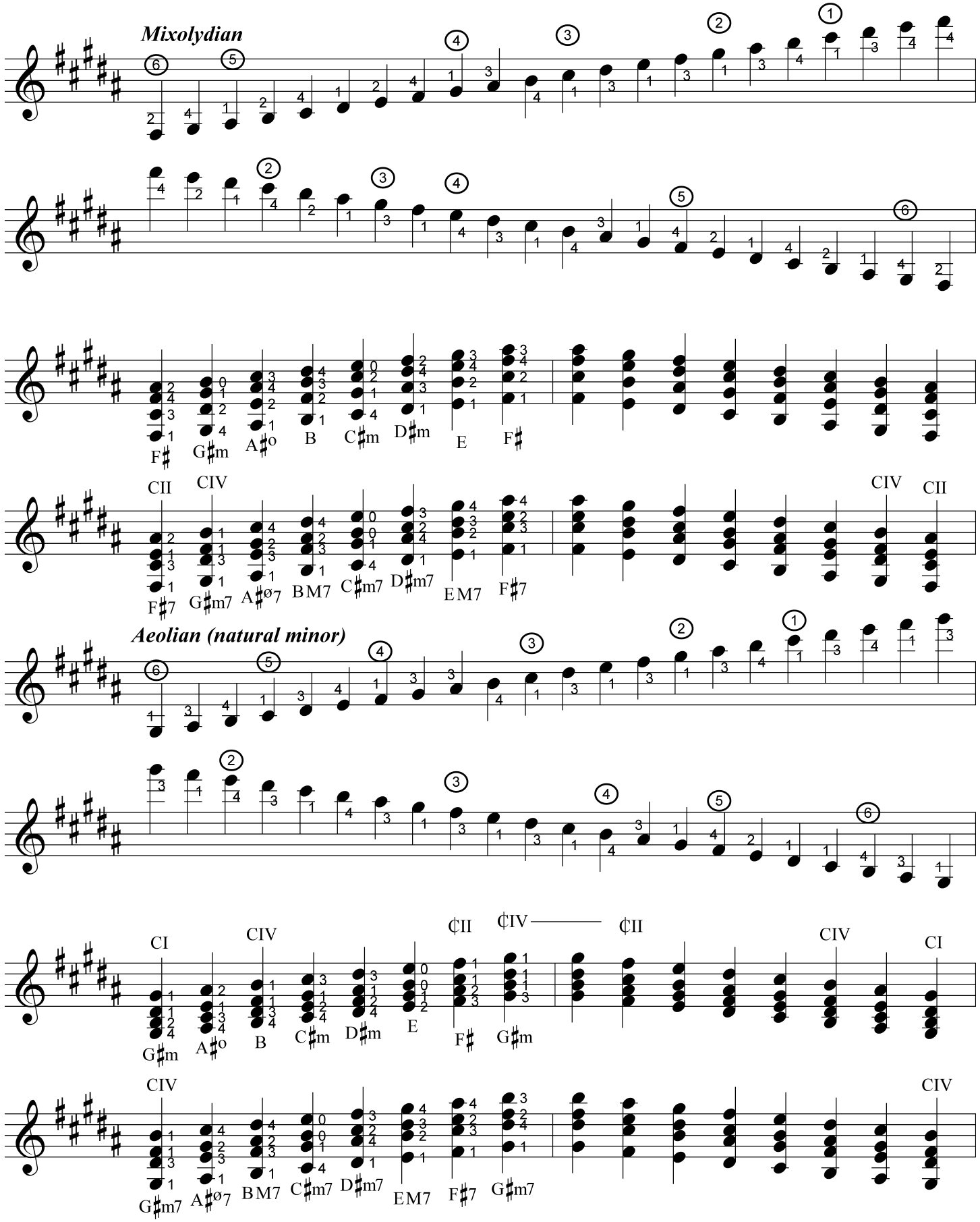
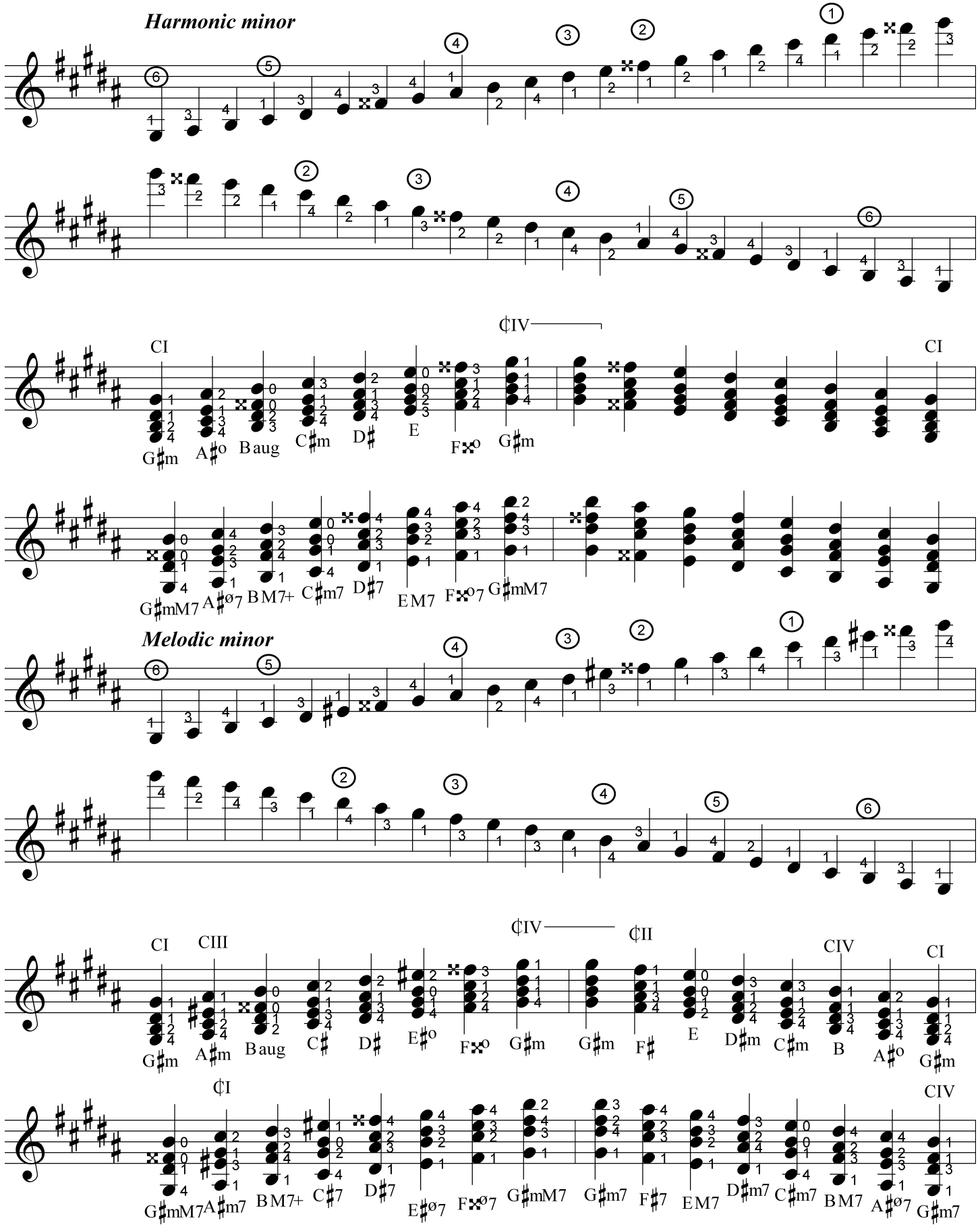
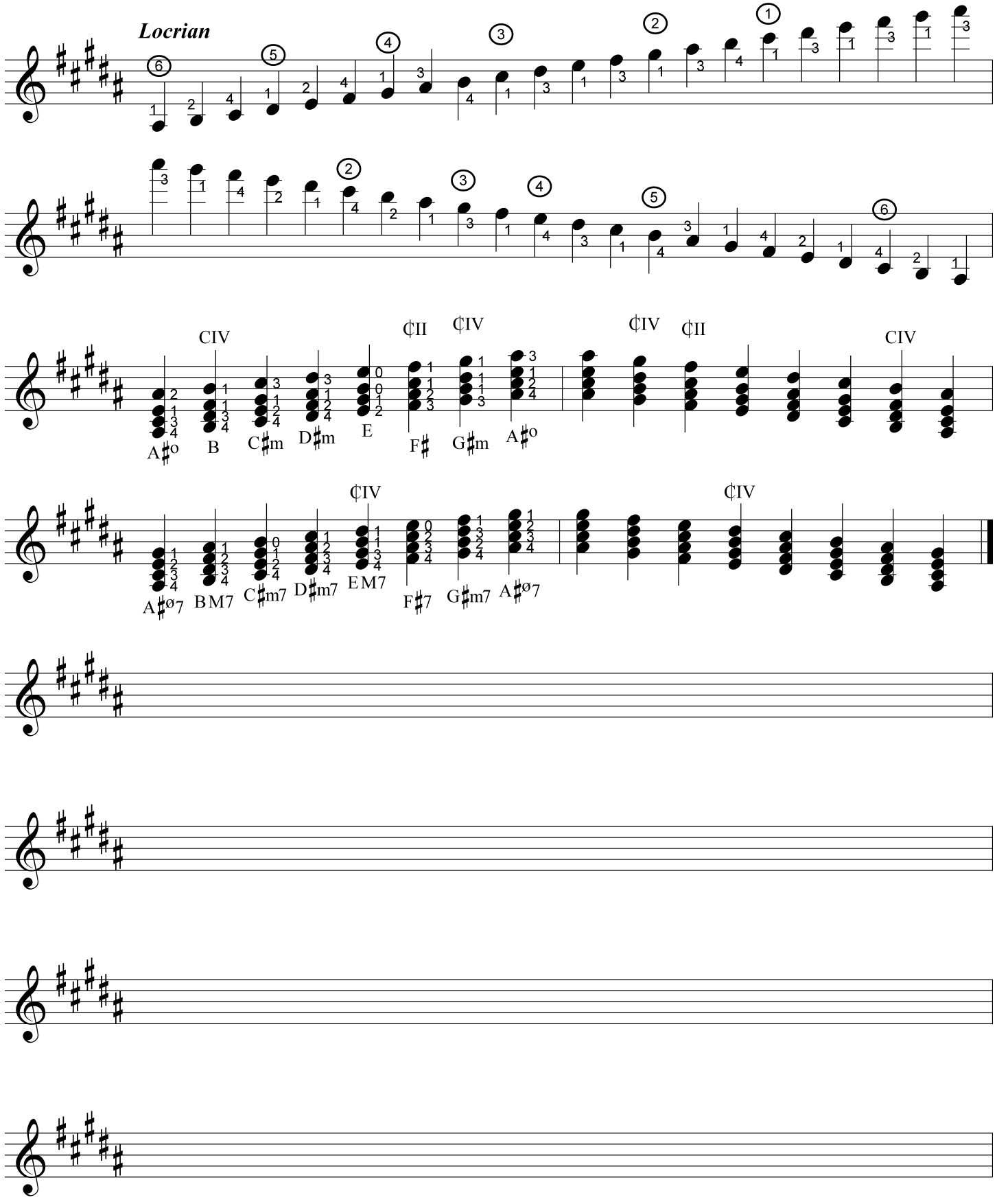
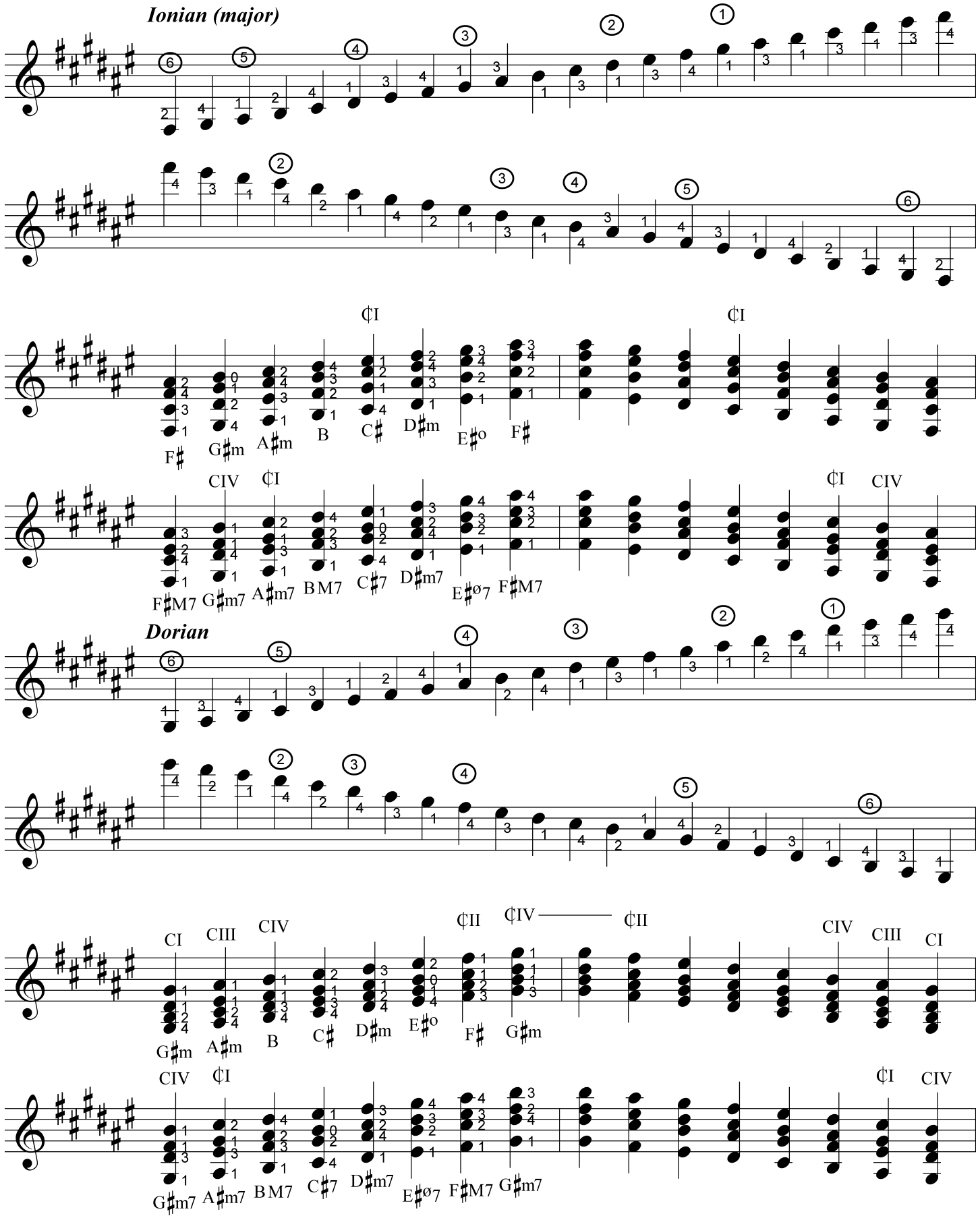

Phrygian
D♯m
E
F♯
G♯m
A♯o
B
C♯m
D♯m
♭II
♭IV
♭VII
♭IX
♭XI
♭IX
♭VII
♭IV
♭II
D♯m7
EM7
F♯7
G♯m7
A♯ø7
BM7
C♯m7
D♯m7
♭IV
Lydian
E
F♯
G♯m
A♯o
B
C♯m
D♯m
E
EM7
F♯7
G♯m7
A♯ø7
BM7
C♯m7
D♯m7
EM7
CII
CIV
CIV
CII


Mixolydian
F♯ G♯m A♯o B C♯m D♯m E F♯
CII CIV A♯ø7 BM7 C♯m7 D♯m7 EM7 F♯7 CIV CII
F♯7 G♯m7
Aeolian (natural minor)
CI CIV ¢II ¢IV ¢II CIV CI
G♯m A♯o B C♯m D♯m E F♯ G♯m
CIV A♯ø7 BM7 C♯m7 D♯m7 EM7 F♯7 G♯m7 CIV
G♯m7


Harmonic minor
CI
G♯m
A♯o
Baug
C♯m
D♯
E
F×o
G♯m
¢IV
CI
G♯mM7
A♯ø7
BM7+
C♯m7
D♯7
EM7
F×o7
G♯mM7
Melodic minor
CI
CIII
G♯m
A♯m
Baug
C♯
D♯
E♯o
F×o
G♯m
¢IV
G♯m
¢II
F♯
E
CIV
D♯m
C♯m
B
CI
A♯o
G♯m
¢I
G♯mM7
A♯m7
BM7+
C♯7
D♯7
E♯ø7
F×ø7
G♯mM7
G♯m7
F♯7
EM7
CIV
D♯m7
C♯m7
BM7
A♯ø7
G♯m7


Locrian
CIV
¢II
¢IV
A♯o
B
C♯m
D♯m
E
F♯
G♯m
A♯o
A♯ø7
BM7
C♯m7
D♯m7
EM7
F♯7
G♯m7
A♯ø7

## Modal and Minor Scales (six sharps)



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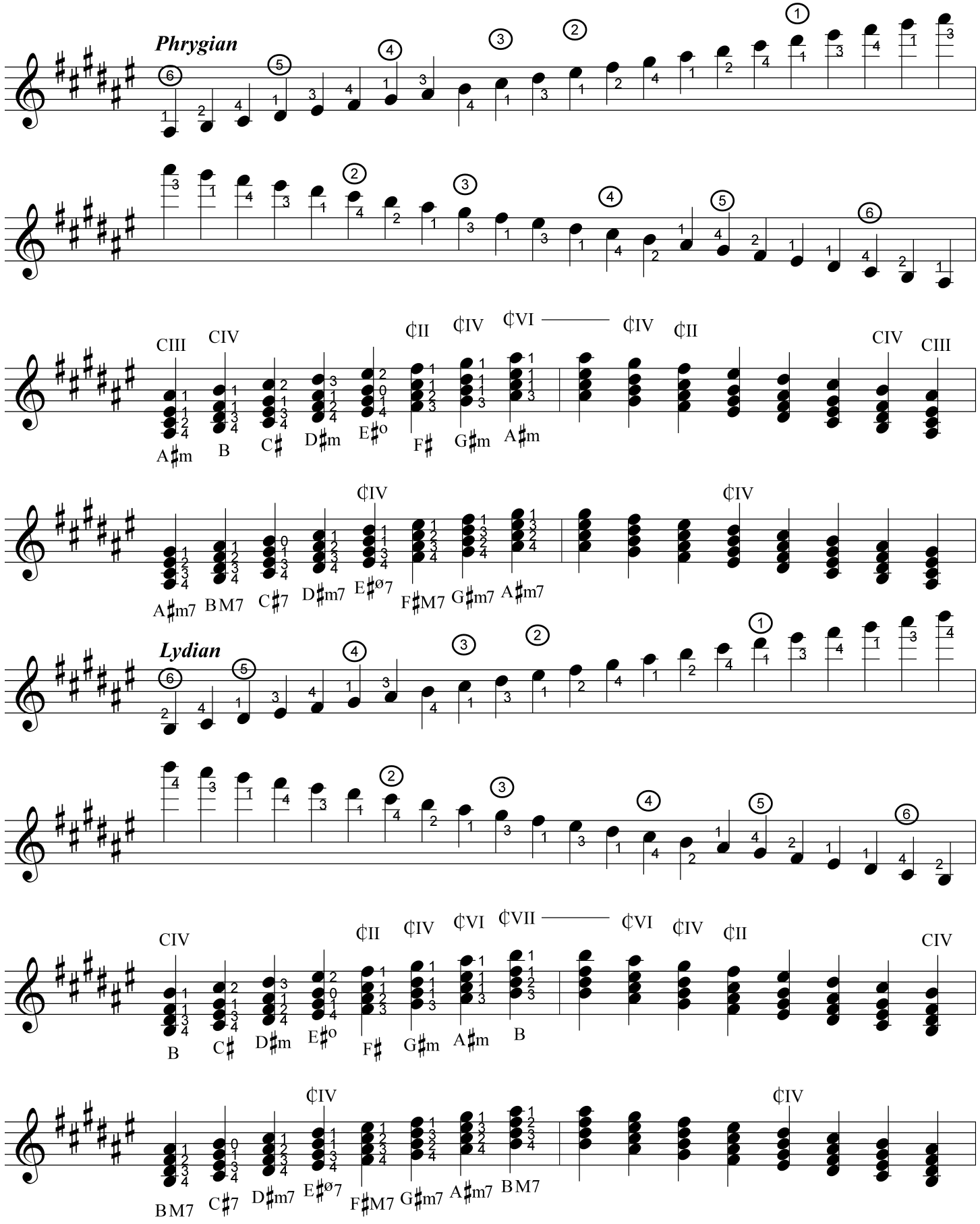
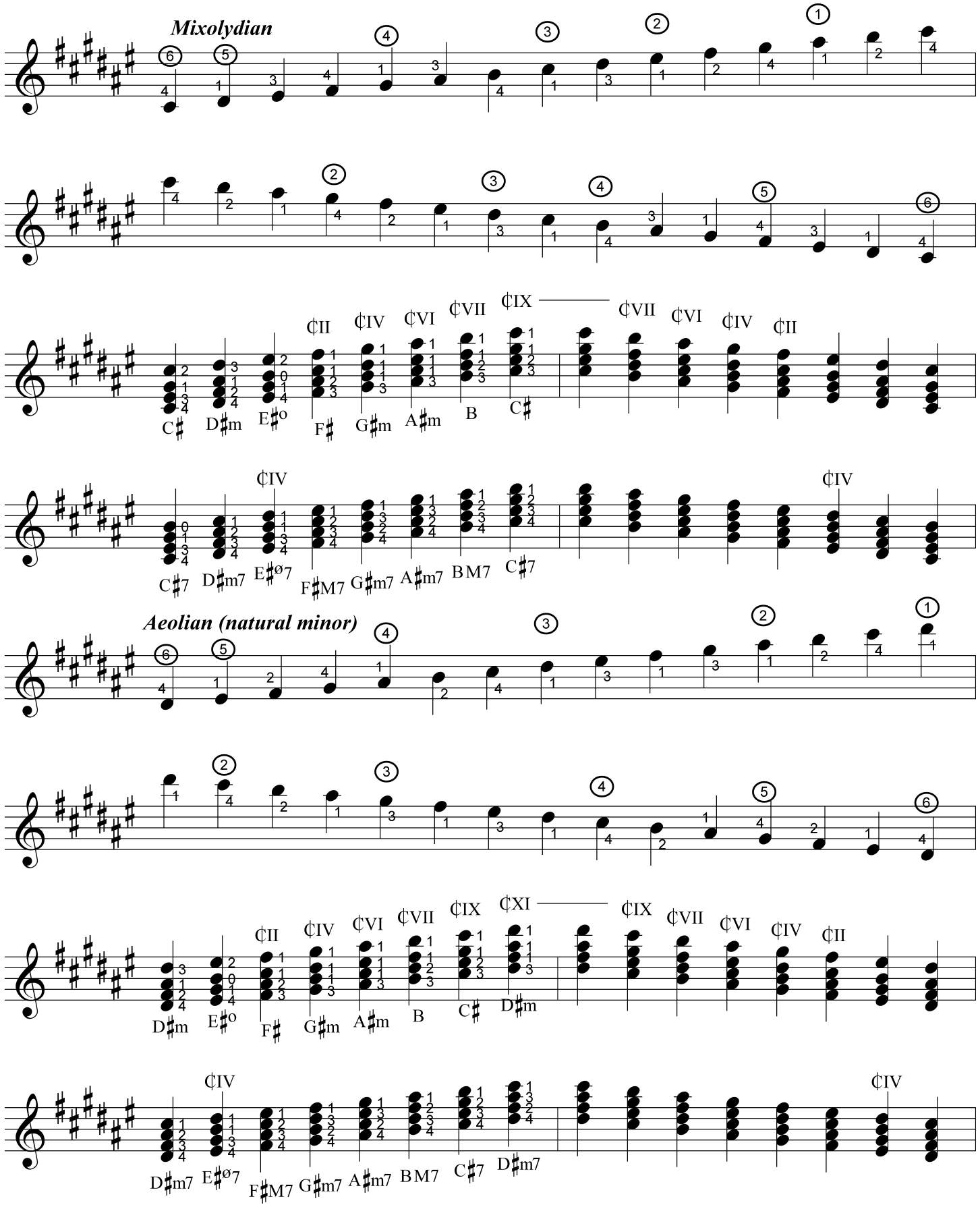
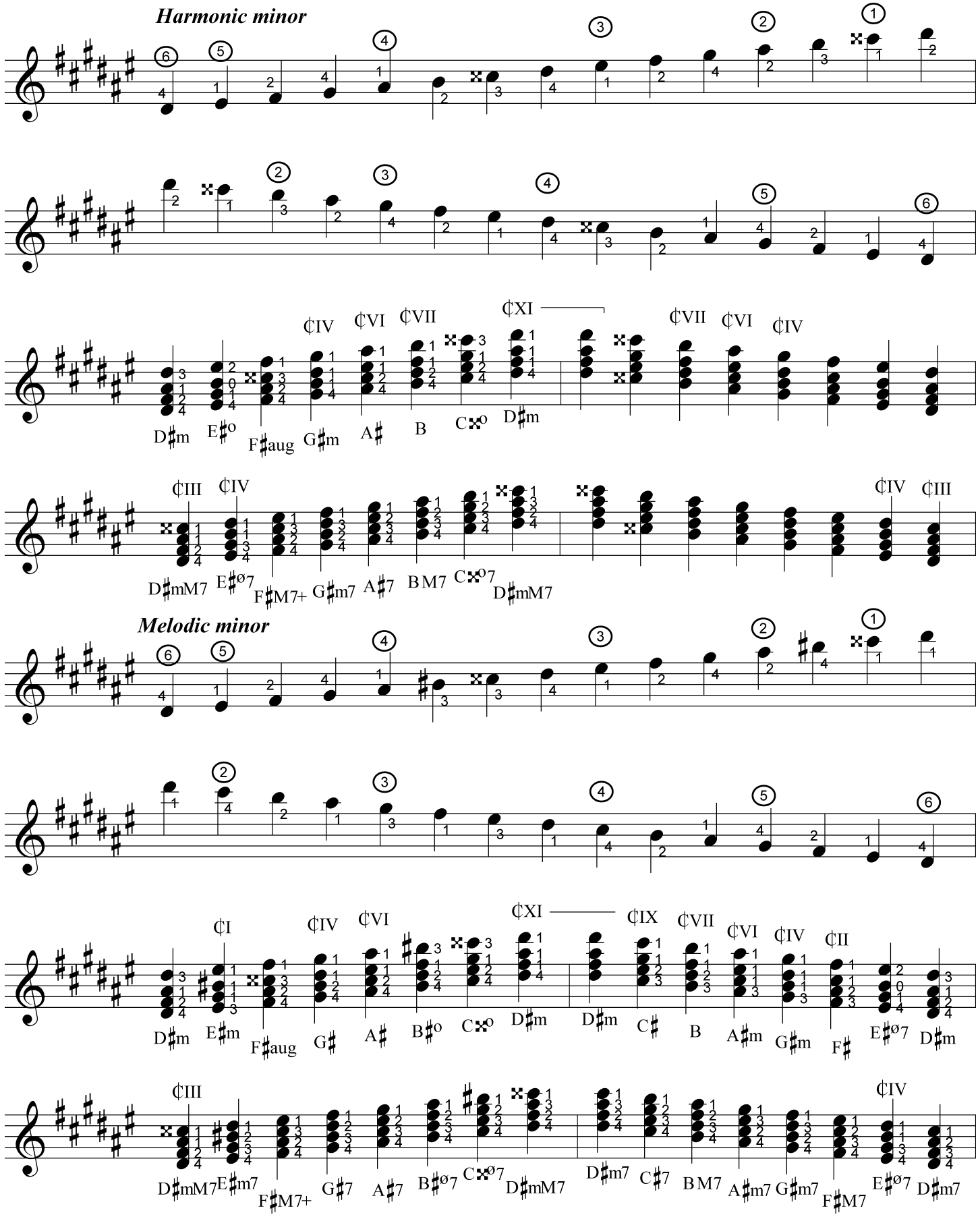
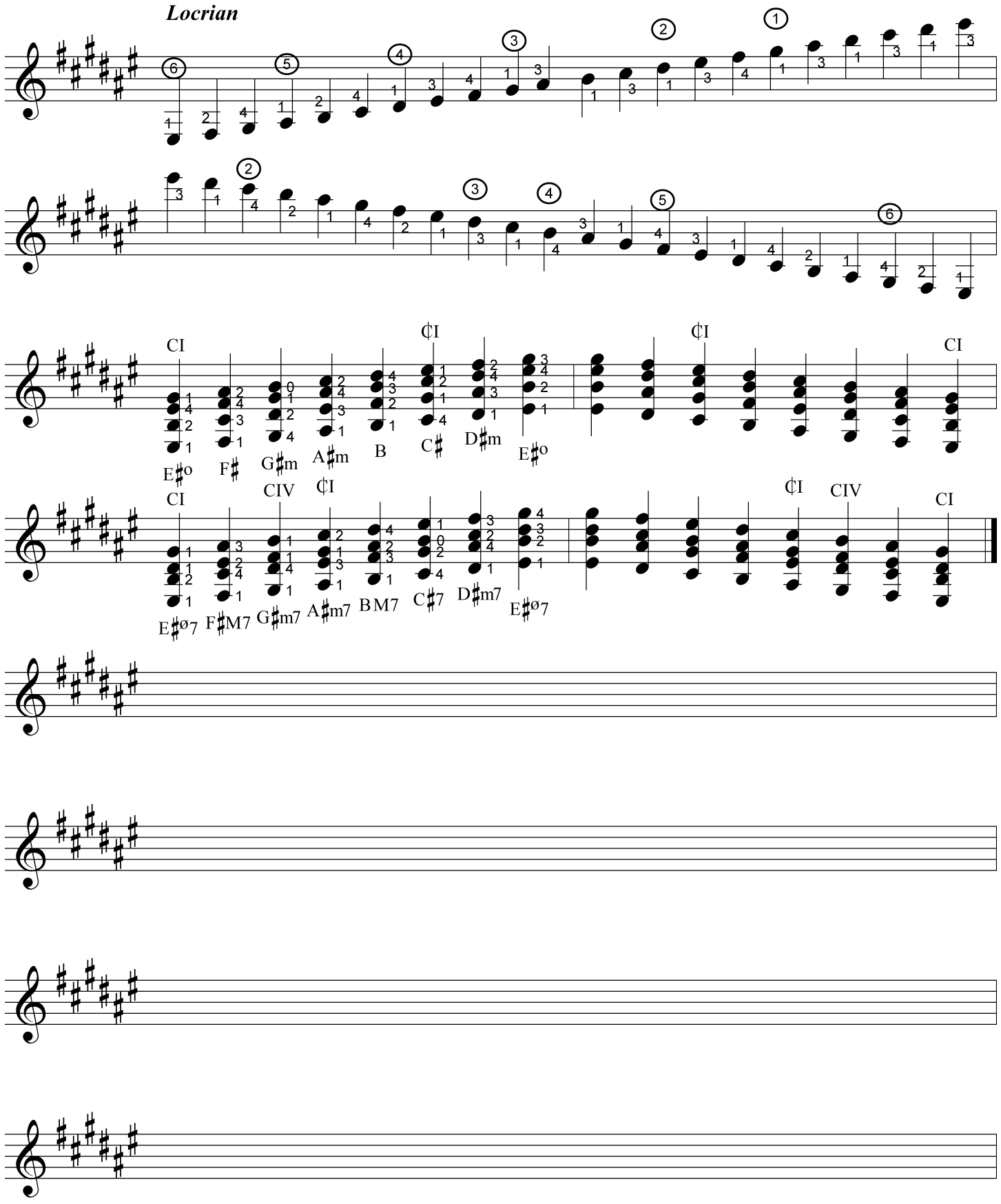
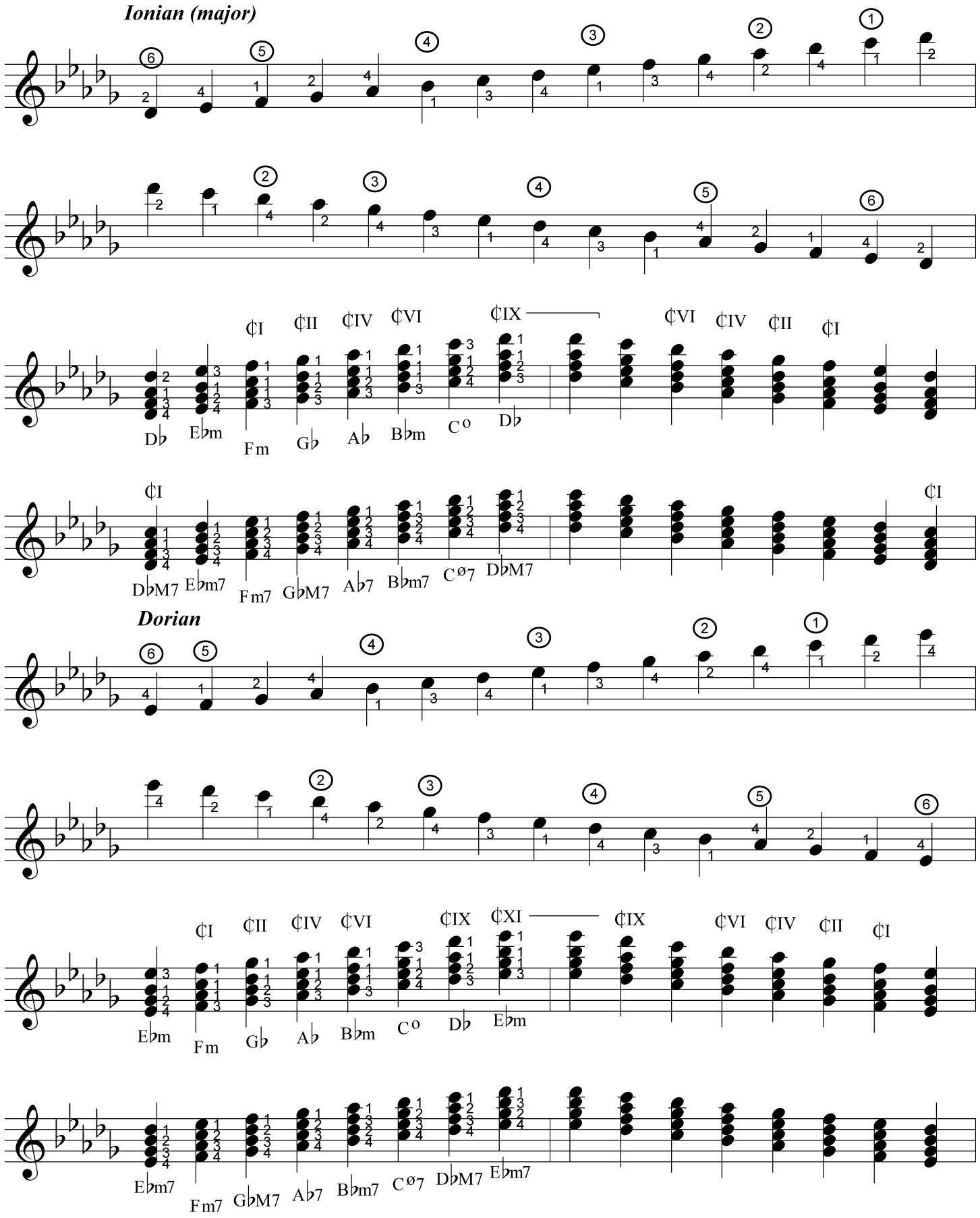

Phrygian
CIII CIV ¢II ¢IV ¢VI ¢IV ¢II CIV CIII
A♯m B C♯ D♯m E♯o F♯ G♯m A♯m
¢IV ¢IV
A♯m7 BM7 C♯7 D♯m7 E♯ø7 F♯M7 G♯m7 A♯m7
Lydian
CIV ¢II ¢IV ¢VI ¢VII ¢VI ¢IV ¢II CIV
B C♯ D♯m E♯o F♯ G♯m A♯m B
¢IV ¢IV
BM7 C♯7 D♯m7 E♯ø7 F♯M7 G♯m7 A♯m7 BM7


Mixolydian
C♯ D♯m E♯o F♯ G♯m A♯m B C♯
C♯7 D♯m7 E♯ø7 F♯M7 G♯m7 A♯m7 BM7 C♯7
Aeolian (natural minor)
D♯m E♯o F♯ G♯m A♯m B C♯ D♯m
D♯m7 E♯ø7 F♯M7 G♯m7 A♯m7 BM7 C♯7 D♯m7


Harmonic minor
D♯m E♯o F♯aug G♯m A♯ B C×o D♯m
¢IV ¢VI ¢VII ¢XI
¢VII ¢VI ¢IV
¢III ¢IV
D♯mM7 E♯ø7 F♯M7+ G♯m7 A♯7 BM7 C×ø7 D♯mM7
¢IV ¢III
Melodic minor
D♯m E♯m F♯aug G♯ A♯ B♯o C×o D♯m
¢I ¢IV ¢VI ¢XI
D♯m C♯ B A♯m G♯m F♯ E♯ø7 D♯m
¢IX ¢VII ¢VI ¢IV ¢II
D♯mM7 E♯m7 F♯M7+ G♯7 A♯7 B♯ø7 C×ø7 D♯mM7
¢III
D♯m7 C♯7 BM7 A♯m7 G♯m7 F♯M7 E♯ø7 D♯m7
¢IV


Locrian
CI
E♯o
F♯
G♯m
A♯m
B
♢I
C♯
D♯m
E♯o
CI
♢I
CI
CI
CIV
♢I
E♯ø7
F♯M7
G♯m7
A♯m7
BM7
C♯7
D♯m7
E♯ø7
♢I
CIV
CI

## Modal and Minor Scales (five flats)



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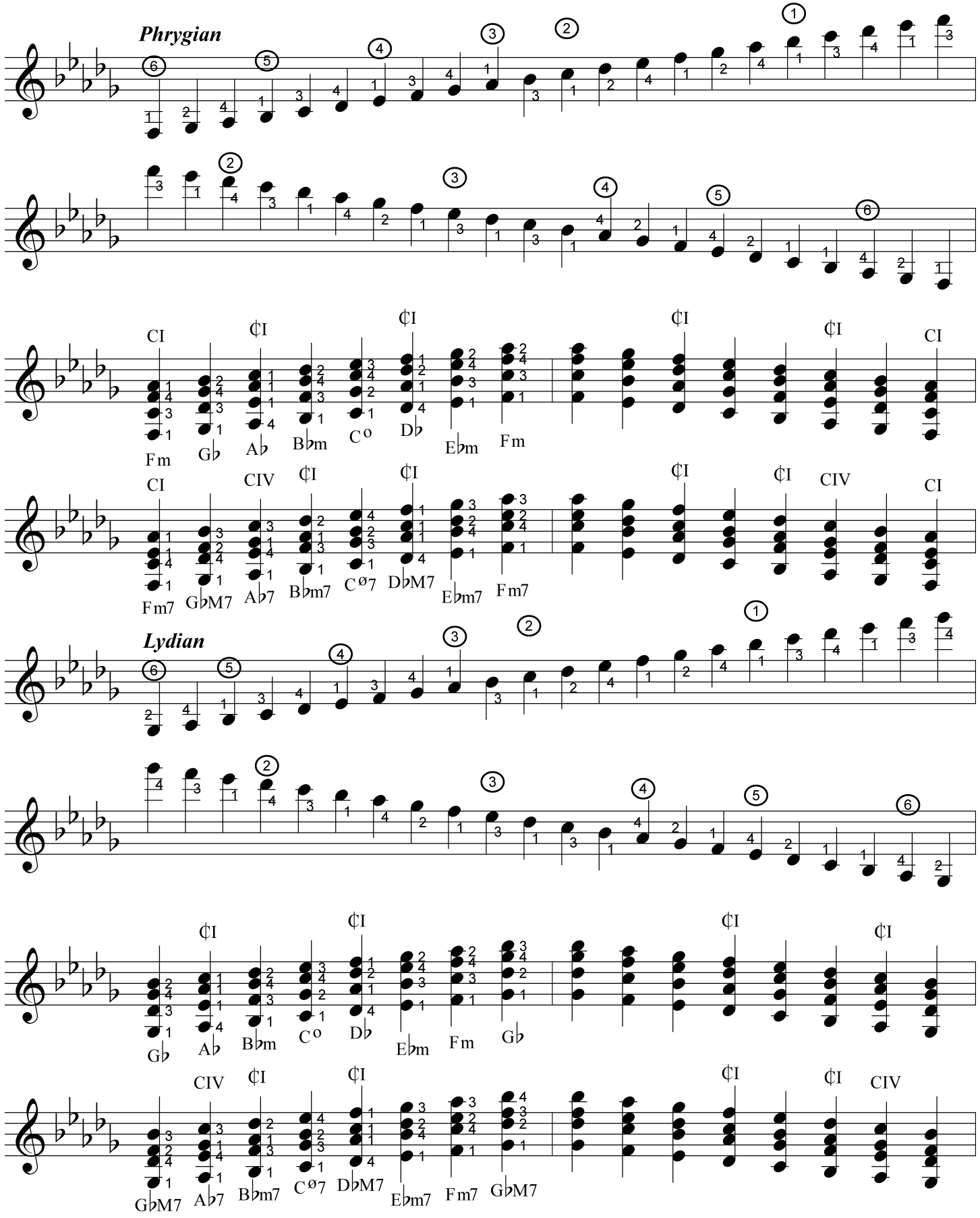
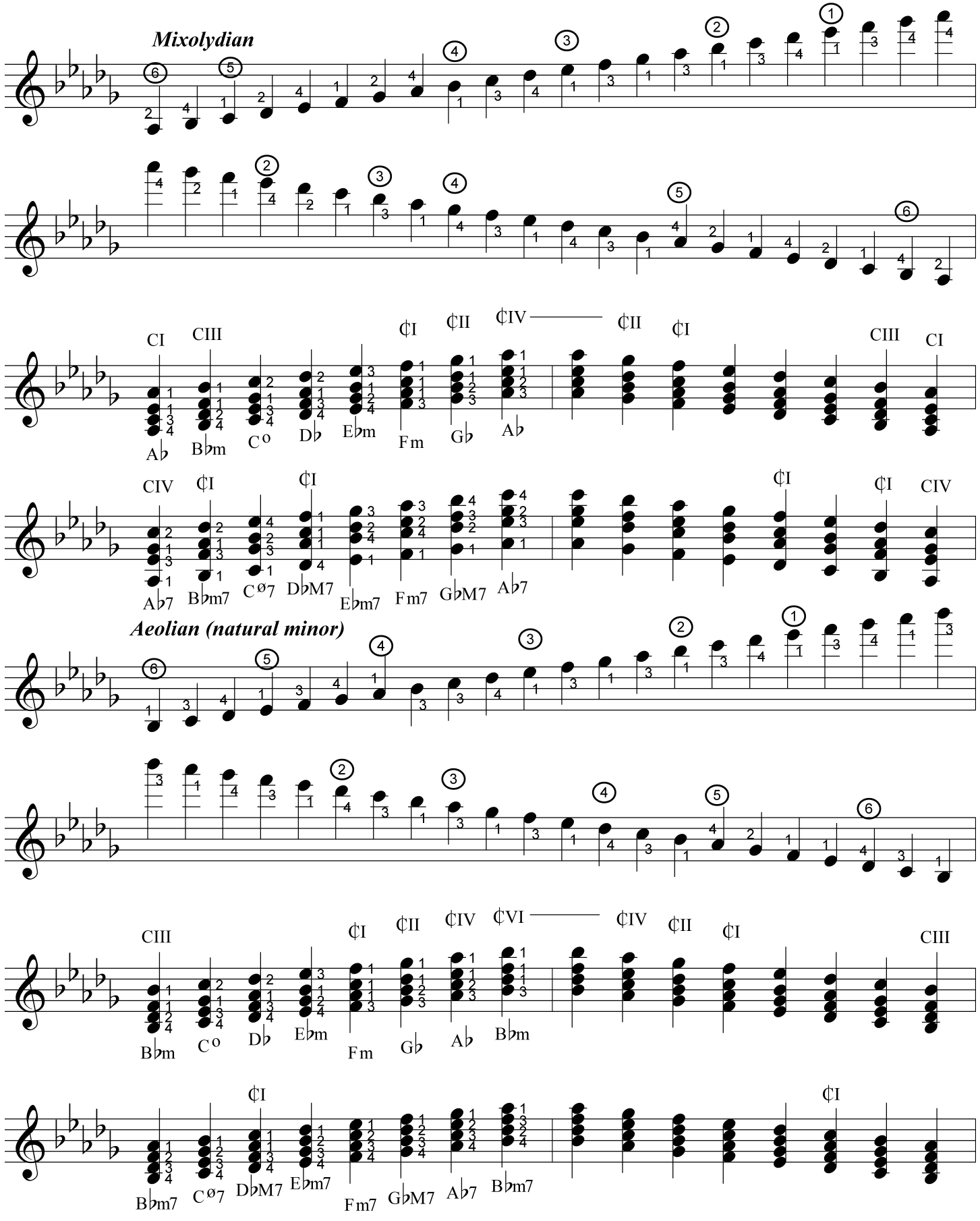
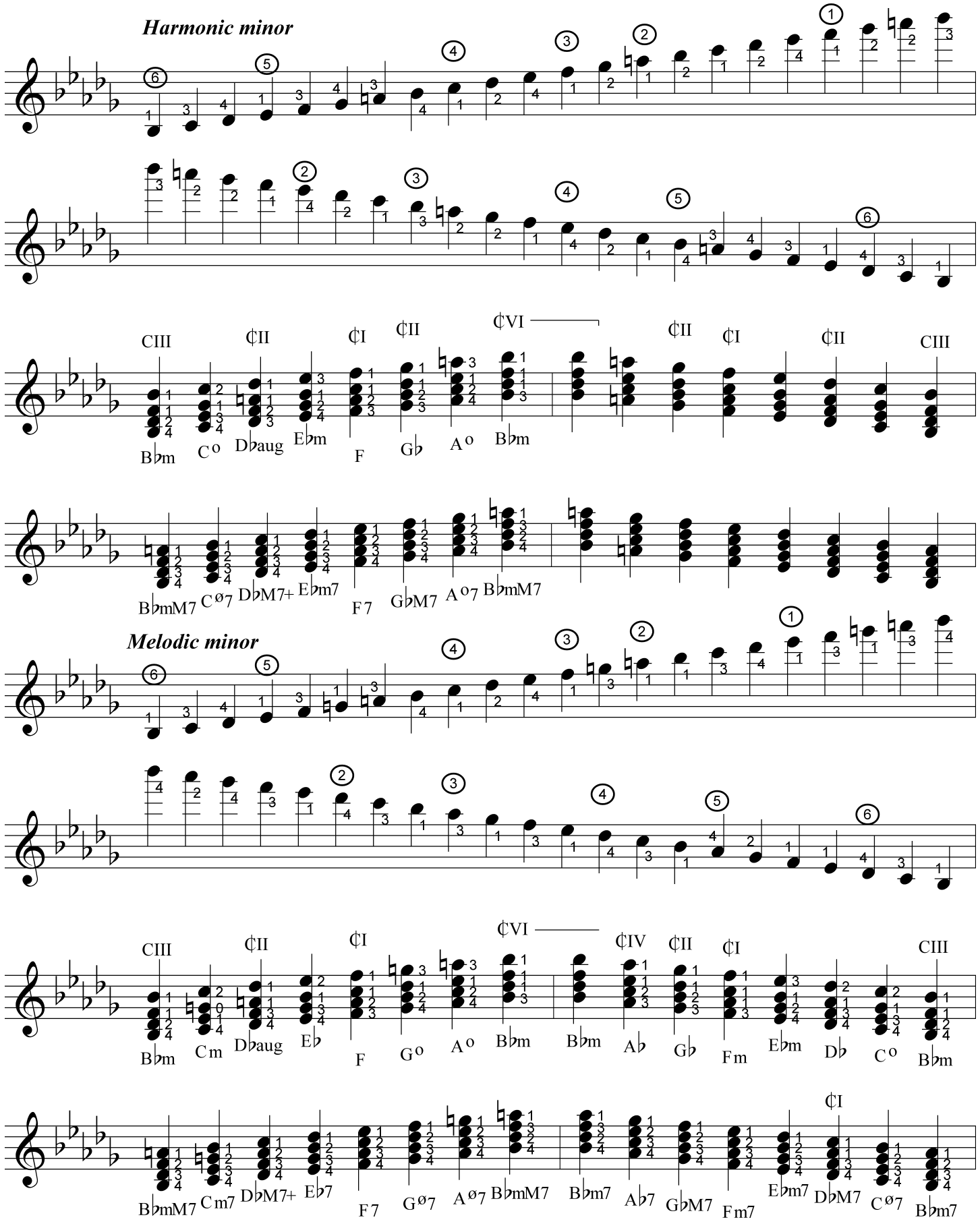
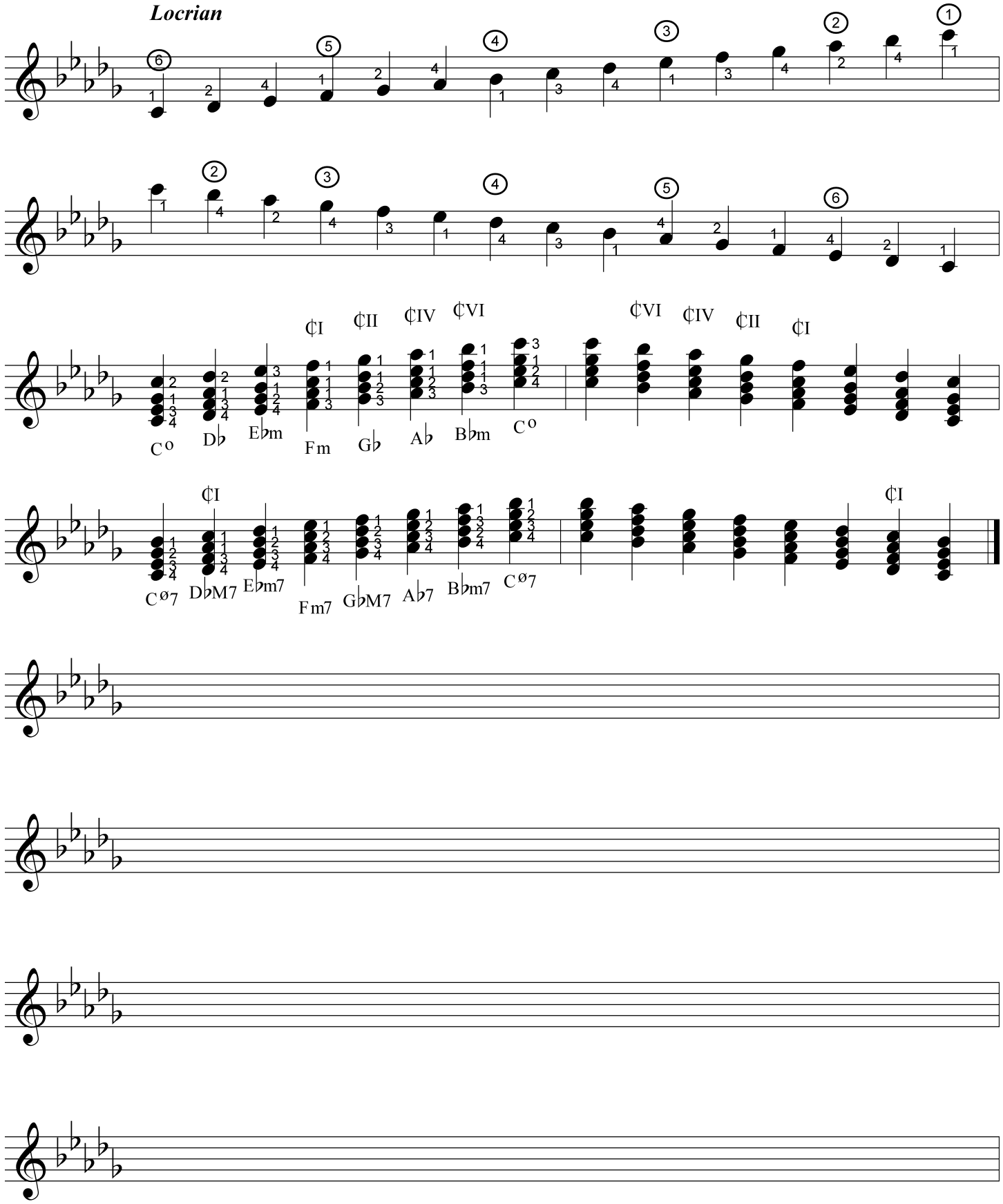
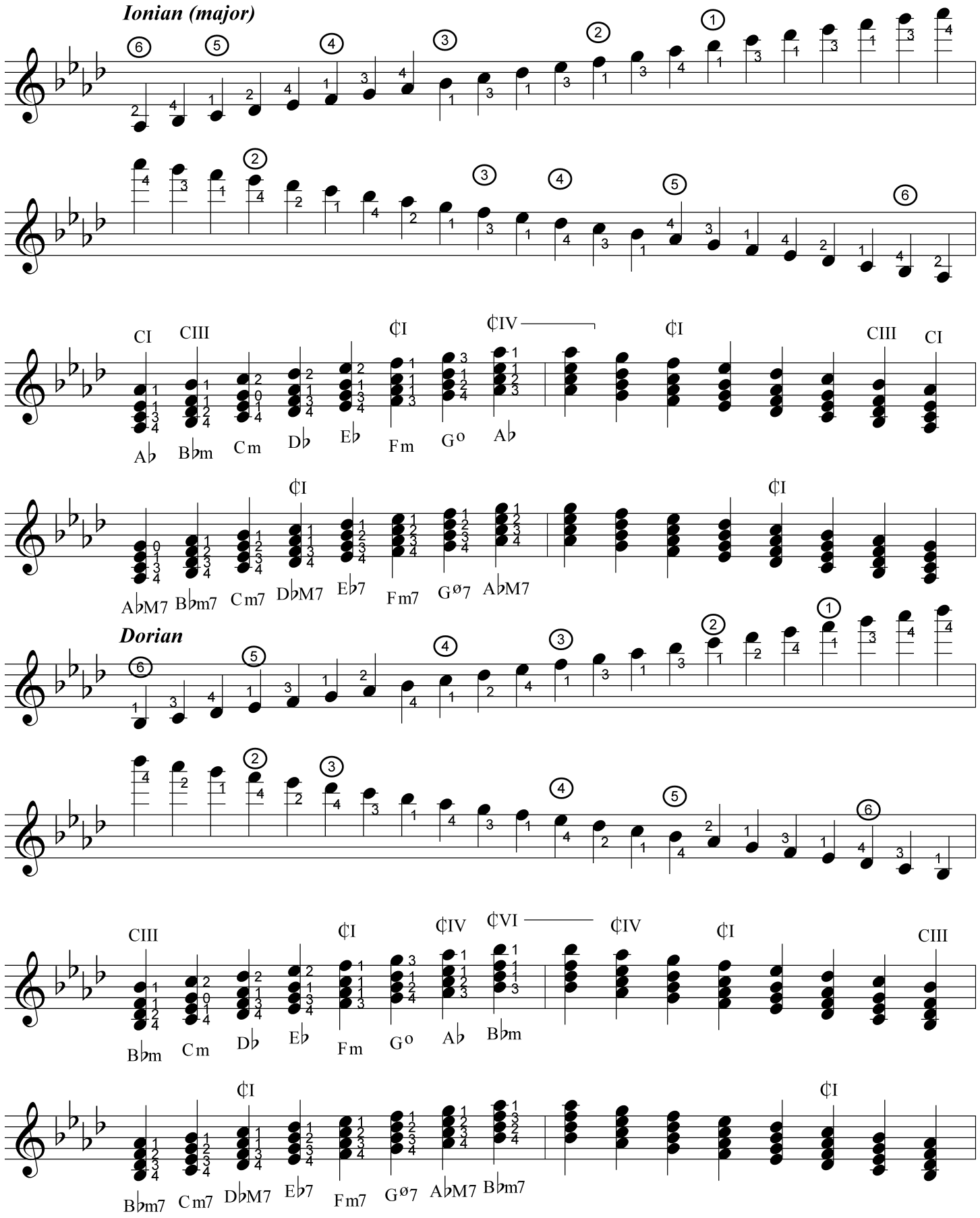

Phrygian
CI
¢I
¢I
¢I
¢I
CI
Fm
G♭
A♭
B♭m
C°
D♭
E♭m
Fm
CI
CIV
¢I
¢I
¢I
¢I
CIV
CI
Fm7
G♭M7
A♭7
B♭m7
C°7
D♭M7
E♭m7
Fm7
Lydian
¢I
¢I
¢I
¢I
G♭
A♭
B♭m
C°
D♭
E♭m
Fm
G♭
CIV
¢I
¢I
¢I
¢I
CIV
G♭M7
A♭7
B♭m7
C°7
D♭M7
E♭m7
Fm7
G♭M7


Mixolydian
CI CIII ¢I ¢II ¢IV ¢II ¢I CIII CI
A♭ B♭m C° D♭ E♭m Fm G♭ A♭
CIV ¢I ¢I ¢I ¢I CIV
A♭7 B♭m7 Cø7 D♭M7 E♭m7 Fm7 G♭M7 A♭7
Aeolian (natural minor)
CIII ¢I ¢II ¢IV ¢VI ¢IV ¢II ¢I CIII
B♭m C° D♭ E♭m Fm G♭ A♭ B♭m
¢I ¢I
B♭m7 Cø7 D♭M7 E♭m7 Fm7 G♭M7 A♭7 B♭m7


Harmonic minor
CIII ¢II ¢I ¢II ¢VI ¢II ¢I ¢II CIII
B♭m C o D♭aug E♭m F G♭ A o B♭m
B♭mM7 C ø7 D♭M7+ E♭m7 F 7 G♭M7 A o7 B♭mM7
Melodic minor
CIII ¢II ¢I ¢VI ¢IV ¢II ¢I CIII
B♭m Cm D♭aug E♭ F G o A o B♭m B♭m A♭ G♭ Fm E♭m D♭ C o B♭m
B♭mM7 Cm7 D♭M7+ E♭7 F 7 G ø7 A ø7 B♭mM7 B♭m7 A♭7 G♭M7 Fm7 E♭m7 D♭M7 C ø7 B♭m7 ¢I


Locrian
C o
D♭
E♭m
Fm
G♭
A♭
B♭m
C o
C ø7
D♭M7
E♭m7
Fm7
G♭M7
A♭7
B♭m7
C ø7

## Modal and Minor Scales (four flats)



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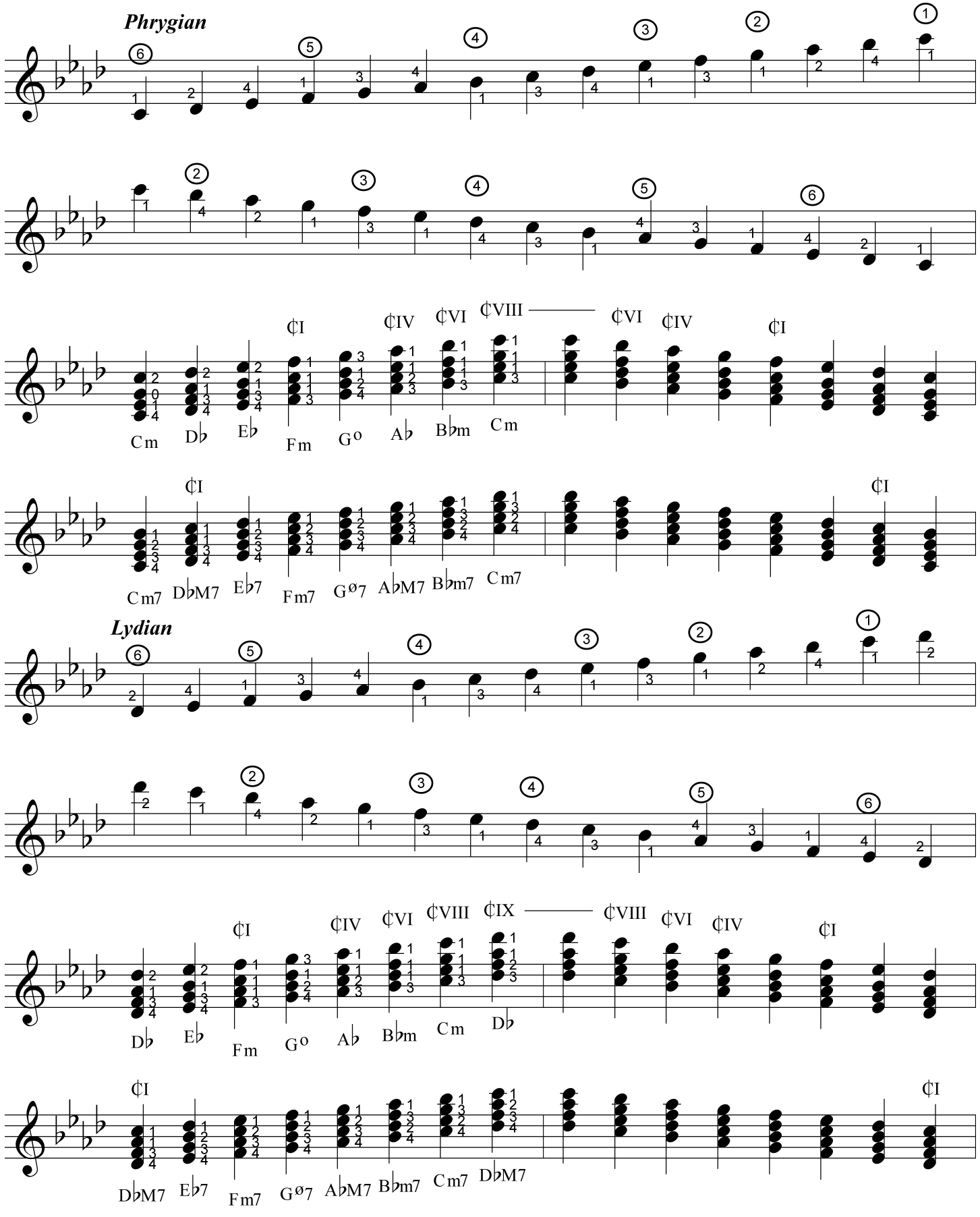
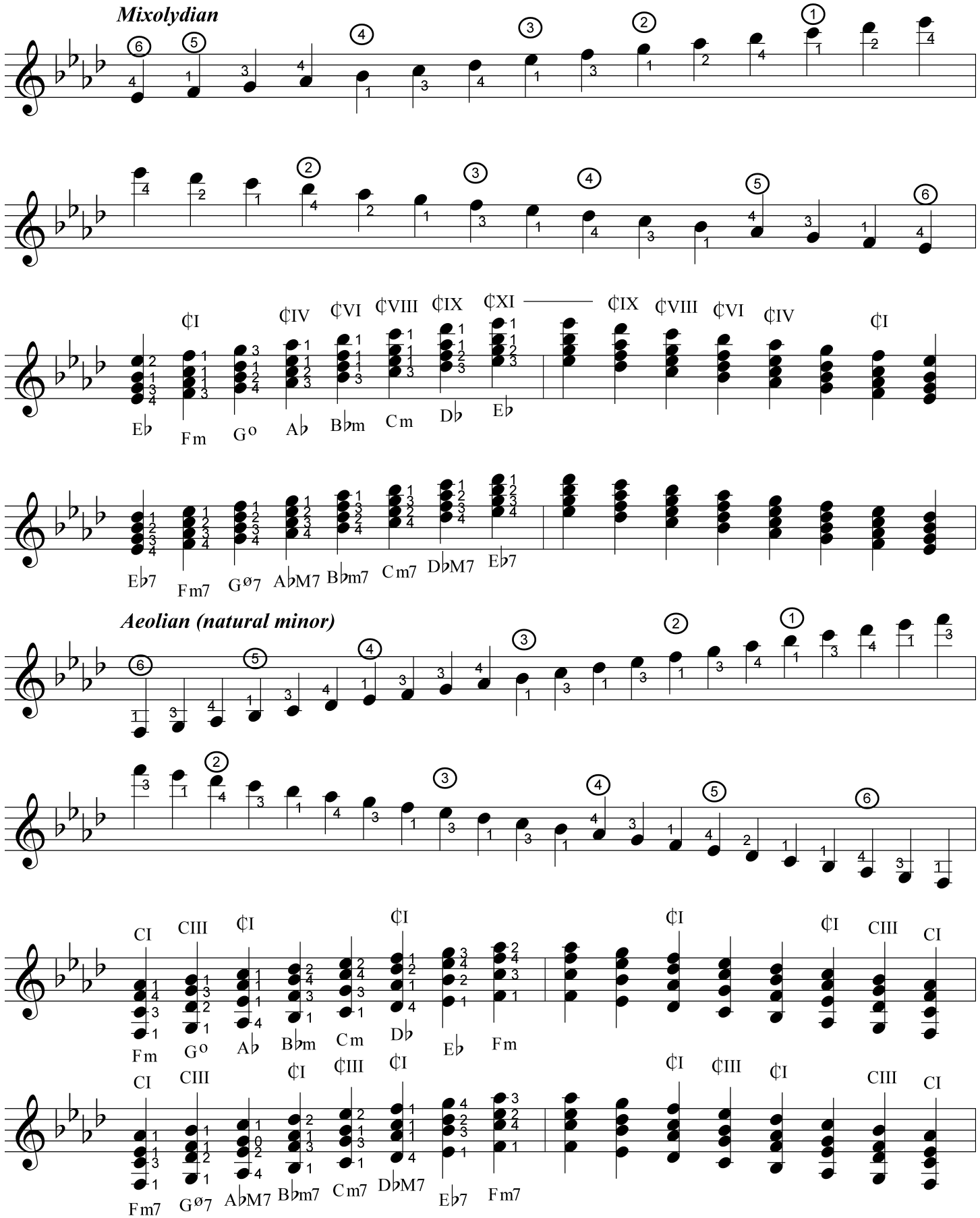
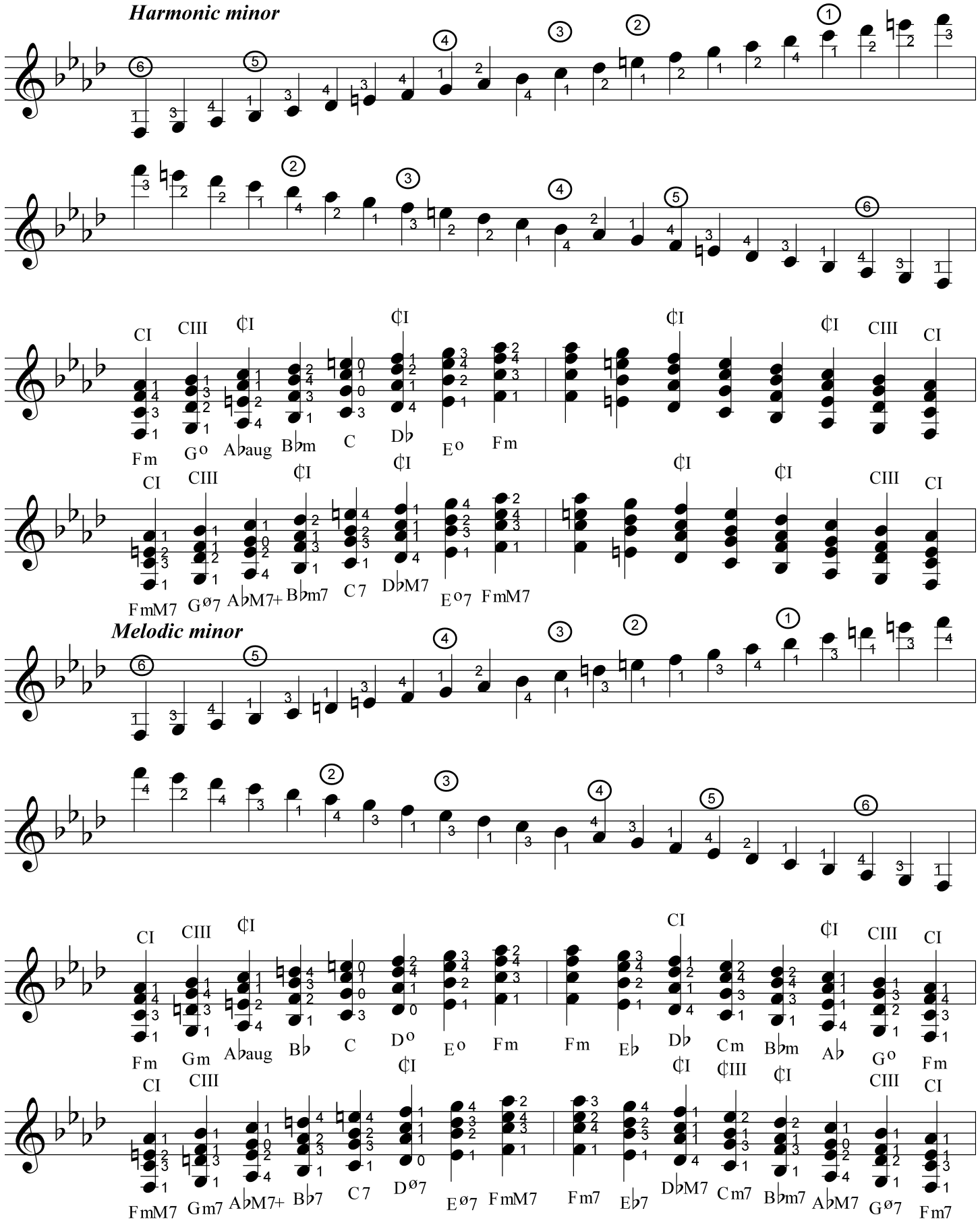
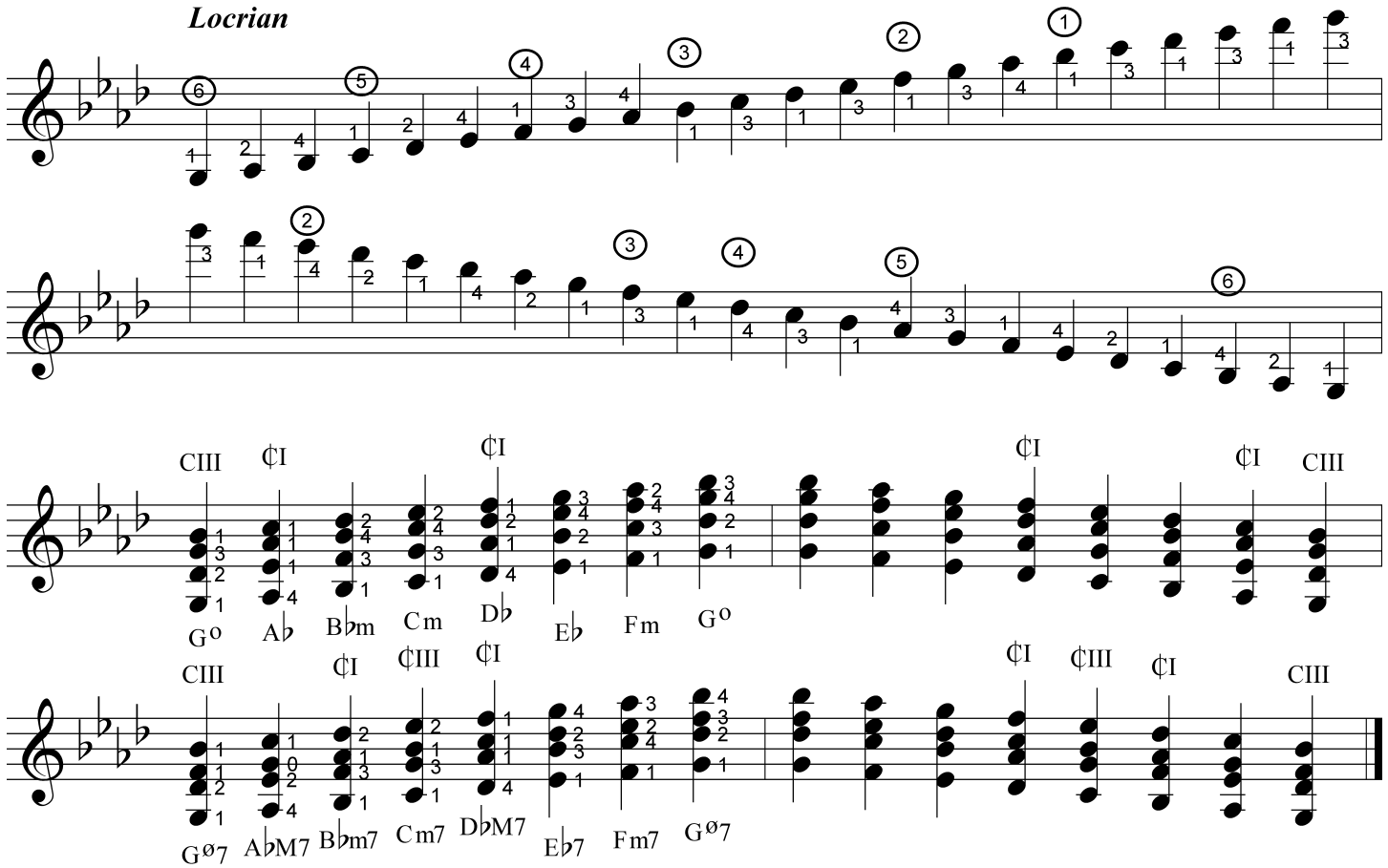
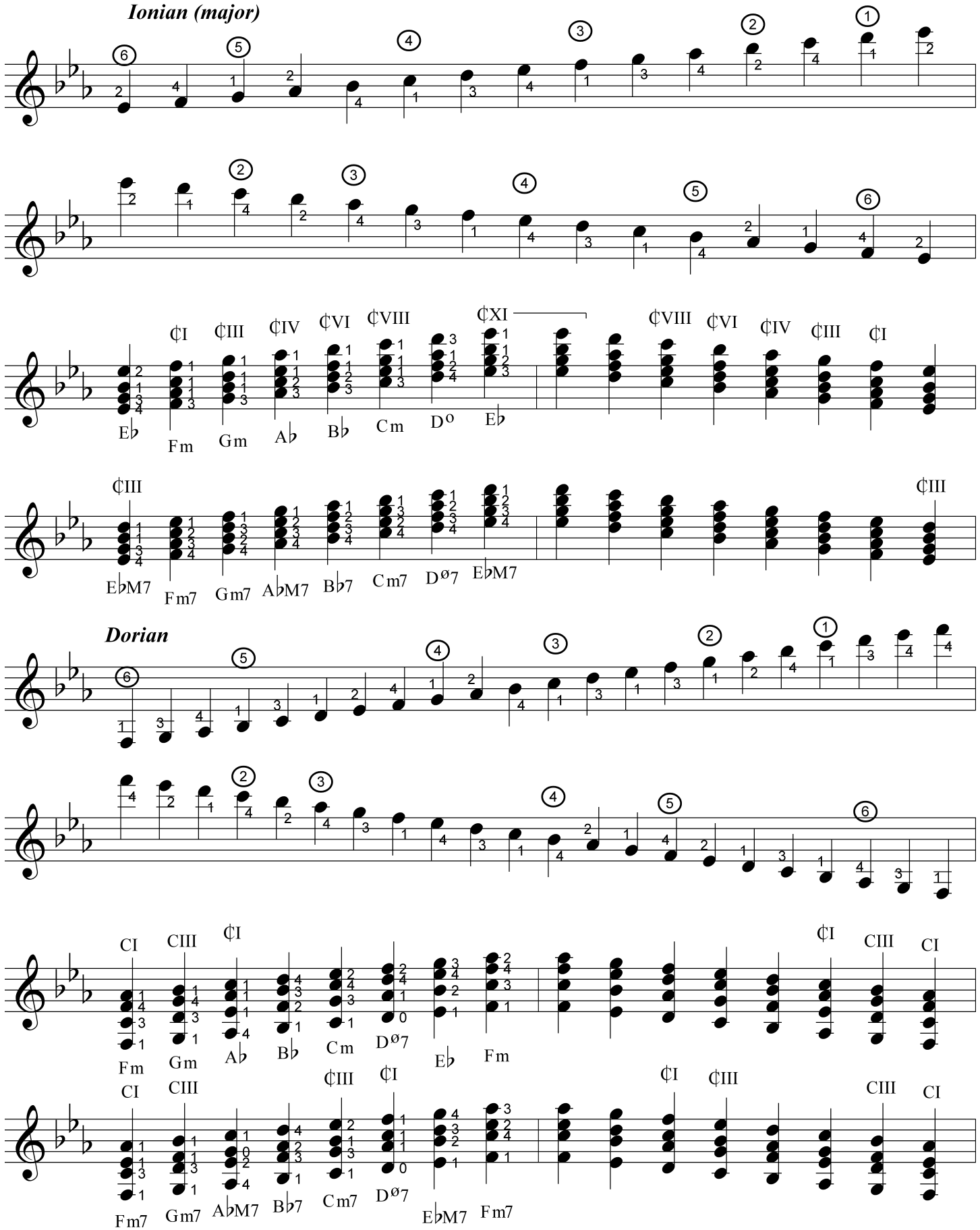

Phrygian
¢I ¢IV ¢VI ¢VIII ¢VI ¢IV ¢I
Cm D♭ E♭ Fm G° A♭ B♭m Cm
¢I ¢I
Cm7 D♭M7 E♭7 Fm7 Gø7 A♭M7 B♭m7 Cm7
Lydian
¢I ¢IV ¢VI ¢VIII ¢IX ¢VIII ¢VI ¢IV ¢I
D♭ E♭ Fm G° A♭ B♭m Cm D♭
¢I ¢I
D♭M7 E♭7 Fm7 Gø7 A♭M7 B♭m7 Cm7 D♭M7


Mixolydian
¢I ¢IV ¢VI ¢VIII ¢IX ¢XI ¢IX ¢VIII ¢VI ¢IV ¢I
E♭ Fm G° A♭ B♭m Cm D♭ E♭
E♭7 Fm7 G°7 A♭M7 B♭m7 Cm7 D♭M7 E♭7
Aeolian (natural minor)
CI CIII ¢I ¢I ¢I CIII CI
Fm G° A♭ B♭m Cm D♭ E♭ Fm
CI CIII ¢I ¢III ¢I ¢I ¢III ¢I CIII CI
Fm7 G°7 A♭M7 B♭m7 Cm7 D♭M7 E♭7 Fm7


Harmonic minor
CI CIII ¢I ¢I ¢I ¢I CIII CI
Fm Go A♭aug B♭m C D♭ Eo Fm
CI CIII ¢I ¢I ¢I ¢I CIII CI
FmM7 Gø7 A♭M7+ B♭m7 C7 D♭M7 Eo7 FmM7
Melodic minor
CI CIII ¢I CI ¢I CIII CI
Fm Gm A♭aug B♭ C Do Eo Fm Fm E♭ D♭ Cm B♭m A♭ Go Fm
CI CIII ¢I ¢I ¢III ¢I CIII CI
FmM7 Gm7 A♭M7+ B♭7 C7 Dø7 Eø7 FmM7 Fm7 E♭7 D♭M7 Cm7 B♭m7 A♭M7 Gø7 Fm7


Locrian
CIII ¢I ¢I ¢I ¢I CIII
Go Ab Bbm Cm Db Eb Fm Go
CIII ¢I ¢III ¢I ¢I ¢III ¢I CIII
Gø7 AbM7 Bbm7 Cm7 DbM7 Eb7 Fm7 Gø7

## Modal and Minor Scales (three flats)



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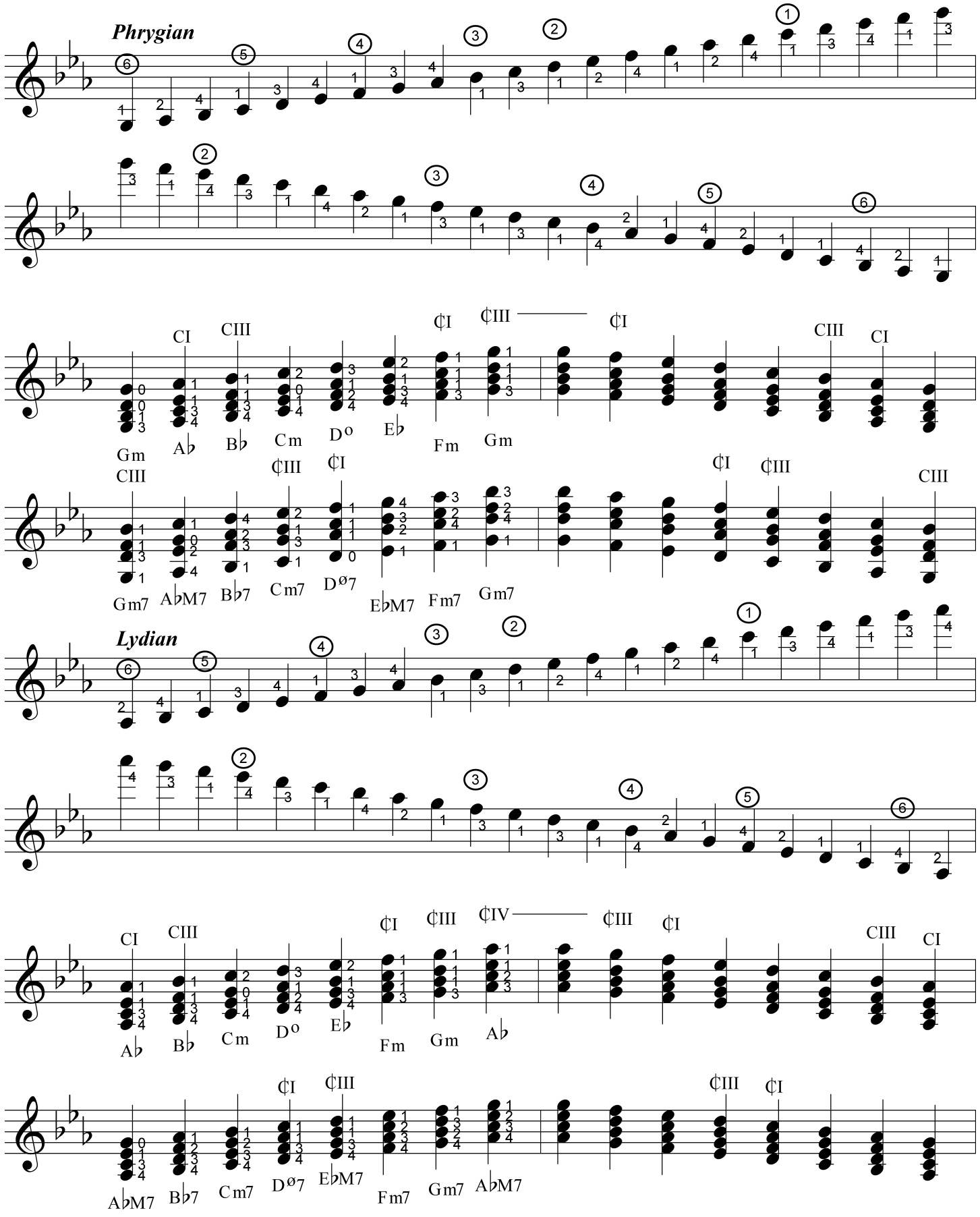
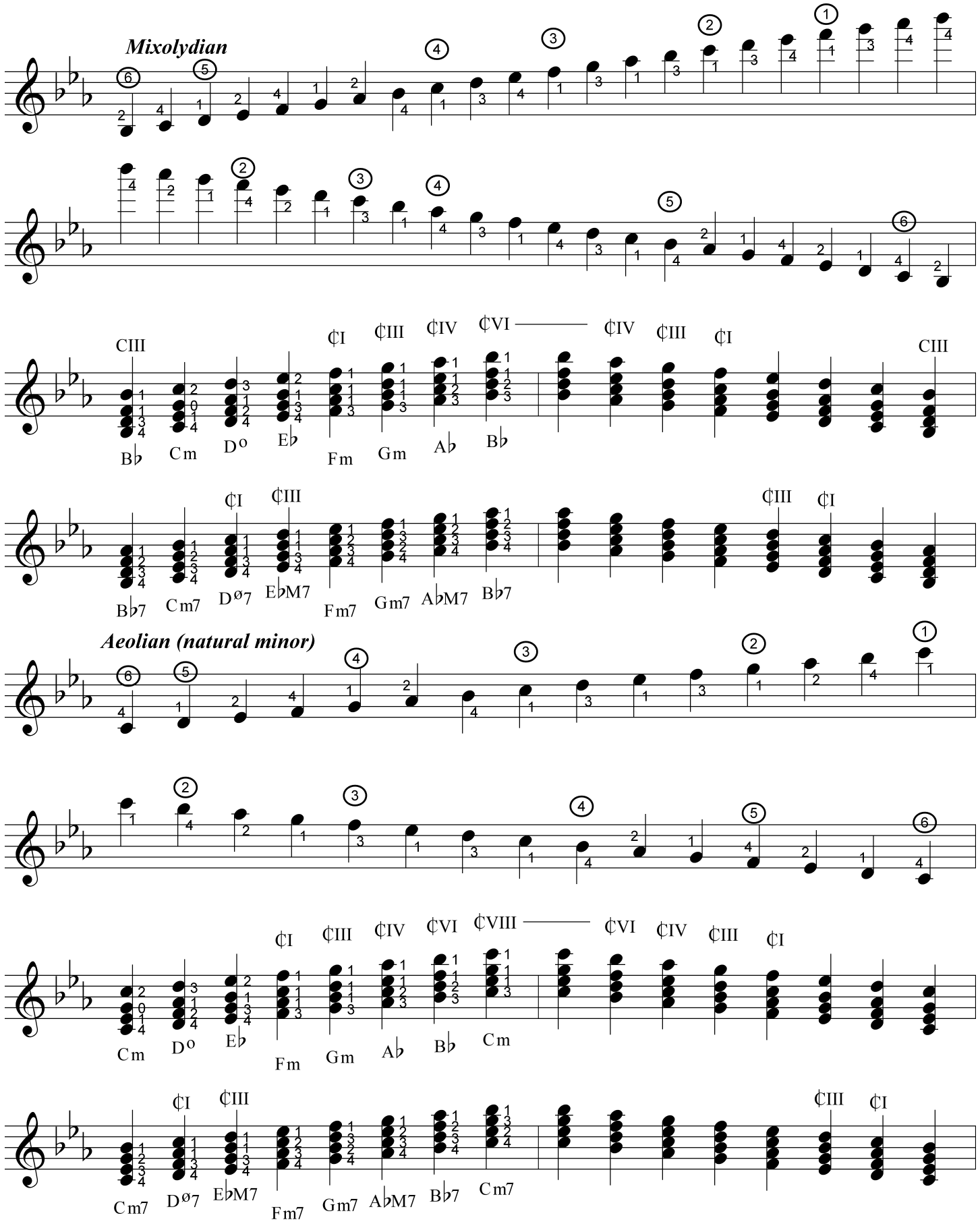
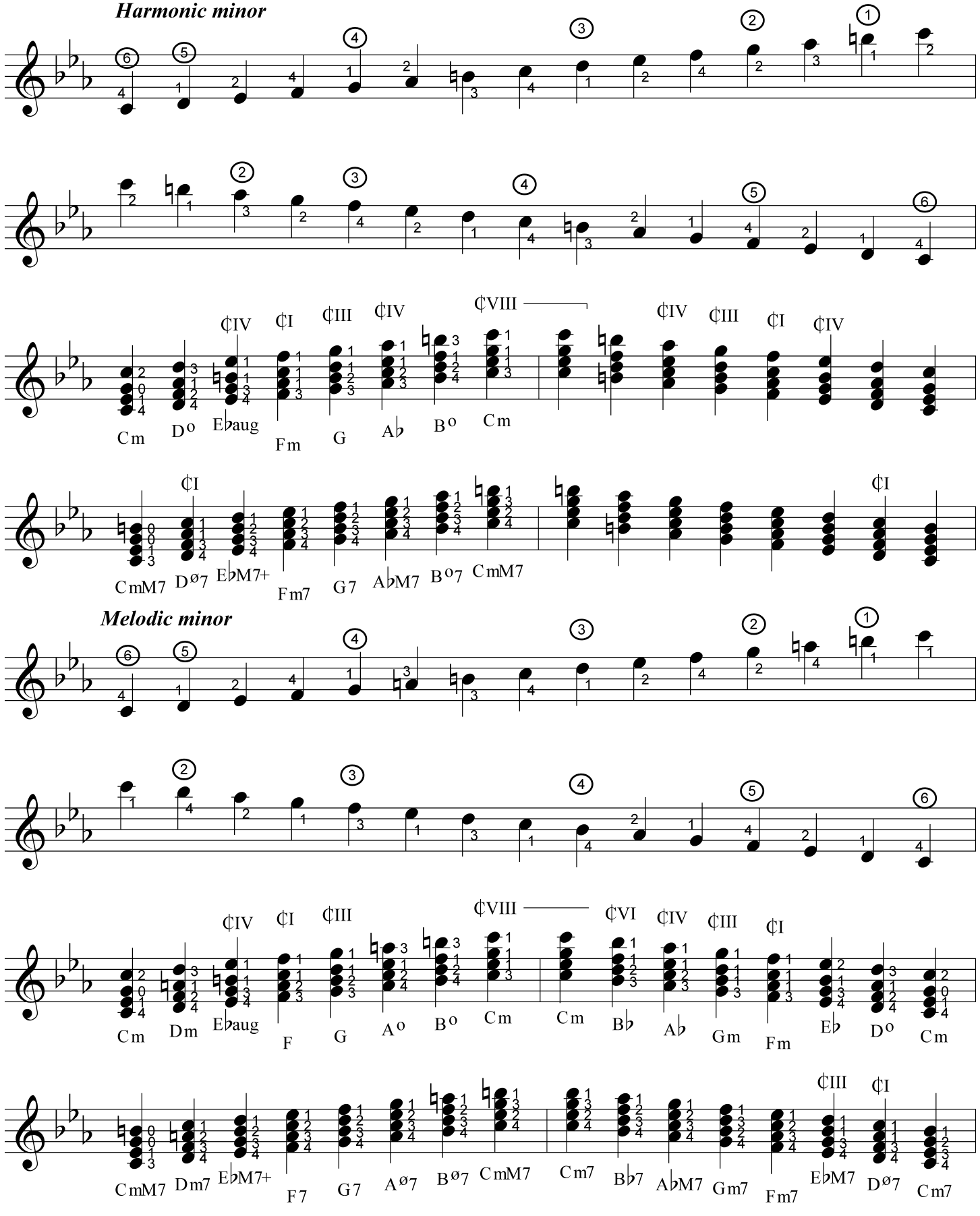
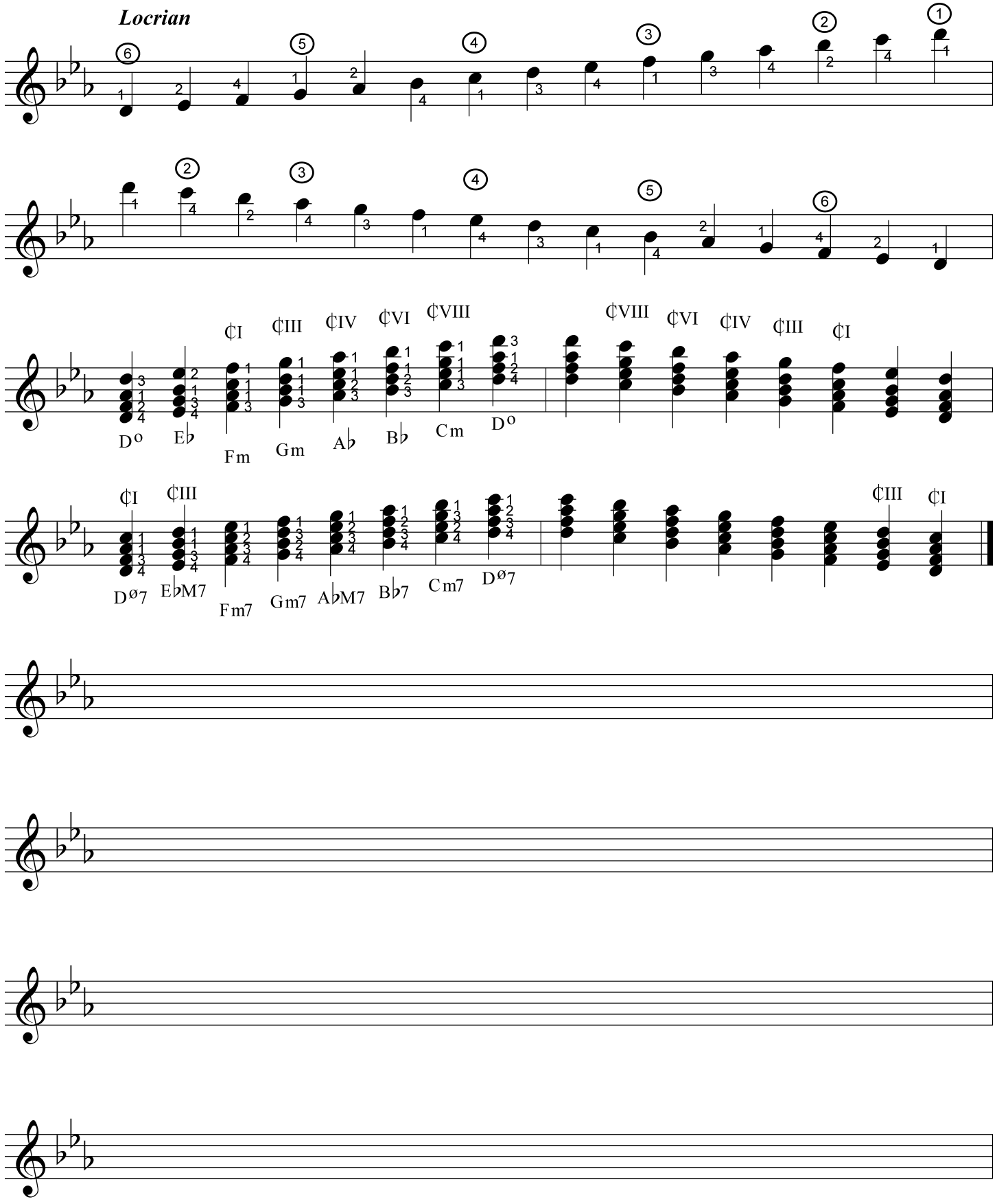

Phrygian
CI
CIII
¢I
¢III
¢I
CIII
CI
Gm
A♭
B♭
Cm
D°
E♭
Fm
Gm
CIII
¢III
¢I
¢I
¢III
CIII
Gm7
A♭M7
B♭7
Cm7
Dø7
E♭M7
Fm7
Gm7
Lydian
CI
CIII
¢I
¢III
¢IV
¢III
¢I
CIII
CI
A♭
B♭
Cm
D°
E♭
Fm
Gm
A♭
¢I
¢III
¢III
¢I
A♭M7
B♭7
Cm7
Dø7
E♭M7
Fm7
Gm7
A♭M7


Mixolydian
CIII
¢I
¢III
¢IV
¢VI
¢IV
¢III
¢I
CIII
B♭ Cm D° E♭ Fm Gm A♭ B♭
¢I
¢III
¢III
¢I
B♭7 Cm7 Dø7 E♭M7 Fm7 Gm7 A♭M7 B♭7
Aeolian (natural minor)
¢I
¢III
¢IV
¢VI
¢VIII
¢VI
¢IV
¢III
¢I
Cm D° E♭ Fm Gm A♭ B♭ Cm
¢I
¢III
¢III
¢I
Cm7 Dø7 E♭M7 Fm7 Gm7 A♭M7 B♭7 Cm7

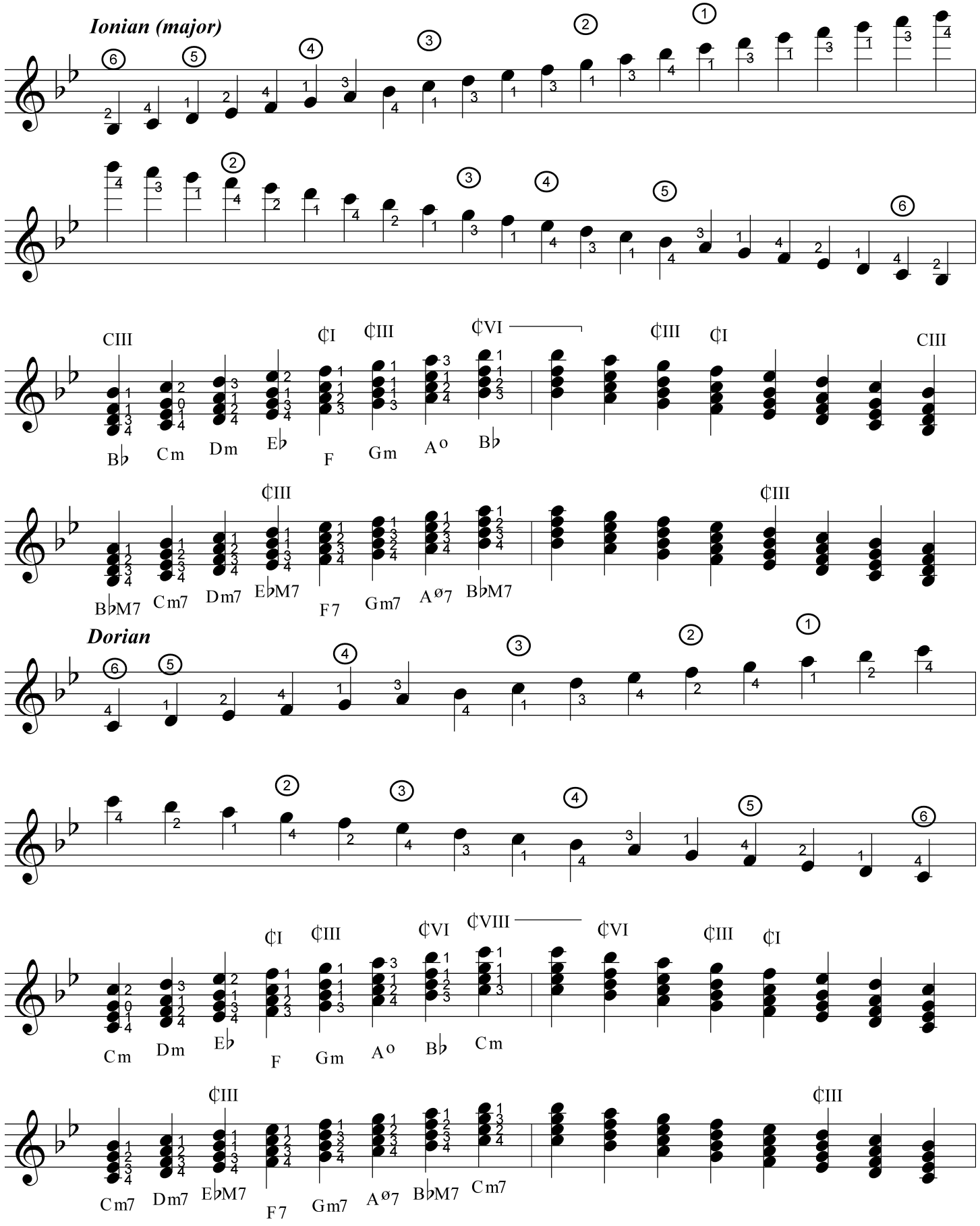
***Harmonic minor***




***Melodic minor***


Locrian
6 5 4 3 2 1
1 2 4 1 2 4 1 3 4 1 3 4 2 4 1
1 4 2 4 3 2 4 3 1 4 3 1 4 2 1 4 2 1
¢I ¢III ¢IV ¢VI ¢VIII
Do Eb Fm Gm Ab Bb Cm Do
¢VIII ¢VI ¢IV ¢III ¢I
¢I ¢III
Dø7 EbM7 Fm7 Gm7 AbM7 Bb7 Cm7 Dø7
¢III ¢I

# Modal and Minor Scales (two flats)



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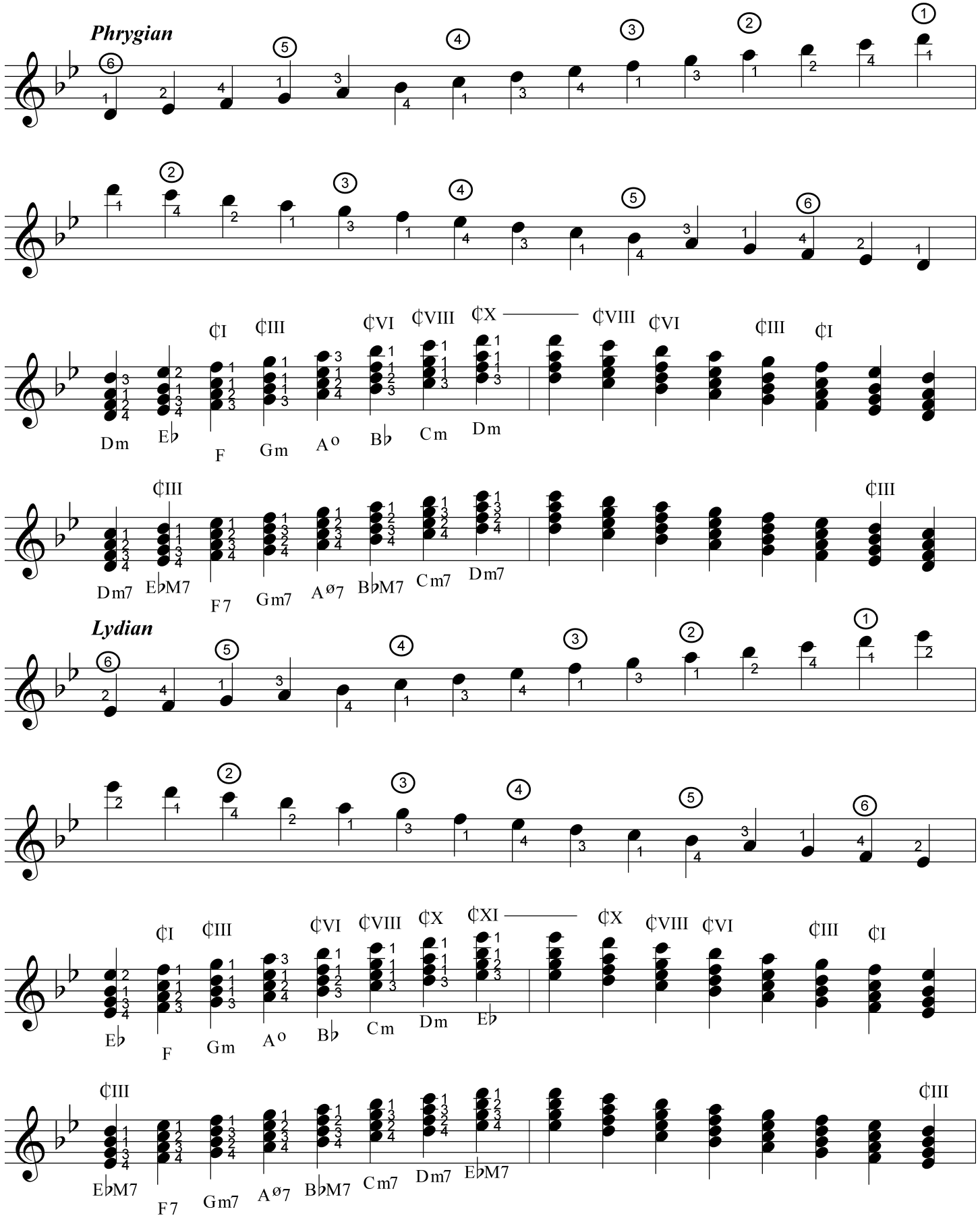
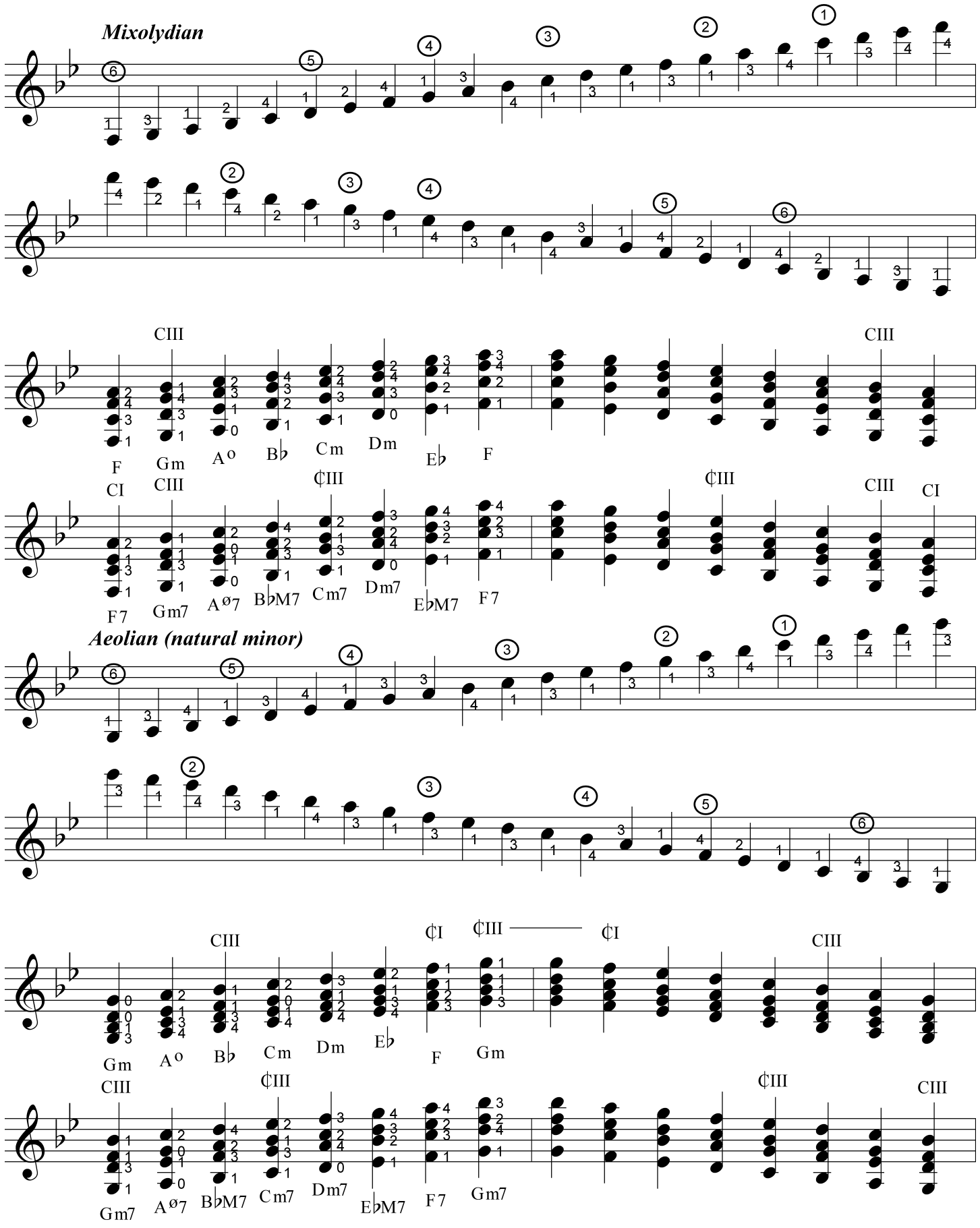
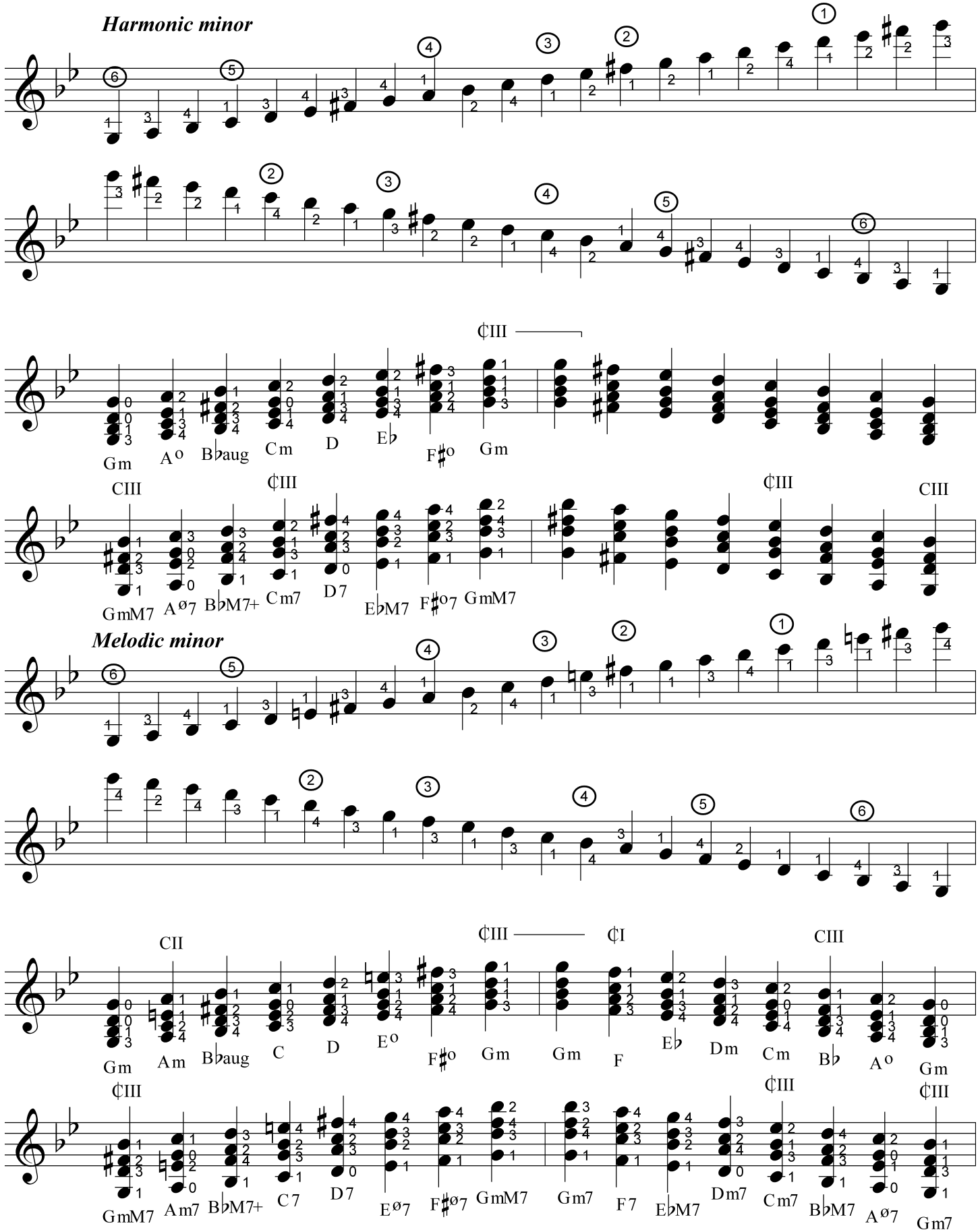
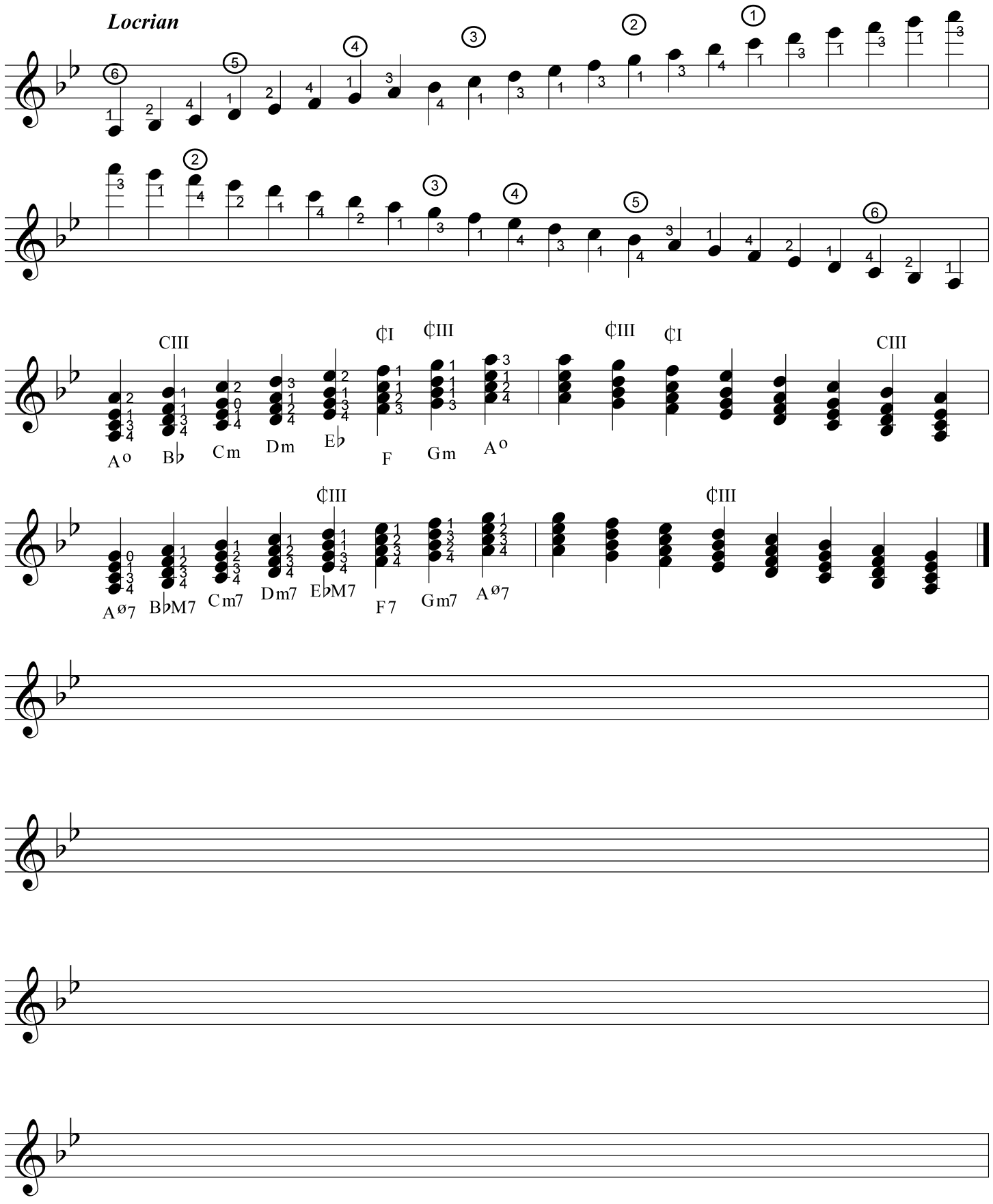
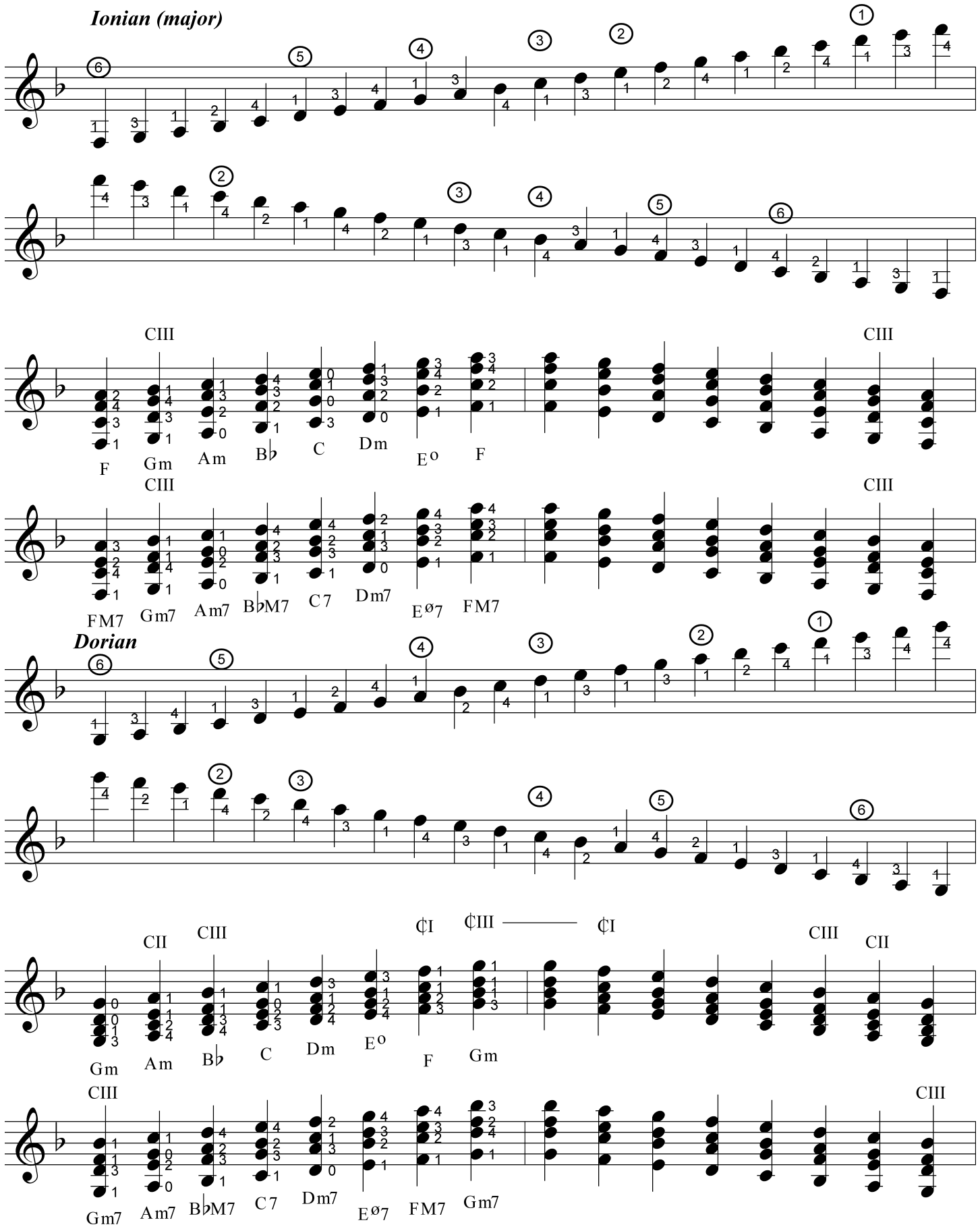

Phrygian
Dm E♭ F Gm A° B♭ Cm Dm
Dm7 E♭M7 F7 Gm7 Aø7 B♭M7 Cm7 Dm7
Lydian
E♭ F Gm A° B♭ Cm Dm E♭
E♭M7 F7 Gm7 Aø7 B♭M7 Cm7 Dm7 E♭M7


Mixolydian
CIII
F
Gm
A o
B♭
Cm
Dm
E♭
F
CIII
CI
CIII
¢III
¢III
CIII
CI
F7
Gm7
A ø7
B♭M7
Cm7
Dm7
E♭M7
F7
Aeolian (natural minor)
CIII
¢I
¢III
¢I
CIII
Gm
A o
B♭
Cm
Dm
E♭
F
Gm
CIII
¢III
¢III
CIII
Gm7
A ø7
B♭M7
Cm7
Dm7
E♭M7
F7
Gm7


Harmonic minor
¢III
Gm
A o
B♭aug
Cm
D
E♭
F♯o
Gm
CIII
¢III
¢III
CIII
GmM7
A ø7
B♭M7+
Cm7
D7
E♭M7
F♯o7
GmM7
Melodic minor
CII
¢III
¢I
CIII
Gm
Am
B♭aug
C
D
E o
F♯o
Gm
Gm
F
E♭
Dm
Cm
B♭
A o
Gm
¢III
¢III
¢III
GmM7
Am7
B♭M7+
C7
D7
E ø7
F♯ø7
GmM7
Gm7
F7
E♭M7
Dm7
Cm7
B♭M7
A ø7
Gm7


Locrian
CIII
A o
B♭
Cm
Dm
E♭
¢I
F
¢III
Gm
A o
¢III
¢I
CIII
A ø7
B♭M7
Cm7
Dm7
E♭M7
¢III
F7
Gm7
A ø7
¢III

## Modal and Minor Scales (one flat)



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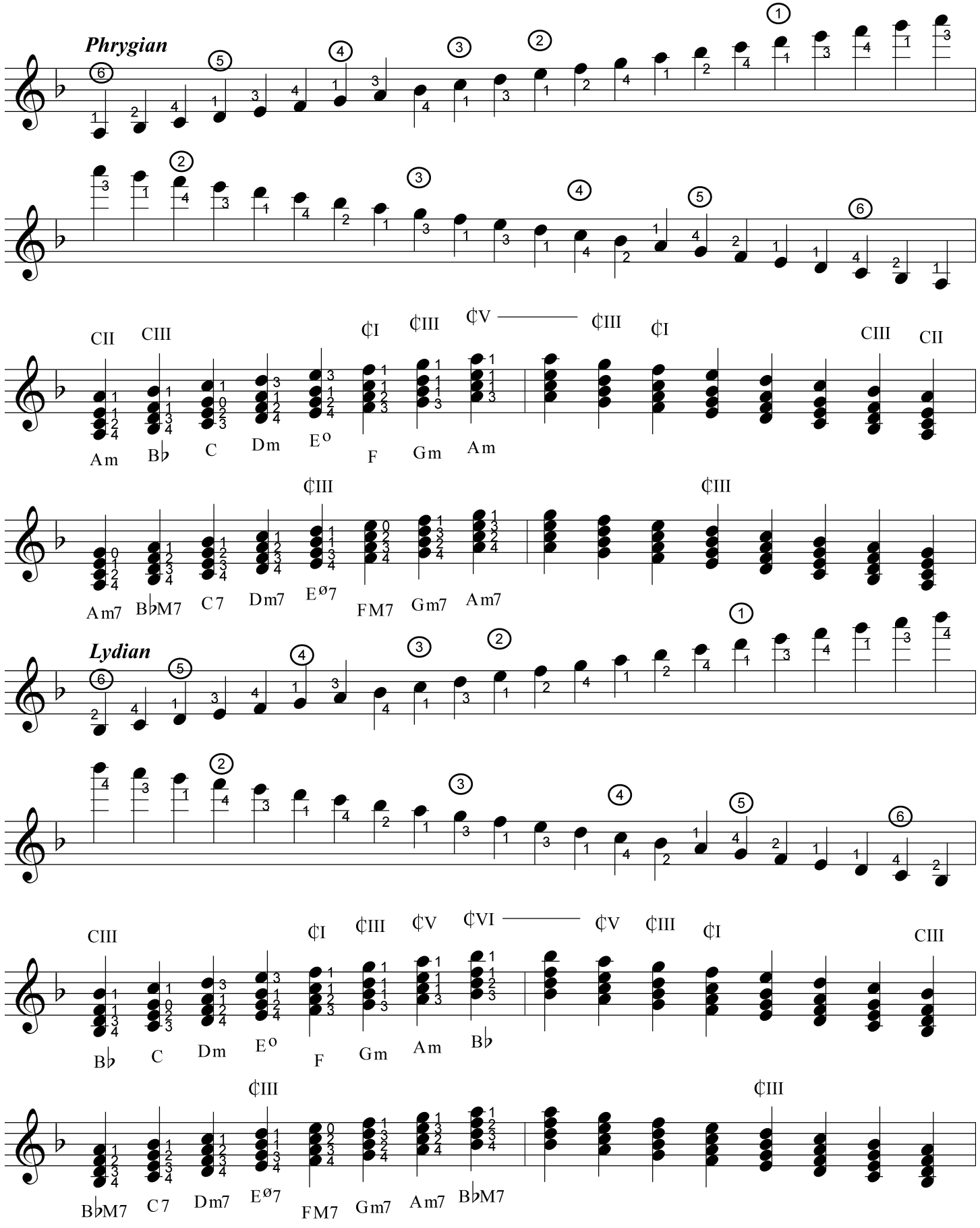
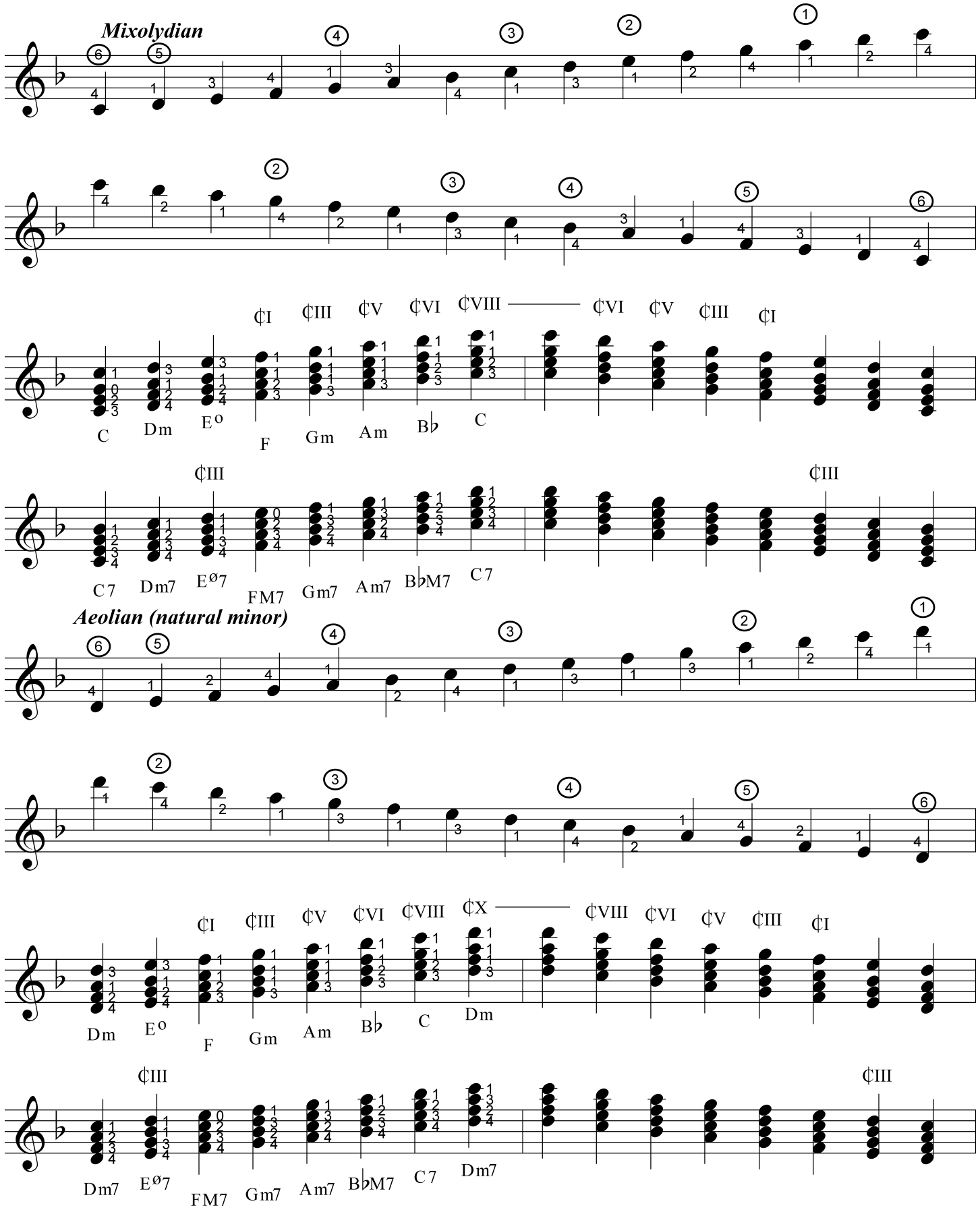
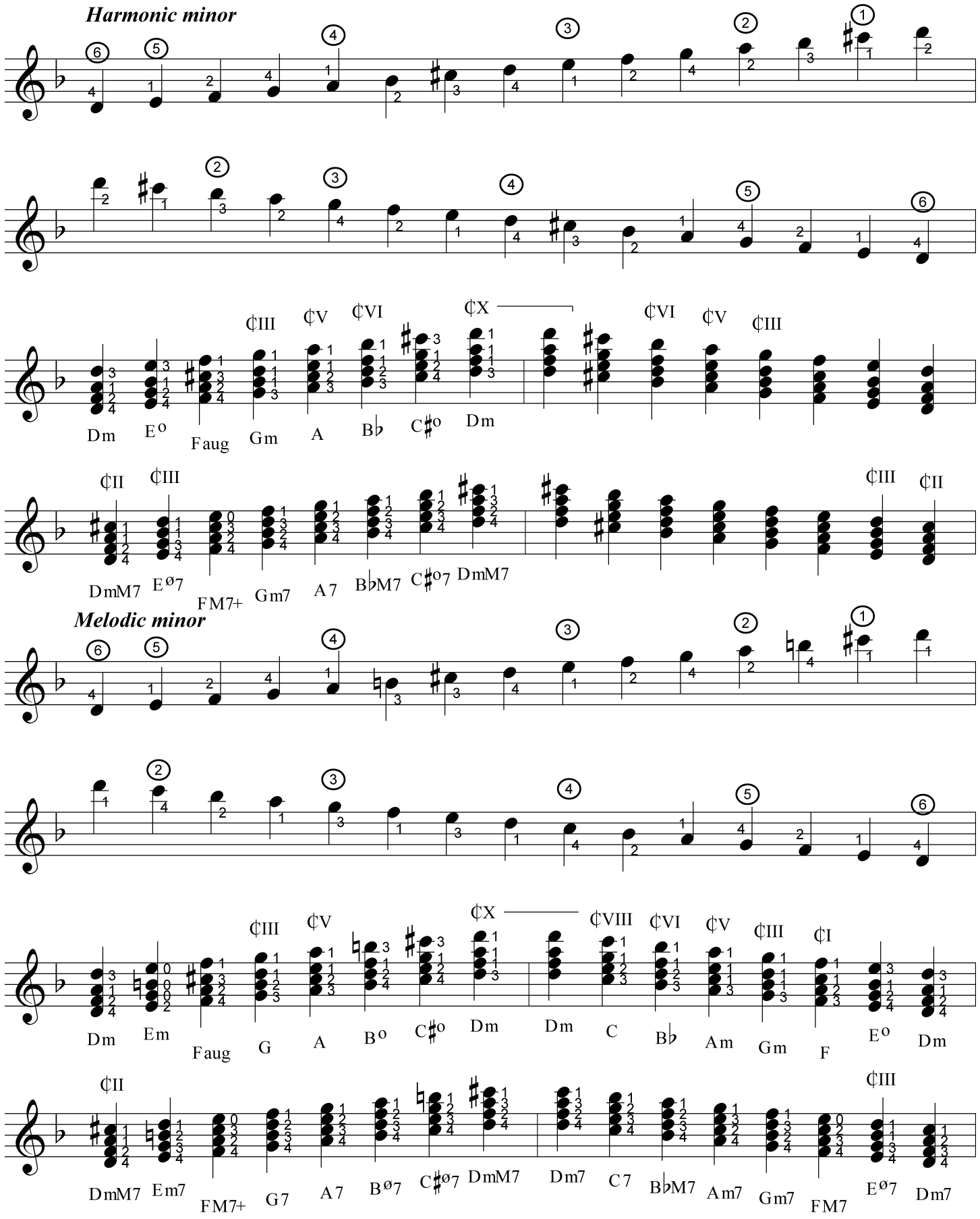
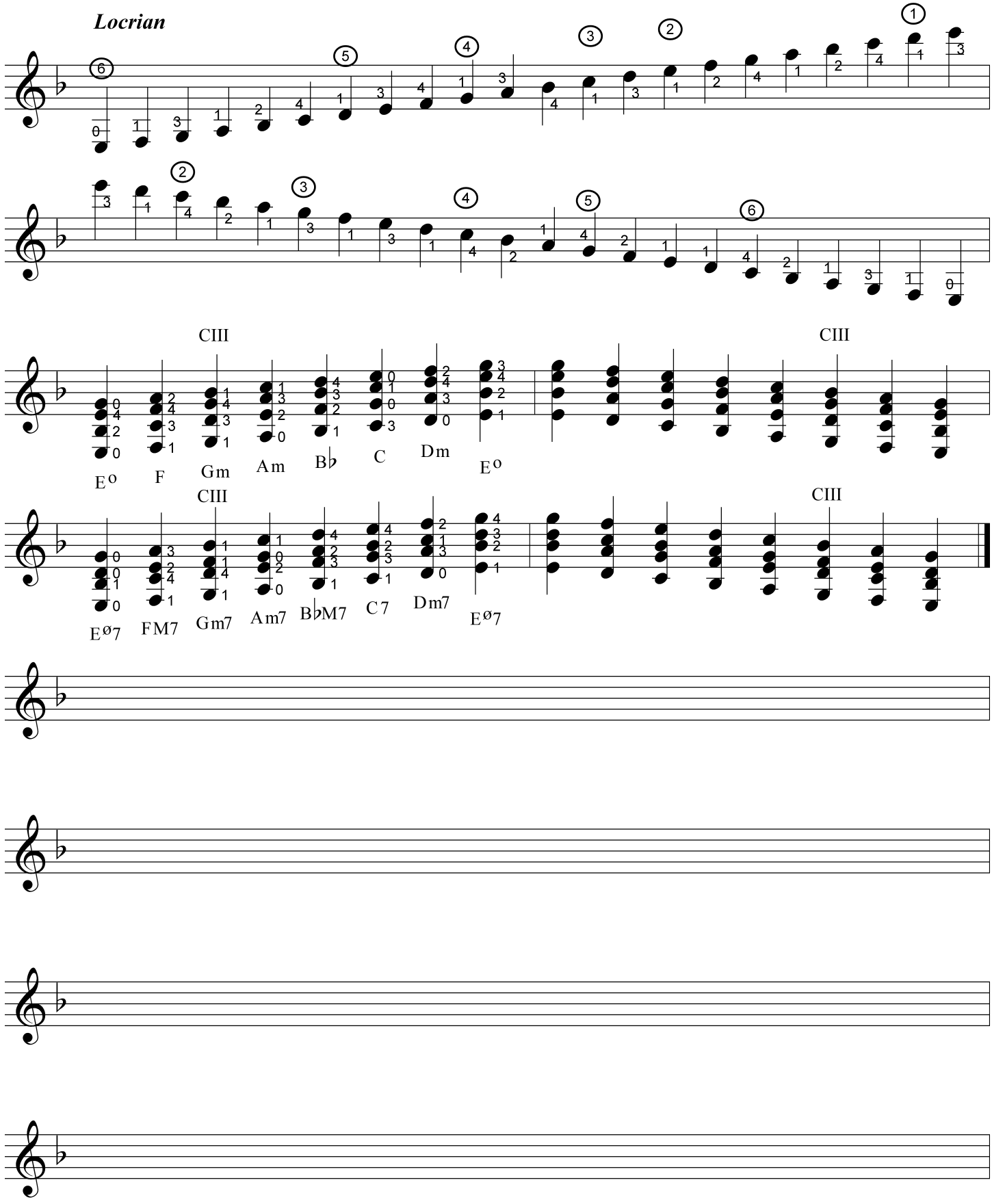

Phrygian
CII CIII ¢I ¢III ¢V ¢III ¢I CIII CII
Am B♭ C Dm E° F Gm Am
¢III ¢III
Am7 B♭M7 C7 Dm7 EØ7 FM7 Gm7 Am7
Lydian
CIII ¢I ¢III ¢V ¢VI ¢V ¢III ¢I CIII
B♭ C Dm E° F Gm Am B♭
¢III ¢III
B♭M7 C7 Dm7 EØ7 FM7 Gm7 Am7 B♭M7


Mixolydian
¢I ¢III ¢V ¢VI ¢VIII ¢VI ¢V ¢III ¢I
C Dm E° F Gm Am B♭ C
¢III ¢III
C7 Dm7 Eø7 FM7 Gm7 Am7 B♭M7 C7
Aeolian (natural minor)
¢I ¢III ¢V ¢VI ¢VIII ¢X ¢VIII ¢VI ¢V ¢III ¢I
Dm E° F Gm Am B♭ C Dm
¢III ¢III
Dm7 Eø7 FM7 Gm7 Am7 B♭M7 C7 Dm7


Harmonic minor
Dm E° Faug Gm A B♭ C♯o Dm
DmM7 Eø7 FM7+ Gm7 A7 B♭M7 C♯o7 DmM7
Melodic minor
Dm Em Faug G A B° C♯o Dm
DmM7 Em7 FM7+ G7 A7 Bø7 C♯ø7 DmM7
Dm C B♭ Am Gm F E° Dm
Dm7 C7 B♭M7 Am7 Gm7 FM7 Eø7 Dm7


Locrian
CIII
CIII
E°
F
Gm
Am
B♭
C
Dm
E°
CIII
CIII
Eø7
FM7
Gm7
Am7
B♭M7
C7
Dm7
Eø7