

Introductory Notes for Karnatic Vocal Classes

There are seven notes in Indian system of music in one Octave (Sthayi). One octave is an interval between notes that is twice the starting frequency.

The basic 7 notes are: **S R G M P D N (S)**

A raga we have arohana (ascending scale) and avarohana (descending scale).

Eg: S R G M P D N **S** (arohana) - **S** N D P M G R S (avarohana). A raga may contain all the seven notes or may not, based on its structure.

As per music theory one octave is divided into 22 equal intervals - forming 22 “shrutis”.

The swara differs from the shruti concept in Indian music. A shruti is the smallest gradation of pitch available, while a swara is the selected pitches from which the musician constructs the scales, melodies and ragas. The Natya Shastra identifies and discusses twenty two shruti and seven swara per octave. Theoretically, an infinite number of shruti are possible (as there can be any number of frequencies or fractional frequencies between notes, technically speaking!), and later music scholars of India increased the number of shruti in their studies.

These 22 Shrutis are mapped into 12 swaras sthaanas in Karnatic Music.

No	Swara Sthaanam	Name
1	S	Shadjam
2	R1	Shuddha Rishabham
3	R2	G1 Chatusruti Rishabham / Shuddha Gandharam
4	R3	G2 Shatsruti Rishabam / Sadharana Gandharam
5		G3 Anthara Gandharam
6	M1	Shuddha Madhyamam
7	M2	Prati Madhyamam
8	P	Panchamam
9	D1	Shuddha Dhaivatam
10	D2	N1 Chatusruti Dhaivatam / Shuddha Nishadam
11	D3	N2 Shatsruti Dhaivatam / Kaisika Nishadam
12		N3 Kakali Nishadam

The overlapping notes are considered same “swara sthaana”. The 22 shrutis come into play based on how a particular raga is rendered. Eg., though Mayamalavagowla and Begada have the same “ma” (M1), the rendering is different - Begada M1 is rendered with a higher pitch. Similarly, the M2 used in Kalyani is slightly different from M2 used in Varali etc. For easier understanding and simplicity, we always refer to “12 swara sthaanams”.

A formal system (framework) of classification of Ragas is the “mela-kartha” system. The predominant system we have today is called “sampoorna melakartha system” consisting of 72 “base” ragas from which all ragas are derived. Please remember that Ragas existed independently of such frameworks; hence it is only a point of reference for our understanding.

Classification with ‘mela’ system was first proposed by Ramamatya in 1550 in his work titled *Swaramelakalanidhi*. The mela system was redefined in a completely different form by Venkatamakhi in the 17th century (Chaturdandi Prakaasika). Some of the assumptions he made in this format was controversial. Today’s melakartha system was propounded by Govindacharya in 18th century. This system (which is considered also mathematically elegant) is well established as a framework in Karnatic Music today.

72 melakarthas are derived by combination of 12 notes shown above. These are divided into 12 “chakras” of 6 ragas each. The first 6 are with shuddha Madhyamam and the second six are with prathi madhyamam. So, we have $12 \times 6 = 72$ Melakarthas.

Due to the 12-notes and overlapping positions of some notes, only 72 combinations are possible. Eg, we can’t have a raga with “R2 and G1” in its scale (as both represent the same pitch/ position). Or D3 and N2 in the scale.

Eg:

1. S R1 G1 M1 P D1 N1 S (Kanakangi)	Indu Chakra
2. S R1 G1 M1 P D1 N2 S (Ratnangi)	
3. S R1 G1 M1 P D1 N3 S (Ganamurti)	
4. S R1 G1 M1 P D2 N2 S (Vanaspati)	
5. S R1 G1 M1 P D2 N3 S (Manavati)	
6. S R1 G1 M1 P D3 N3 S (Tanarupi)	
7. S R1 G2 M1 P D1 N1 S (Senavati)	Netra Chakra
8. S R1 G2 M1 P D1 N2 S (Hanumatodi)	
9. S R1 G2 M1 P D1 N3 S (Dhenuka)	
10. S R1 G2 M1 P D2 N2 S (Natakapriya)	
11. S R1 G2 M1 P D2 N3 S (Kokilapriya)	
12. S R1 G2 M1 P D3 N3 S (Rupavati)	
etc.... please look up for more info in Wikipedia. Search for the term “Melakartha”	

All the derived ragas (janya ragas) are the children of these 72 melakarthas in the theoretical framework. Since there are dissonant (vivadi) notes when we use some of the combinations of the basic 12 notes, not all melakartha ragas are extensively used in compositions.

Based on the characteristics of a raga and the notes used in the same, ajanya raga is said to be derived from one of the mela kartha ragas. However, since there are instances where a janya raga can be derived from two or three mela karthas (as the janya ragas may not contain all the notes). In such instances, the 'lakshana' of the raga is looked at and one of the melakartha ragas are selected by musicologists. Of course, some of these are challenged and discussed too!

Please read more about these concepts from books and other authentic internet sources. While theory helps us in a better understanding of music, it is not a pre-requisite for enjoying good, melodious music!

The basic lessons are divided into progressive sets, each introducing a new concept and helping to establish proficiency of a higher level:

1. Sarala Varise (Simple, sequential notes)
2. Janti Varise (Double notes, mostly sequential, but with variations)
3. Dattu Varise (Zig-zag notes, that help you jump from notes to note.
4. Geethams
5. Swarajathis
6. Jathiswarams
7. Varnams
8. Krithis...
9. and so on.....!

From Step 7 and 8 you are on the path to being a musician! These are the items that are actually sung in concerts. Of course, there are more things to add to the repertoire (there is lot of fine print, so to say!) before you can reach there, but all of it begins here.