

## CHAPTER I

### 1.1 Introduction - *Swara-Graam* (the scale)

The *Swara-Graam* or the scale in modern Indian music consists of seven *Suddha* (pure or unchanged) or *Prakrita* (exact) **Swars** (notes) as the primary notes which correspond exactly to the seven notes in Western musical scales. For this reason, Indian musical scale is also called *Swara-Sapthak* where "*Saptha*" (like Latin *Hepta*) means seven. Each of these **Swars** or notes has a special name as - ***Sarh-ja***, ***Risav***, ***Nisaad***, ***Gaandhaar***, ***Madhyam*** (middle), ***Pancham*** (fifth), ***Dhaibath*** and ***Nisaad***. But these names are too long to sing in short unit of time. For this reason, names of these *Swars* will be abbreviated as "**S R G M P DH N**". The below shows how these *Swars* are abbreviated and pronounced at the time of actual singing :

Name of the notes		Abbreviated as	Pronounced as
Western	Indian		
Do	<i>Sarh-ja</i>	<b>S</b>	saa
Re	<i>Risav</i>	<b>R</b>	rey
Mi	<i>Gaandhaar</i>	<b>G</b>	gaa
Fa	<i>Madhyam</i>	<b>M</b>	maa
So	<i>Pancham</i>	<b>P</b>	paa
La	<i>Dhaibath</i>	<b>DH</b>	dhaa
Ti	<i>Nisaad</i>	<b>N</b>	nee

Apart from these seven *Suddha Swars*, there are five *Bikritha* (changed) *Swars* of which four *Swars* are ***Komal*** (soft) or flat and one is ***Theebra*** (strong) or sharp. The *Komal* or flat *Swars* are placed in a lower position than (or left of) a *Suddha Swar* whereas a *Theebra* or sharp *Swar* is placed in a higher position than (or right of) a *Suddha Swar*. *Sarh-ja* and *Pancham* are two steady *Swars* and do not have any *Bikritha Swars*. *Risav*, *Gaandhaar*, *Dhaibath* and *Nisaad* have their corresponding *Komal* or flat *Swars* and only *Madhyam* has a *Theebra* or sharp *Swar*. These *Bikritha Swars* will be denoted by "**r g dh n**" and "**m**".

The following table is showing the Swara-Sapthak and relative positions of the *Bikritha Swars* in the scale :

<b>Swar-Graam</b> (the scale)	
<i>Saptha-Swars (Suddha)</i> Seven primary notes	<i>Suddha &amp; Bikritha Swars (7 + 5 = 12)</i> Twoelve notes with the secondary ones
1. <i>Sarhja</i> = <b>S</b>	1. <i>Sarhja</i> = <b>S</b>
.....	.....
2. <i>Risav</i> = <b>R</b>	2. <i>Komal Risav</i> = <b>r</b>
.....	3. <i>Sudhdha Risav</i> = <b>R</b>
.....	.....
3. <i>Gaandhaar</i> = <b>G</b>	4. <i>Komal Gaandhaar</i> = <b>g</b>
.....	5. <i>Suddha Gaandhaar</i> = <b>G</b>
.....	.....
4. <i>Madhyam</i> = <b>M</b>	6. <i>Suddha Madhyam</i> = <b>M</b>
.....	7. <i>Theebra Madhyam</i> = <b>m</b>
.....	.....
5. <i>Pancham</i> = <b>P</b>	8. <i>Pancham</i> = <b>P</b>
.....	.....
.....	9. <i>Komal Dhaibath</i> = <b>dh</b>
6. <i>Dhaibath</i> = <b>DH</b>	10. <i>Suddha Dhaibath</i> = <b>DH</b>
.....	.....
.....	11. <i>Komal Nisaad</i> = <b>n</b>
7. <b>Nisaad</b> = <b>N</b>	12. <i>Suddha Nisaad</i> = <b>N</b>

The above description of the **Swara-Graam** is of only one *Swar-Sapthak* (octave). There are three *Sapthaks* - each consisting seven *Suddha* as well as five *Bikritha Swars*. They are marked as **Mandra** or **Nimna Sapthak** (low octave) or **Oodaara, Madhya Sapthak** (middle octave) or **Moodaara** and **Ooch-cha** or **Thaar Sapthak** (high octave) or **Thaara**. A Swar in *Madhya Sapthak* will be denoted by the specific letter as described above. The Swars in *Mandra Sapthak* will be denoted by the corresponding letter followed by a comma "," and those in *Ooch-cha Sapthak* will be denoted by the corresponding letters followed by an apostrophe "'" as shown below :

Three **Sapthaks** (3 octaves)

Examples : SA = *Sarh-ja* in one *Maathra*

1. *Oodaara* or *Mandra* or *Nimna* (low) *Sapthak* (with a comma) -  
**S, R, G, M, P, DH, N,**
2. *Moodaara* or *Madhya* (Middle) *Sapthak* (without a sign) -  
**S R G M P DH N**
3. *Thaara* or *Thaar* or *Oochcha* (high) *Sapthak* (with an apostrophe) -  
**S' R' G' M' P' DH' N'**

Although there are  $(7 + 5) \times 3 = 36$  Swars in these Sapthaks, usually 27 Swars are enough to cover average human voice (after training). Of course, the singers with intensive training background are capable to cover a wider range of notes. The learners of Indian music must train their voices with some kind of accompaniments. A **Thamboor** or **Thaanpoora** which has only four strings, (namely P, S S S,) is the best for this purpose but now a days harmoniums or organs or pianos or electronic keyboards are also being used. So, a card or tape may be prepared suitably in the

Main Saptak							Madhya Saptak							
<--- M, m, P, dh, DH, n, N, S r R g G M m P dh DH n N														

Thaar Saptak--->													
S' r' R' g' G' M' m' P' --->													

and attached or fixed just above the keyboard of the instrument of practice.

Next comes the task of choosing the proper scale of an individual singer. Before that, the significances of some of the Swars need to be interpreted. The meaning of the word Sarh-ja is "one which generates (determines) the (other) six". "Sarh" is six and "ja" is generating or creating. This means that after the position of the Swar Sarh-ja is found in the voice or in keyboard of any instrument, those of other six Swars - Risav, Gaandhaar, Madhyam, Pancham, Dhaibath and Nisaad - are determined automatically. Madhyam which is the fourth note in the scale, is the middle Swar and Pancham which means fifth in the scale are two very important notes to keep the scale of the singer steady. To locate the position of Sarh-ja of individual singers, one should make a musical sound "aa" most spontaneously and without any effort and match it with the instrument of practice. After the position of Sarh-ja is determined other six notes will be located by definition. Because of this reason, Sarh-ja in Madhya Sapthak in the above card is marked with an asterisk "\*". If the singers are experienced ones they may do this job by themselves, but in case of the first time learners, help from an experienced Guru or teacher is absolutely important.

After the scale of individual singer is determined, the voice training exercises in the following sections and chapters must be practiced with great care. These will be helpful not only in conditioning the voice but also to expand its range.

The timing plays an integral part of any type of Indian music or dances. An unit of time in Indian music and dances is called a **Maathra** and these *Maathras* are spaced by different **Thaals** or rhythm-patterns. A *Maathra* will be denoted by "A". The note or notes with an "A" will indicate that the particular note or notes together cover one *Maathra*.

**SA** = one *Sarh-ja* in one *Maathra*

**SRA** = half ~~*Maathra* (*Maathra of time*)~~ half *Risav Maathra*

**SRGA** = each of the notes one-third *Maathra*

**SRGMA** = each of the notes one-fourth *Maathra*, etc.

Though the singers need not play beat instruments like "*Thabla & Doogee*" by themselves, still they must be familiar with the **Thhekas** (notations) of the **Thaals** (rhythm patterns) they are supposed to sing with. So, almost at the end of each chapter, *Thhekas* of one or more *Thaals* have been added. The *Thaals* which are marked with an asterisk "\*", are meant for learners of Rabindra-Sangeeth only.

Morning and evening are the best time for practicing Indian music and winter or colder weather is most favorable for this purpose as it delays fatigue. Regulated diet and disciplined life style are highly recommended for singers and learners of Indian music.