

SOUTH INDIAN MUSIC

BOOK II

(Sixth Edition, Revised and Enlarged)



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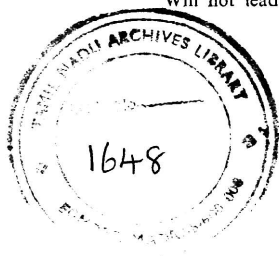
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“ Music devoid of devotion
Will not lead to Salvation ”

—TYAGARAJA.



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Note to the Sixth Edition

The Theoretical portion has been revised and enlarged. Four more supplementary alankaras have been added. Eight more Technical terms have been explained in Chapter VII, Appendix II, III and IV on Varga vadyas, Vocal music vs Instrumental music and Raga rupa sanchari are additions to this edition.

Madras }
27th May, 1960 }

The Author

CHAPTER I

R A G A

Music is an integral part of India's culture, It is the one art which is in evidence in all the strata of society. Indian music is one of the living systems of music in the world.

Indian music is a typical example of *Modal music* i. e. music based on modes. The individuality of a mode is established by notes of defined frequencies in its composition. It is not the interrelationship between the notes that establishes the raga, although this interrelationship is there, but the relationship of each note to the basic tonic note. This tonic note may be actually heard through a drone or even in its absence, a trained ear is able to recognise the raga bearing in mind the presumed tonic note. Memory thus plays an important part in Indian Music.

Rāga is the *pivotal concept* of Indian music. This concept is India's proud contribution to world music. This concept is of interest to scholars of comparative musicology all the world over. The ideal of absolute music is reached in the concept of raga. The attainment of rāgajnāna is the ultimate aim of all musical studies. The whole structure of Indian music is built around the concept of rāga. Indian melodies of the classical type are based on rāgas. As for folk melodies, a good number of them will be found to be in some recognisable rāga or other. Some folk melodies are in mixed ragas i.e. one part of the stanza being in one raga and another part in another raga. The origin of rāgas like Kuranji and Nādanamakriya can be traced to folk melodies.

Rāgas are aesthetic facts and can be perceived by trained ears. Rāgas derive their individuality through notes of defined pitch entering into their formation. It is the horizontal arrangement of particular tones and semitones in conformity to recognised aesthetic laws that establishes the *rūpa* or form of a rāga. Rāgas reveal themselves through the twin channels of Kalpita sangita and Manodharma sangita. Kalpita sangita means music already made. This music includes the musical compositions already composed. Both rhythmical music and compositions like the Chitta tānaṣ which are not strictly rhythmical will come under its scope. Manodharma sangita is music improvised on the spot. It admits of the divisions : Alapana inclusive of Tāna or Madhyamakāla, Pallavi exposition, Niraval and Svara Kalpana. Musical compositions and alapanas are concrete manifestations of the abstract raga.

Manodharma sangita or creative music is the distinctive feature of Indian music. It is this that imparts a dynamic character to Indian music. In a concert we hear not only the compositions of great composers but also the performer's creative music—music improvised by him and rendered on the spot. Thus we enjoy in a concert not only the creative talents of the musician but also his powers of interpreting the compositions of great composers. Performers are the links between audiences and composers. Alapana is unmeasured music. Alapana had its origin when slokas and viruttams came to be sung in a raga.

Raga Sphutam (ராக ஸ்புடம்) is the process of discovering the individuality of a rāga i. e. finding its jiva svaras, nyasa svaras, rakti prayogas or pakads, amsa svaras or resting notes, vakra prayogas etc. A rāga once conceived attains its full stature usually at the hands of a subsequent

composer or composers. Thus the *nāḍātma* form of a raga is a process of gradual unfoldment.

The rich treasure-house of rāgas is the glory of Indian music. The rāgas form the basis of all melody in India. Rāga is the quintessence of Indian music. In the formation of rāgas, all possible combinations of notes for creating emotional effects have been utilised. Ability on the part of a person to recognise, distinguish and sing or play rāgas indicates a high degree of musical culture. Rāgas are based on *raṇjakatva*.

A rāga might be defined as a melody-mould or melody-type. It consists of a series of notes, which bear a definite relationship to the ādhāra shadja and which occur in a particular sequence. The introduction of notes eschewed in a rāga will prove fatal to its melodic individuality. Rāgas give pleasure to the listener and are beautified by svara varnas. *Rāga ālāpana* is the presentation of phrases admissible in the rāga in such a manner as to bring out its distinctive characteristics.

The various factors that go to build the melodic individuality of a raga are described in detail in Book III. The first detail that a student should become familiar with, concerning a raga is its ārohana and avarohana and the melakarta to which it belongs. If the rāga in question is a janaka rāga, its ārohana and avarohana will, as already mentioned, be sampurna.

The ārohana and avarohana constitutes the briefest description of a raga and is like a theorem in geometry. It gives in a concise form the outline or frame-work of the rāga. It defines the contour of the rāga. The normal sanchāras that the rāga admits of are directly revealed

hy the ārohana and avarohana. Sometimes a rare prayoga is incorporated in the ārohana and avarohana (Ex. Nāta raga) and in a few instances. the ārohana - avarohana instead of being in a concise form is slightly expanded and presented. Janta svaras, dirgha svaras and kampita svaras figure in the ārohana and avarohana of some rāgas. All these features serve only to reveal better the melodic individuality of those ragas. Instances of such ragas are however not many,

Raga Classification

Rāgas are classified into Janaka rāgas and Janya rāgas. This is a highly scientific system of classification and is based on the genus-specie system. The terms janaka rāga, melakarta raga, mela rāga, kartā rāga, sampurna rāga, parent rāga, fundamental rāga, root rāga and primary rāga are all synonymous and mean the same thing. Likewise janya rāgas are known by other names as derivative rāgas and secondary rāgas. Janaka rāgas possess the full complement of the sapta svaras in both the ārohana and avarohana and the notes ascend and descend in a regular order. In addition, the svaras are of the same kind in both the ārohana and avarohana. These are the three characteristic features of janaka rāgas. There are 72 such janaka rāgas arranged in a definite, serial order.

A janya rāga is a rāga, which is said to be *born* or *derived* from a melakarta rāga. Every janya rāga has its parent scale or janaka rāga. A janya rāga takes the same svaras as the svaras taken by its parent rāga. The mention of the name (or serial number) of the janaka rāga therefore gives the clue to the svaras taken by the janya rāga. Thus when it is said that Māyāmālavagaula is the janaka rāga of

Malahari, it means that the svaras taken by Malahari rāga are the same as the svaras taken by Māyāmālavagaula. Occasionally janya rāgas take one or two foreign notes (notes foreign to their parent rāgas) for the sake of enriching their beauty (see post).

The student will do well at this stage to become familiar with the following janaka rāgas :—

TABLE I

Giving the svaras taken by some prominent melakarta rāgas together with their serial numbers :—

Melakarta No.	Name.	* Svaras.
8	Hanumatodi	s r ₁ g ₁ m ₁ p d ₁ n ₁ s
15	Māyāmālavagaula	s r ₁ g ₂ m ₁ p d ₁ n ₂ s
16	Chakravākam	s r ₁ g ₂ m ₁ p d ₂ n ₁ s
17	Suryakāntam	s r ₁ g ₂ m ₁ p d ₂ n ₂ s
20	Natha Bhairavi	s r ₂ g ₁ m ₁ p d ₁ n ₁ s
22	Kharaharapriya	s r ₂ g ₁ m ₁ p d ₂ n ₁ s
28	Harikāmbhoji	s r ₂ g ₂ m ₁ p d ₂ n ₁ s
29	Dhira Sankarabharana	s r ₂ g ₂ m ₁ p d ₂ n ₂ s
51	Kāmavardhani	s r ₁ g ₂ m ₂ p d ₁ n ₂ s
65	Mechakalyāni	s r ₂ g ₂ m ₂ p d ₂ n ₂ s

* Numeral 1 denotes the Komala svvara and Numeral 2, the Tivra svvara.

Classification of Janya Ragas

1. Varja ragas. Varja rāgas are those janya rāgas wherein one, two or three notes are deleted either in the ārohana or avarohana or both. From the number of svaras present in the ārohana and avarohana, janya rāgas are classified under eight heads. The terms, *sampurna* (all the *sapta* svaras being represented), *shādava* (six svaras only being represented i. e., one note being *varja*) and *audava* (five svaras only being represented i. e., two notes being *varja*) are used to describe the ārohana and avarohana in this connection. The tāra sthāyi shadja is excluded in calculating the number of svaras present in the ārohana and avarohana of rāgas.

Audava is the earlier form of *Audava*

The *eight kinds of varja ragas are : —

1. Shādava — sampurna
2. Audava — sampurna
3. Sampurna — shādava
4. Sampurna — audava
5. Shādava — shādava
6. Shādava — audava
7. Audava — shādava
8. Audava — audava

Every one of the 72 melakarta rāgas admits of all these eight varieties of transilient ragas. The possible number of audava-shādava-sampurna combinations is 483 and this multiplied by 72, gives the colossal figure 34,776, which is the possible number of varja rāgas of this class, derivable from all the 72 melakarta rāgas.

* Varja ragas of the *svarantara* type i. e. with only four notes are explained later.

Note.— Even as a minimum of three straight lines is required to enclose a space, a minimum of five notes is required to give an individuality to a raga. Thus a svarāntara-svarāntara rāga, though a theoretical possibility must be ruled out from the pale of practical music.

In the ārohana and avarohana of the audava or svarāntara type, contiguous notes will not usually occur as varja svaras. But Kuntalavarali (s m p d n d \dot{s} - \dot{s} n d p m s —28), Megharanji (s r g m n \dot{s} - \dot{s} n m g r s —15), and Purnashadjam (s r g m N \dot{s} - \dot{s} n p m G r s —22) are happy exceptions. The contiguous notes r and g in Kuntalavarali and p and d in the other two examples are varja svaras. The distribution of *varja svaras* has much to do with the melodical richness of a raga. The extent and nature of *varjatva* in varja ragas are clearly revealed by the graphs of those ragas.

TABLE II
The eight kinds of varja raga with examples.

No.	Kind of Janya-raga and the Number of svaras present in its:		Examples		
	Arohana	Avarohana	Name of the raga	Its arohana & avarohana.	Serial No. of its mela-karta
1	Shādava-Sampurna 6 7		Kāmbhoji	{ s r g m p d s s n d p m g r s	28
2	Audava-Sampurna 5 7		{ Bilahari Arabhi	{ s r g p d s s n d p m g r s s r m p d s s n d p m g r s	29 29
3	Sampurna-Shādava 7 6		Bhairavam	{ s r g m p d n s s d p m g r s	17
4	Sampurna-Audava 7 5		{ Garuda- dhvani Sāramati	{ s r g m p d n s s d p g r s s r g m p d n s s n d m g s	29 20
5	Shādava-Shādava 6 6		Sriranjani	{ s r g m d n s s n d m g r s	22
6	Shādava-Audava 6 5		Nātakuranji	{ s r g m d n s s n d m g s	28
7	Audava-Shādava 5 6		{ Malahari Sarasvati	{ s r m p d s s d p m g r s s r m p d s s n d p m r s	15 64
8	Audava-Audava 5 5		{ Mohana Suddha- sāveri	{ s r g p d s s d p g r s s r m p d s s d p m r s	28 29

Varja ragas may again be classified into *upāṅga* ragas and *bhāṣhāṅga* ragas and these again into *vakra* or non-*vakra*:—

II Vakra ragas Janya rāgas whose ārohana or avarohana or both take a *crooked* or *zig-zag* course are called *vakra* rāgas. Graphically represented, the ārohana and avarohana of non-*vakra* rāgas will be found to be regularly ascending and descending straight lines or curves; but the graphs of *vakra* ragas will present indentations and reveal their tortuous character.

In *vakra* rāgas, during the course of the ārohana or avarohana or both, a prior note will be found to repeat itself. Instances of *vakra* rāgas without the repetition of a prior note are rare. *Kathanakutuhalam* is an example of this latter type, wherein the ārohana is : *s r m D n g p s*.

Vakra svāra is that *svāra* in the ārohana or avarohana, at which a change in the course takes place. It is the *svāra* at which there is the interruption in the regular course of the ārohana or the avarohana as the case may be.

Vakrāntya svāra is the *svāra* at which the *vakratva* or the change in the course ends and the original course is resumed. Thus in the ārohana of *Kathanakutuhalam* (see above) the *ni* is the *vakra svāra* and *ga* is the *vakrāntya svāra*. Sometimes the *vakrāntya svāra* may be the note next to the *vakra svāra*; for ex. *dha* in the ārohana of *Kuntalavarālī* : *s m p d n d ṣ* (herein *ni* is the *vakra svāra* and the *dha* following it is the *vakrāntya svāra*). Thus the range of *vakratva* may be a semi-tone as in *Kuntalavarālī* or the interval of a Panchama as in *Kathanakutuhalam*.

TABLE III

Examples of vakra ragas.

Name of the rāga.	Serial No. of its janaka raga.	Ārohana and avarohana	Remarks.
Ānanda-bhairavi	20	$\left\{ \begin{array}{l} s \ g \ r \ g \ m \ p \ d \ p \ \dot{s} \\ \dot{s} \ n \ d \ p \ m \ g \ r \ s \end{array} \right.$	Ārohana alone vakra
Sriraga	22	$\left\{ \begin{array}{l} s \ r \ m \ p \ n \ \dot{s} \\ \dot{s} \ n \ p \ d \ n \ p \ m \ r \ g \ r \ s \end{array} \right.$	Avarohana alone vakra
Sahāna	28	$\left\{ \begin{array}{l} s \ r \ g \ m \ p \ m \ D \ n \ \dot{s} \\ \dot{s} \ n \ d \ p \ m \ G \ m \ R \ g \ r \ s \end{array} \right.$	Both vakra

Note that in Srirāga, the vakra svaras are *pa* and *ri* and the vakrāntya svaras are *ni* and *ga* respectively. Sāranga is an instance of a vakra raga wherein the vakrāntya svara is the anya svara itself.

Classification of Vakra ragas

1. Sampurna Vakras or Vakra Sampurnas.

Vakra sampurna ragas are those wherein the ārohana and avarohana are sampurna and either or both of them are vakra. Examples.

- (a) Kathana kutuhalam ($s \ r \ m \ D \ n \ g \ p \ \dot{s} - \dot{s} \ n \ d \ p \ m \ g \ r \ s$)
Arohana alone vakra.

(b) Karnāṭaka byāg ($s r g m p d n \dot{s} - \dot{s} n d n p d m g r g s$)
Avarohana alone Vakra.

(c) Sahana ($s r g m p m D n \dot{s} - \dot{s} n d p m G m R g r s$)
Both vakra i. e. Ubhaya vakra.

2. Vakra varjas

Vakra varjas admit of the divisions, *Vakra Shādavas* and *Vakra audavas*.

Vakra shādava ragas are those wherein the arohana and avarohana are shadava and either or both of them are vakra

Examples :

(a) Nalinakānti (27) ($s g r m p n \dot{s} - \dot{s} n p m g r s$)
Arohana alone Vakra.

(b) Devaṃanohari (22) ($s r m p d n \dot{s} - \dot{s} n d n p m r s$)
Avarohana alone Vakra.

(c) Bangala (29) ($s r g m p m r p \dot{s} - \dot{s} n p m r g r s$)
Ubhāya Vakra.

Vakra audava ragas are those wherein the arohana and avarohana are audava and either or both of them are Vakra.

Example :

H i n d' o l a m (20) ($s m g m d n \dot{s} - \dot{s} n d m g s$)
Arohana alone vakra.

From the point of view of the number of varja svaras, if the ārohana and avarohana of a raga are not symmetrical, the ārohana and avarohana will be described separately as in the following Examples :

(a) Kedaram (29) ($s m g m p n \dot{s} - \dot{s} n p m g r s$)
Vakra audava - Krama shādava raga.

(b) Begada (29) (s g r g m p d p \dot{s} - \dot{s} N d p M g r s)
Vakra shādava - Krama sampurna rāga.

(c) Janaranjani (29) (s r g m p d p n \dot{s} - \dot{s} d p m r s)
Vakra sampurna - Krama audava raga.

(d) Suddha bangala (s r m p d \dot{s} - \dot{s} d p m r g r s)
Krama audava - Vakra shadava raga.

3. Ubhaya vakra

Herein both the arohana and avarohana are vakra. These may again be sāmputna, shadava or audava.

Ubhaya vakra ragas may again be classified into :-

(i) Those wherein the number of vakra svaras in the arohana and avarohana is equal.

Nilambari raga which has one vakra svara in the arohana and one vakra svara in the avarohana is an example.

Nilambari (29) (s r g m p d p n \dot{s} - \dot{s} n p m g r g s)

(ii) Those wherein the number of vakra svaras in the arohana and avarohana is not equal.

Ex Ritigaula rāga which has two vakra svaras in the arohana and one vakra svara in the avārohana.

(s g r g m n d m n \dot{s} - \dot{s} n d m g m p m g r s).

4. From the number of vakra svaras present, vakra rāgas may be classified into :—

1. *Ekasvara vakra raga* i.e., with one vakra svara in the ārohana and one vakra svara in the avarohana.

Ex. Nilambari ($s r g m p d p n \dot{s} - \dot{s} n p m g r g s$)

2. *Dvisvara vakra rāga* i.e., with two *vakra svaras* in the *ārohana* and two *vakra svaras* in the *avarohana*.

Ex. Suposhini ($s r s m p n d \dot{s} - \dot{s} d n p m r m s$)

3. *Trisvara vakra rāga* i.e., with three *vakra svaras* in the *ārohana* and three *vakra svaras* in the *avarohana*.
4. *Chatussvara vakra rāga* i.e., with four *vakra svaras* in the *ārohana* and four *vakra svaras* in the *avarohana*.

There are *vakra rāgas* with an *eka svara vakra ārohana* alone (Kuntala varāli : $s m p d n d \dot{s} - \dot{s} n d p m s$) or an *eka svara vakra avarohana* alone (Suddha bangāla $s r m p d \dot{s} - \dot{s} d p m r g r s$) or a *dvisvara vakra arohana* alone :—

Ex. Anandabhairavi ($s g r g m p d p \dot{s} - \dot{s} n d p m g r s$)
or a *dvisvara vakra avarohana* alone :—

Ex. Sriraga ($s r m p n \dot{s} - \dot{s} n p d n p m r g r s$)

In the case of those *ubhaya vakra ragas* wherein the number of *vakra svaras* in the *ārohana* and *avarohana* differs, the *ārohana* and *avarohana* are described separately. Thus *Sahāna* furnishes an instance of an *ubhaya vakra rāga* with an *eka svara vakra ārohana* and a *dvisvara vakra avarohana* : $s r g m p m D n \dot{s} - \dot{s} n d p m G m R g r s$. The same rule applies to *Dvisvara*, *Trisvara* and *Chatussvara vakra ragas*.

5. **Upanga Vakra ragas and Bhashanga Vakra ragas.** *Suddha bangala* and *Manjari* are examples of the former

class and Saranga and Chintāmani are examples of the latter class.

The number of vakra ragas is unlimited.

Upanga - Bhashanga.

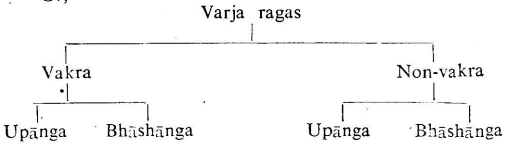
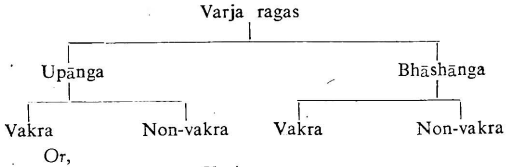
III. *Upānga ragas* are those janya ragas, which take only notes, present in their respective parent ragas Malahari; Suddha saveri, Ārabhi, and Mohana are examples.

Bhāshānga ragas are those janya rāgas which in addition to the notes pertaining to their parent rāgas, take one or two *foreign* notes as visitors. These visiting notes come only in particular sanchāras and serve to increase the beauty of the rāga. The svarupa of the rāga is revealed better by these foreign notes. Thus in a bhāshānga raga, both the varieties of a svara occur, the variety pertaining to the melakarta being called the *svakiya svara* and the visiting note, the *anya svara*. In Bilahari and Bhairavi, the kaisiki nishāda and chatussruti dhaivata are the respective *anya svaras*; the *svakiya svaras* for the two ragas being kākali nishāda and suddha dhaivata respectively.

Barring a few instances like Bhairavi, the *anya svara* as a rule is not a nyāsa svara in bhāshānga rāgas.

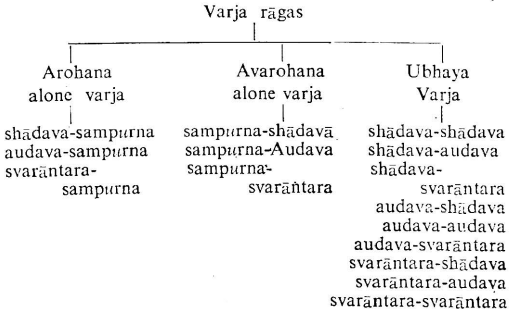
The member of Bhāshānga ragas used in Karnatic Music is twenty-five.

TABLE IV



*Varja rāgas may further be classified into :—

1. Arohana (alone) varja
2. Avarohana (alone) varja
3. Ubhaya (both) varja.



CHAPTER II

T A L A

The tāla system is perhaps the most difficult and complicated branch of South Indian music. There is no comparison to it in the other musical systems of the world. The time-measures used by all the nations put together will form but a small fraction of the innumerable varieties of rhythm used in South Indian music. A Tamil writer emphasizes the intricate nature of the tāla system in the following stanza :

“தென்றல் வடிவுஞ் சிவனுர் திருவடிவு
மன்றல் வடிவு மதன்வடிவுங்--குன்றுத
வேயினிசை வடிவும் வேதவடிவுங் காணில் ,
ஆயதாளம் காணலாம்.”

Meaning : “If one can see the form of the southern breeze, the form of Siva, the form of scent, the form of Manmatha (Cupid), the form of the flute tone and the form of the Vedas, one can see the subtlety of the tāla.”

The development of tāla mnemonics and the art of drumming have contributed to the high development of the tāla system. It should be remembered, that when a mridangam player accompanies a musician (vocalist or instrumentalist) in India, he does not merely beat the sarva laghu, but provides a cross - rhythmical accompaniment based on the style, movement and rhythmical construction of the pieces rendered. This ‘rhythmical harmony’ provided by the mridangam player contributes to the excellence of a concert of Indian music.

The ancient books on music refer to the classification of tālas into *mārgi* and *desi* and enumerate the classical 108

tālas. Latterly a system of 35 tālas developed and Purandara Dāsa gave prominence to this simpler system by composing alankāras, gitas and sulādis in them. While the 108 tālas make use of all the shadangas, the 35 tālas use only the laghu, drutam and anudrutam. In addition to these, a system of tālas known as the *Nava sandhi tālas* (நவஸந்தி தாளங்கள்) has been in use in temple rituals from ancient times. There is also the Chāpu tāla with its varieties and the Desādi and Madhyādi tālas. The scheme of the 35 tālas is explained here. The other tālas are explained in Books III and IV.

Law of Homogeneity

Of the sapta tālas, the Dhruva, Matya and Ata alone admit of a plurality of laghus. And within each one of the varieties of these tālas, the laghu retains its homogeneous character. That is, if we take the Tisra jāti Dhruva tāla, all the three laghus figuring in the tāla are of the *tisra* type,—not that one can be *chaturasra* and the other *khanda* and so on. In the same manner, *Khanda jāti* Matya tāla means, both the laghus therein are of the *khanda* variety; likewise *Sankirna jāti* Ata tāla means the two laghus therein are of the *sankirna* variety and so on. Thus in tālas consisting of more than one laghu, no two varieties of the laghu can come in one and the same variety of the tāla. In other words the laghu retains its *homogeneous* character within the tāla.

Presumptions regarding the seven talas.

Unless otherwise stated, the following presumptions hold good :—

Dhruva tāla	means	Chaturasra jāti	Dhruva tāla.
Matya tāla	means	„	Matya tāla.
Rūpaka tāla	means	„	Rupaka tāla.
Jhampa tāla	means	Misra jāti	Jhampa tāla.
Tripura tāla	means	Tisra jāti	Tripura tāla.
Ata tāla	means	Khanda jāti	Ata tāla.
Eka tāla	means	Chaturasra jāti	Eka tāla.

The Scheme of 35 Talas

Briefly stated, the 35 tālas result by the change of the laghu jāti in the sapta tālas. The student will do well to recall to his mind, the sapta tālas and their constituent angas given in Table VIII on P. 77 of Book I. Now taking the Eka tāla, if the chaturasra laghu is respectively substituted by the tisra, khanda, misra and sankirna laghus, we get four new varieties of the Eka tāla, the aksharakāla value of the āvarta varying in each case on account of the substitution of the laghus of different magnitudes. Thus the Eka tāla on account of the five laghu jātis admits of five varieties. In the same way, the other six tālas also admit of five varieties each and we thus get in all, the 35 talas from the seven principal tālas. There are the 35 Alankāras to illustrate the 35 tālas and these are given in Chapter IV of this book.

It should be remembered that the five angas : Anudrutam, Drutam, Guru, Plutam and Kākapādam do not admit of jāti bhedas and hence their values remain constant throughout.

In Table V given on Pp 20-23, the 35 talas are given with their technical names, signatures and total aksharakāla value for an āvarta in each case.

Arrangement of the 35 Talas

In the Table, under each tala, the various time measures are presented in the increasing order of their magnitude *i. e.* in the sequence of Tisra, Chaturasra, Khanda, Misra and Sankirna.

It is also possible to think of an alternative arrangement for the 35 talas. The jātis under each tala may be presented in the traditional order of Chaturasra, Tisra, Misra, Khanda and Sankirna. In this arrangement, the serial numbers of the tala will differ from that of the previous arrangement. For instance the twelfth tala in the first arrangement will be the Chaturasra jāti Rupaka tala. In the second arrangement, the twelfth tala will be the Tisra jāti Rupaka tala and so on.

A third possible arrangement is to group the talas of identical jātis and present them in the usual order. In this arrangement, the Dhruva, Matya, Rupaka, Jhampa, Triputa, Ata and Eka talas of Chaturasra jāti will rank first, and then the same talas of Tisra jāti and then the same order of talas in Misra jāti and so on.

Nomenclature for the 35 Talas

There is an empirical nomenclature and a mnemonic nomenclature (based on katapayadi sankhya and bhuta sankhya) for the 35 talas. The former is given in the Table.

TABLE
EXPLAIN
*The Scheme of the

The Sapta tālas.	No.	Their varieties and
I. Dhruva ధ్రువ	1	Tisra —
	2	Chaturasra —
	3	Khanda —
	4	Misra —
	5	Sankirna —
II. Matya మత్య	6	Tisra —
	7	Chaturasra —
	8	Khanda —
	9	Misra —
	10	Sankirna —
III. Rupaka రూపక	11	Tisra —
	12	Chaturasra —
	13	Khanda —
	14	Misra —
	15	Sankirna —

*On account of the *gati bhedas*, these 35 talas give rise to 175

V

ING

Thirty-five Tālas

technical names.	Signature.	Total aksharakāla for ān āvarta
Mani మణి	$l_3 \quad \bigcirc \quad l_3 \quad l_3$	$3+2+3+3=11$
Srikara శ్రీకర	$l_4 \quad \bigcirc \quad l_4 \quad l_4$	$4+2+4+4=14$
Pramāna ప్రమాణ	$l_5 \quad \bigcirc \quad l_5 \quad l_5$	$5+2+5+5=17$
Pūrṇa పూర్ణ	$l_7 \quad \bigcirc \quad l_7 \quad l_7$	$7+2+7+7=23$
Bhuvana భువన	$l_9 \quad \bigcirc \quad l_9 \quad l_9$	$9+2+9+9=29$
Sāra సార	$l_3 \quad \bigcirc \quad l_3$	$3+2+3=8$
Sama సమ	$l_4 \quad \bigcirc \quad l_4$	$4+2+4=10$
Udaya ఉదయ	$l_5 \quad \bigcirc \quad l_5$	$5+2+5=12$
Udirna ఉదీర్ణ	$l_7 \quad \bigcirc \quad l_7$	$7+2+7=16$
Rāva రావ	$l_9 \quad \bigcirc \quad l_9$	$9+2+9=20$
Chakra చక్ర	$\bigcirc \quad l_3$	$2+3=5$
Patti పత్తి	$\bigcirc \quad l_4$	$2+4=6$
Rāja రాజ	$\bigcirc \quad l_5$	$2+5=7$
Kula కుల	$\bigcirc \quad l_7$	$2+7=9$
Bindu బిందు	$\bigcirc \quad l_9$	$2+9=11$

tala. This is explained in Book III

The Sapta Tālas.		No.	Their varieties and
IV. Jhampa ఝంప	{	16	Tisra —
		17	Chaturasra —
		18	Khanda —
		19	Misra —
		20	Sankirna —
V. Tripura త్రిపుట	{	21	Tisra —
		22	Chaturasra —
		23	Khanda —
		24	Misra —
		25	Sankirna —
VI. Ata అట	{	26	Tisra —
		27	Chaturasra —
		28	Khanda —
		29	Misra —
		30	Sankirna —
VII. Eka ఏక	{	31	Tisra —
		32	Chaturasra —
		33	Khanda —
		34	Misra —
		35	Sankirna —

Talas (Continued)

Technical names		Signature	Total aksharakāla for an āvarta
Kadamba	కదంబ	$l_3 \cup \circ$	$3+1+2 = 6$
Madhura	మధుర	$l_4 \cup \circ$	$4+1+2 = 7$
Chana	చణ	$l_5 \cup \circ$	$5+1+2 = 8$
Sura	సుర	$l_7 \cup \circ$	$7+1+2 = 10$
Kara	కర	$l_9 \cup \circ$	$9+1+2 = 12$
Sankha	శంఖ	$l_3 \rho \circ$	$3+2+2 = 7$
Ādi	ఆది	$l_4 \circ \circ$	$4+2+2 = 8$
Dushkara	దుష్కర	$l_5 \circ \circ$	$5+2+2 = 9$
Lila	లీల	$l_7 \circ \circ$	$7+2+2 = 11$
Bhoga	భోగ	$l_9 \circ \circ$	$9+2+2 = 13$
Gupta	గుప్త	$l_3 \ l_3 \circ \circ$	$3+3+2+2 = 10$
Lekha	లేఖ	$l_4 \ l_4 \circ \circ$	$4+4+2+2 = 12$
Vidala	విదళ	$l_5 \ l_5 \circ \circ$	$5+5+2+2 = 14$
Loya	లోయ	$l_7 \ l_7 \circ \circ$	$7+7+2+2 = 18$
Dhira	ధీర	$l_9 \ l_9 \circ \circ$	$9+9+2+2 = 22$
Sudha	సుధ	l_3	3
Māna	మాన	l_4	4
Rata	రత	l_5	5
Rāga	రాగ	l_7	7
Vasu	వసు	l_9	9

The 35 tālas are analysed and presented according to the magnitude of their āvartas in Table VI. It will be seen from this Table that the tāla with the maximum number of aksharakālas (29) for an āvarta, is the Sankirna jāti Dhruva tāla and the tāla with the minimum number of aksharakālas (3) for an āvarta, is the Tisra jāti Eka tāla. It will also be seen that there are a few tālas whose āvartas consist of the same number of aksharakālas. These tālas however differ from one other on account of their varying constituent angas resulting in different modes of counting and the stresses falling at different places in the āvarta. For example, the Chaturasra jāti Matya tāla, Misra jāti Jhampa tāla and Tisra jāti Ata tāla all consist of 10 aksharakālas each for an āvarta ; yet they differ from each other on account of their modes of reckoning and the beats falling on different points of the āvarta.

TABLE VI
The 35 Talas : Analysed

Total akshara- kāla for an āvarta.	Tāla	Its jāti.	Signature.
29	Dhruva	Sankirna	1 ₉ ○ 1 ₉ 1 ₉
23	Dhruva	Misra	1 ₇ ○ 1 ₇ 1 ₇
22	Ata	Sankirna	1 ₉ 1 ₉ ○ ○
20	Matya	Sankirna	1 ₉ ○ 1 ₉
18	Ata	Misra	1 ₇ 1 ₇ ○ ○
17	Dhruva	Khanda	1 ₅ ○ 1 ₅ 1 ₅
16	Matya	Misra	1 ₇ ○ 1 ₇ \

Total akshara- kāla for an āvarta	Tāla	Its jāti.	Signature.
14	{ Dhruva Ata	Chaturasra Khanda	$\begin{array}{cccc} _4 & \bigcirc & _4 & _4 \\ _5 & _5 & \bigcirc & \bigcirc \end{array}$
13	Tripura	Sankirna	$\begin{array}{cccc} _9 & \bigcirc & \bigcirc & \end{array}$
12	{ Matya Jhampa Ata	Khanda Sankirna Chaturasra	$\begin{array}{cccc} _5 & \bigcirc & _5 & \\ _9 & \smile & \bigcirc & \\ _4 & _4 & \bigcirc & \bigcirc \end{array}$
11	{ Dhruva Rūpaka Tripura	Tisra Sankirna Misra	$\begin{array}{cccc} _3 & \bigcirc & _3 & _3 \\ \bigcirc & _9 & & \\ _7 & \bigcirc & \bigcirc & \end{array}$
10	{ Matya Jhampa Ata	Chaturasra Misra Tisra	$\begin{array}{cccc} _4 & \bigcirc & _4 & \\ _7 & \smile & \bigcirc & \\ _3 & _3 & \bigcirc & \bigcirc \end{array}$
9	{ Rūpaka Tripura Eka	Misra Khanda Sankirna	$\begin{array}{cccc} \bigcirc & _7 & & \\ _5 & \bigcirc & \bigcirc & \\ _9 & & & \end{array}$
8	{ Matya Jhampa Tripura	Tisra Khanda Chaturasra	$\begin{array}{cccc} _3 & \bigcirc & _3 & \\ _5 & \smile & \bigcirc & \\ _4 & \bigcirc & \bigcirc & \end{array}$
7	{ Rūpaka Jhampa Tripura Eka	Khanda Chaturasra Tisra Misra	$\begin{array}{cccc} \bigcirc & _5 & & \\ _4 & \smile & \bigcirc & \\ _3 & \bigcirc & \bigcirc & \\ _7 & & & \end{array}$
6	{ Rūpaka Jhampa	Chaturasra Tisra	$\begin{array}{cccc} \bigcirc & _4 & & \\ \bigcirc_3 & \smile & \bigcirc & \end{array}$
5	{ Rūpaka Eka	Tisra Khanda	$\begin{array}{cccc} \bigcirc & _3 & & \\ _5 & & & \end{array}$
4	Eka	Chaturasra	$\begin{array}{cccc} _4 & & & \end{array}$
3	Eka	Tisra	$\begin{array}{cccc} _3 & & & \end{array}$

CHAPTER III

MUSICAL FORM

Music that is heard in an Indian concert falls under two heads :—

- (1) *Manodharma sangita* and (2) *Kalpita sangita*.

In the former, the performer sings or performs his own *improvised music*—music improvised on the spot without any previous thought. This improvised music is of five kinds :—(1) *Rāga ālāpāna*, (2) *Madhyamakāla* or *Tāna*. (3) * *Pallavi exposition* (4) *Svara kalpāna* and (5) *Sāhitya prastāra* or *Niraval* (நிறைவு). In *kalpita sangita*, the singer or the performer reproduces the compositions already created or composed by other composers or even by himself. *Kalpita sangita* is older than *manodharma sangita*. The forms of *manodharma sangita* are dealt with in detail in Book IV.

Kalpita sangita comprises all the musical compositions. A musical composition is a piece of music set to time. It is an exposition of the raga in conformity to the chosen rhythm. *Slokas*, *chūrnikas*, *padyas* and *viruttams* are only instances of literary forms sung to music. They are not set to time.

A musical composition can be compared to a building. What the bricks are to a building, the component *svaras*

* The *Pallavi* theme itself with its *sangatis* (having already been composed) belongs to *kalpita sangita*. It is only the exposition of the *Pallavi* that constitutes *manodharma sangita*. *Pallavis* like “*sa ri ga pa ga ichchene*” (*Mohana*) which are inspired by particular occasions and sung off-hand may be classed under *manodharma sangita*.

are to a tune. The different graces linking up the svaras contribute to ornamental effect. These graces can be compared to the cementing medium holding the bricks together and also to the outer decorative work. Just as there are small buildings and big buildings, there are short compositions like the gitas and long compositions like the varnas. Rāgamālikas and Kritis abounding in technical beauties can be compared to artistically designed, luxuriously decorated and lavishly furnished buildings.

The author of a musical composition is called a Vaggeyakāra.

Classification

South Indian music in the course of its long history has evolved many musical forms. These might be studied under the heads of (1) *Gita prabandhas* (vocal forms) (2) *Vādyā prabandhas* (instrumental forms), and (3) *Nritya prabandhas* (dance forms). Indian music being of the melodic type has evolved many vocal forms. These vocal forms fall under two divisions: *sacred forms* and *secular forms*.

Musical forms might also be studied under the heads of:—*Art/music*, *Sacred music*, *Dance music*, *Opera music*, *Martial music* and *Folk music*. The several forms under these heads possess distinctive characteristics of their own. Some forms like the kriti and varna contain numerous examples while others like the rāgamālika and tillāna contain fewer examples.

Musical compositions can again be classified into those belonging to (1) *Pure music* and (2) *Applied music*. Applied music embraces all compositions wherein music is applied or used for a specific purpose. The sāhitya is an

important factor in this group of compositions and the music which clothes the *sāhitya* serves merely as a vehicle for the better and effective interpretation of the ideas enshrined in it. Religious music, dance music, and opera music and the music of the *yaksha gāna*, *kālakshēpa*, *nondi nataka* and *nritya nataka* (*Bhāgavatha mela nataka* and *Kuravanji nataka*) are examples of Applied music. Some of these compositions have brilliant music in them and deserve to be placed side by side with specimens of art music.

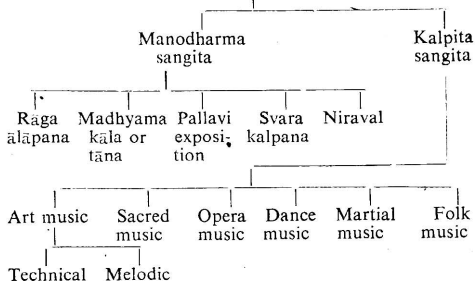
In compositions belonging to the sphere of *pure music* the main concern of the composer is the portrayal of the *rāga bhāva*, in all its visages and melodic richness. The *sāhitya*, in such cases merely serves as a vehicle for singing of the music. Music herein is the primary thing and is enjoyed for its own sake. These compositions constitute the repertoire of performers (vocalists and instrumentalists) in concerts.

Musical compositions may also be grouped under the heads of *art music* and *folk music*. All that is not folk music belongs to art music and *vice versa*. In this wider sense of the term, art music includes sacred music, opera music and dance music also. The term *art music*, in practice however is restricted to *manodharma sangita* and to compositions belonging to the realm of *pure music* and which evoke *gāna rasa* (aesthetic delight) in the listeners.

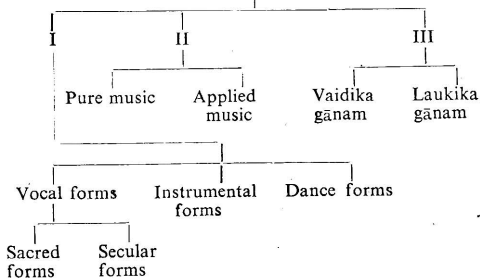
Musical compositions can again be studied under the heads of *sacred music* (*vaidika gānam*) and *secular music* (*laukika gānam*). Examples of abstract music and pure instrumental music figure in both the groups.

TABLE VII
Classifications of Musical forms

I
Music



II
Musical Forms



Under each head, we will first study the major forms and then take up the minor forms.

Compositions belonging to the realm of art music are classified into :—

1. *Technical*

2. *Melodic*

The former group comprises the *svara* exercises, *alankāras*, *gitas*, *chitta tānas*, *varnas* and other exercises which serve a specific technical purpose and help the student to acquire proficiency in the technique of rendering vocal music and instrumental music. These compositions constitute the *vocalises* and are aptly grouped under *abhyāsa gānam*. The melodic group includes **kritis*, *kīrtanas*, *padas*, *jāvalis*, *rāgamālikas*, *tillānas* and other compositions performed in a concert. These compositions are grouped under *sabhā gānam* (concert pieces).

The distinctive features of the compositions belonging to the technical and melodic groups may be summed up as follows :—

Technical

Melodic

1. The music is the more important factor and the *sāhitya* is a mere mnemonic aid to remember the music

1. The music and the *sāhitya* are of equal importance and sometimes the *sāhitya* contains beautiful ideas and sublime thoughts.

The *sāhitya* herein may have a value independent of its music.

2. The compositions are illustrative of some musical law, fact or techni-

2. The one idea in the mind of the composer in composing pieces coming

cal principle. For example, the purpose of the *alankāraś* is to illustrate the 35 *talas* ; the purpose of the *lakshana gītas* is to enumerate the *lakshana* of the *rāga* ; the purpose of the *sūtra gīta* is to present in a concise form the structure of the *ganas* and the kinds of *rāgas* derived by the process of modal shift of tonic from a basic scale ; the purpose of the *Murchchīnakāraka mela rāgamalika* is to enumerate the *melas* derived through the process of modal shift of tonic from each one of the 72 *mela-kartas* and so on.

3. Music here is the product of *conscious* effort. The composer takes the paper and pencil in his hand and writes the music.

4. The appeal is more to the intellect.

5. The composer conceives of the *dhātu* first and then thinks of an appropriate *sāhitya* to it.

under this group is the presentation of the *rāga bhāva* in all its rich colours.

3. The music herein may be the product of conscious effort; more frequently it may be the product of inspiration.

4. The appeal is equally to the intellect and emotion. Sometimes we feel as if lifted to a higher plane.

5. The *dhātu* and *mātu* are in many cases, simultaneously conceived (Ex. *Tyāgarāja's kritis*).

6. The range of the compositions under this group sometimes goes up to three octaves.

6. The compass of the music here, rarely exceeds two octaves.

It is possible sometimes to learn *by rote* compositions under this group.

Heavy, Medium and Light Music.

Classical music admits of the divisions : *Heavy, Medium and Light*. Pallavi exposition and advanced Kritis are examples of heavy classical music. Simpler kritis and javalis are instances of medium classical music. Divyanama kirtanas and simple darus are instances of light classical music.

Art music—Technical Group.

GITA.

ధాతు మాతు సమాయక్రం గీతమిత్యుచ్యతే బుధైః॥

(The union of music and words is said by the learned to constitute gita)

Gitas are the simplest of melodies. The term 'gita' literally means a 'song', but in music it signifies a particular type of composition. The music of the gita is a simple melodic extension of the rāga in which it is composed. Its tempo is uniform. It is a continuous composition * without the sections, pallavi, anupallavi and charana. The gita is sung without repetition from beginning to end. Some gitas have two sections (khandikas) and some three. Some gitas are concluded by repeating a portion of the opening part. Gitas are set in medium tempo. There are no sangatis or variations and the flow of music is natural. Neither intricate combinations nor terse sanchāras are found in its music. The raga svarūpa is well brought out in each case. For each note of the dhātu, there is usually a

*Raganga raga lakshana gitas have sections (See Book III).

syllable in the sāhitya. The theme of the sāhitya is praise of God. (Gitas in praise of musical luminaries and Achāryas also exist: for Ex. the *sapta tala gita* in Nāta raga beginning with the words: *Gāna vidyā dhurandhara* in praise of Venkata-subbayya, by Paidāla Gurumurti Sastri). Sometimes meaningless phrases like *a iya, ti iya, a iyam, vā iya*, called *mātrika padas* are found interspersed in it. These quaint syllables called *gitālankāra* phrases lend a characteristic beauty to the sāhitya of gitas. They are introduced for ornamentation only. These syllables remind one of similar syllables occurring in *Sāma gānam*.

There are instances of famous sanskrit slokas which have been cleverly introduced as sāhityas for sanchari gitas. The Bhairavi gita, Sri Rāmachandra and the Nāta gita, *Amari kabari* are well known examples.

There are gitas in sanskrit, * bhandira and kannada.

Students learn the gitas after a course in the preliminary svara exercises and alankāras. There are gitas in all the sapta tālas and their varieties. In the pre-Tyagaraja period, many composers delighted in composing gitas.

* Bhandira ಭಾಂದಿರ ಭಾಷಾ. Formerly sanskrit was used for the sāhitya of musical compositions. Later on bhandira (a kind of Prakrit) was used. Still later, compositions came to be written extensively in the vernaculars and the bhandira bhasha fell into disuse. According to Visvesvara (alias Vagisa), who has written a treatise on the grammar of this language "Bhandira is best suited for music, having had its origin in the melodious medley of the lyrical notes that arose when Sri Krishna danced with the flute in His hand, in the company of the Gopis of different countries and tongues. This language is thus a creation from Kambhoji, Magadhi, Gaudi, Maharashtri, Kalingi and Gairvani, with a sense to its potency for rich musical effect". The bhandira bhasha received an impetus for development from the time of Bhoja and Someswara. Some lakshana gitas and some of the gitas of Purandara Dasa are in bhandira.

Gitas are of two kinds :—

(1) *Sāmānya gita* and (2) *Lakshana gita*.

Sāmānya gita is the ordinary *gita* and is also called by other names as *śādhārana gita*, *lakshya gita* and *sanchāri gita*.

The points of *lakshana* mentioned above for a *gita* hold good in the case of the *sāmānya gita*. But in a *lakshana gita*, the *sāhitya*, instead of being praise of God, enumerates in so many words, the *lakshana* of the *rāga*, in which it is composed—giving amongst other details, its *varja* and *vakra svaras*, *graha*, *nyāsa* and *amsa svaras*, its *audava*, *shadava* or *sampūrṇa* character and lastly its parent *raga*, if it is a *janya raga lakshana gita*; and the *anya svaras*, if any, if it is a *bhāshāṅga raga lakshana gita*.

There are *lakshana gitas* for most of the current *rāgas* and for a few obsolete *rāgas*. At a time when the art of printing was not known and copies could not be multiplied in thousands, *lakshana gitas* were of great value in helping students to remember the *lakshanas* of *rāgas*. The *Rāgāṅga raga lakshana gitas* are a special class by themselves and are described in detail in Book III.

In a *gita*, the number of *svaras* present in an *āvarta* is equal to the number of *aksharakālas* forming the *āvarta*—the *dirgha svara* being reckoned as two *svaras*. This being so, a *gita* in *chaturasra jāti dhruva tāla* should not be reckoned in the *tisra triputa tāla*, reckoning two *svaras* for each count; and likewise a *gita* in *chaturasra jāti rūpaka tāla* should not be reckoned in the *tisra jāti eka tāla*, with two *svaras* for each count and so on. This will not be in keeping with the rhythmical construction of the composition.

Gitas are compositions in *Ati chitra tama mārga*. They are in *Ekākshara kālam*, i e. with one svara for each count.

Ghana rāga gītas are gitas in ghana ragas like Nāta, Gaula, Ārabhi, Srīrāga and Varāli.

Purandara Dāsa's introductory gitas in praise of Vighnesvara, Mahesvara and Vishnu are sometimes referred to collectively as *Pillāri gītas*. The significant introduction of the vowels : *a*, *i*, *u*, *e*, *o* and *m* in the very first gita is noteworthy and testifies to the genius of the composer.

Paidāla Gurumurti Sāstri was a prolific composer of gitas after Purandara Dāsa. He is referred to as *Veyi gita* (1000 gitas) *Paidāla Gurumūrti Sāstri*. After him no noteworthy composer has attempted sanchāri gitas. *Rāmā-mātya*, the author of *Svaramela kālānidhi* has also composed gitas. *Govinda Dikshitar* and *Venkatamakhi* are credited with many lakshana gitas.

Rāgamālā gīta is a miniature *rāgamālikā* after the model of a gita.

Gita Prabandha is a gita composition, containing in it the features of a prabandha. *Gita prabandha* also means a vocal form as opposed to *Vadya Prabandha* (instrumental form) and *Nritya prabandha* (dance form).

C h i t t a t ā n a s

Chitta tānas (called *Katakam* by ancient writers) are set exercises for the vina and are intended to enable the students of this instrument to acquire high technique in playing. This is strictly speaking, an instrumental form. There are *chitta tānas* for many current rāgas.

Katakam (கடகம்) is also the name given to a dictionary of ragas ; for ex. the *Vyasa katakam*.

S u l a d i

Sulādi (from *sūda*, a *desya* word for gita) is a composition very much like the gita in musical structure and arrangement. But it is a *tālamālika*, the sections being in different *tālas*. *Sūlādis* are illustrative of the *sūlādi tālas* and are of a higher standard than the *gitas*. The *sāhitya* syllables are fewer than in *gitas* and are characterised by a profusion of vowel extensions. The *sāhitya* is devotional. Unlike the gita, *sūlādis* are composed in different tempos i. e. *vilambita*, *madhya* and *druta*. *Sūlādis* are the counterpart of the earlier *Tālārnavam* and *Pāncha tālesvaram*. Purandara Dāsa has composed many *sūlādis*.

S v a r a j a t i

Svarajatis are pleasing melodies. They are learnt after the *gitas*. They form the stepping-stone to the next important composition, the *varna*. In point of musical structure and speed of execution, they resemble the *varnas*. A *svrajati* consists of a *pallavi*, *anupallavi* and *charanas*—the *charanas* being set in different *dhātus*. Sometimes the *anupallavi* is dispensed with. The theme of the *sāhitya* may be either devotional, heroic or amorous. It may be an invocation to some favourite Deity or may relate to the glorious and valorous deeds of some hero.

The *svrajati* originated as a dance form with *jatis*. *Emāyalādi* (ஏமாயலாடி) in *Huseni raga* is a good example. The *anupallavi* herein is concluded with a *svara sāhitya-jati* i. e. with a *solfa* passage and an appropriate *sāhitya* and

jati (*Muktāyi jatisvara sāhitya*). But Syama Sastri deleted the element of jati in it and moulded the svarajati into a musical form. His svarajatis in Bhairavi, Yadukula kambhoji and Todi are brilliant compositions and are fine concert pieces.

Syāmā Sāstri, Adiyappiah, Svāti Tirunāl, Sobhanādri, Merattūr Venkatarāma Sāstri, Wālājapet Krishnaswāmy Bhāgavatar and Chinni Krishna Dāsa have composed beautiful svarajatis.

Jatīsvaram

Jatīsvaram is a composition very much like the svarajati in point of musical structure, but has no sāhitya and the piece is sung with the solfa syllables. It is a composition belonging to the realm of dance music. The piece in Bilahari raga S, \dot{r} G P D \dot{S} N D is a splendid example of this type of composition. The Sāhitya '*Rārā Venu gopāpālā*' is a later composition, tacked on to the piece by some obscure composer. Jatisvara compositions are moulded on the patterns of jati passages.

In some Jatisvaras, the muktayi svaras consist of half-āvarta svaras and half-āvarta jatis. Ponnayya, Vadivelu and Sivānandam have composed jatisvaras of this type.

This *solfeggio* composition is also known as *svara pallavi*.

There are Jatisvaras wherein the Pallavi and Anupallavi are sung to Jatis and the Charanas are sung to a mixture of svaras and jatis. "*Tārijhemtaka*" in Attana raga - Adi tala is a very good example. Jatisvaras of this type are sometimes called *Sabda Pallavis*.

Rāgamālika Jatisvaras also exist. H. H. Svāti Tirunāl has composed some good compositions belonging to this type.

Svarajatis and Jatisvaras may be composed in *chauka kāla* (slow tempo) or in *madhyamakāla* (medium tempo).

In the *svarajati*, the aim of the composer is to picturise the raga in all its brilliant colours. But the *jatisvaram* is moulded on the background of Jati patterns. *Jatisvaram* is a derivative name since phrases of jatis were strung into a musical sequence. The *jatisvaram* is of interest from the rhythmical point of view. But the *svarajati* is of interest from the musical point of view. The name *svarajati* was given to that form, because a passage of jatis originally formed an integral part of the composition. The Huseni *svarajati* is a wellknown form conforming to this type. Later on the introduction of jatis was given up.

Gana krama (கானக்கிரமம்)

In *gitas*, the compositions are sung from beginning to end without repeating the *avartas*. If a *gita* consists of two sections as in *Kamalajadala* (Kalyani), the second section is sung after the first section. In *jatisvaras* and *svarajatis*, which have the sections, *pallavi*, *anupallavi* & *charana*, the *pallavi* is first sung and is followed by the *anupallavi*. The *pallavi* is repeated after this and then the *charana* is sung. The *charanas* are sung in their sequential order and at the conclusion of each, the *pallavi* is repeated.

CHAPTER IV

ALANKARAS

Lesson 1.

1. Dhruva tāla—Tisra jati (*Mani tālā*) I_3
 Total Aksharakāla :— $1_3 \bigcirc 1_3 1_3 : 3+2+3+3=11$.

$ _3$	\bigcirc	$ _3$	$ _3$
s r g	s g	r g m	g m p
r g m	r m	g m p	m p d
g m p	g p	m p d	p d n
m p d	m d	p d n	d n s
s n d	s d	n d p	d p m
n d p	n p	d p m	p m g
d p m	d m	p m g	m g r
p m g	p g	m g r	g r s

2. Dhruva tāla—Chaturasra jati (*Srikara tāla*)
 Total Aksharakāla :— $1_4 \bigcirc 1_4 1_4 : 4+2+4+4=14$.
 (See Book I p. 78)

3. Dhruva tāla—Khanda jati (*Pramāna tāla*) I_5
 Total Aksharakāla :— $1_5 \bigcirc 1_5 1_5 : 5+2+5+5=17$.

$ _5$	\bigcirc	$ _5$	$ _5$
s r g m p	m g	s r g m g	s r g m p
r g m p d	p m	r g m p m	r g m p d
g m p d n	d p	g m p d p	g m p d n
m p d n s	n d	m p d n d	m p d n s
s n d p m	p d	s n d p d	s n d p m
n d p m g	m p	n d p m p	n d p m g
d p m g r	g m	d p m g m	d p m g r
p m g r s	r g	p m g r g	p m g r s

4. Dhruva tāla—Misra jāti (*Purna tāla*) 1_7
 Total Aksharakāla :— $1_7 \bigcirc 1_7 1_7 : 7+2+7+7=23$.

$ _7$	\bigcirc	$ _7$	$ _7$
s r g m p d p	m g	s r g m p m g	s r g m p d n
r g m p d n d	p m	r g m p d p m	r g m p d n s
ś n d p m g m	p d	ś n d p m p d	ś n d p m g r
n d p m g r g	m p	n d p m g m p	n d p m g r s

5. Dhruva tāla—Sankirna jāti (*Bhuvana tāla*) 1_9
 Total Aksharakāla :— $1_9 \bigcirc 1_9 1_9 : 9+2+9+9=29$.

$ _9$	\bigcirc	$ _9$	$ _9$
S R G m p d	p m	S R G m p m	S R G m p d
R G M p d n	d p	R G M p d p	R G M p d n
G M P d n ś	n d	G M P d n d	G M P d n s
Ś N D p m g	m p	Ś N D p m p	Ś N D p m g
N D P m g r	g m	N D P m g m	N D P m g r
D P M g r s	r g	D P M g r g	D P M g r s

Lesson 2.

6. Matya tāla—Tisra jāti (*Sāra Tāla*) II_3
 Total Aksharakāla :— $1_3 \bigcirc 1_3 : 3+2+3=8$.

$ _3$	\bigcirc	$ _3$
s r g	s r	g m p
r g m	r g	m p d
g m p	g m	p d n

3	○	3
m p d	m p	d n s
s n d	s n	d p m
n d p	n d	p m g
d p m	d p	m g r
p m g	p m	g r s

7. Matya tāla—Chaturasra jāti (Sama tāla) II₄
 Total Aksharakāla :—1₄ ○ 1₄ : 4+2+4=10.
 (See Book I p. 79)

8. Matya tāla—Khanda jāti (Udaya tāla) II₅
 Total Aksharakāla :—1₅ ○ 1₅ : 5+2+5=12.

5	○	5
s r g m g	r g	s r g m p
r g m p m	g m	r g m p d
g m p d p	m p	g m p d n
m p d n d	p d	m p d n s
s n d p d	n d	s n d p m
n d p m p	d p	n d p m g
d p m g m	p m	d p m g r
p m g r g	m g	p m g r s

9. Matya tāla—Misra Jāti (Udirna tāla) II₇
 Total Aksharakāla :—1₇ ○ 1₇ : 7+2+7=16.

7	○	7
s r g m p d p	m g	s r g m p d n
r g m p d n d	p m	r g m p d n s
s n d p m g m	p d	s n d p m g r
n d p m g r g	m p	n d p m g r s

10. Matya tāla—Sankīrna jāti (*Rāvā tāla*) II₉
 Total Aksharakāla :—1₉ ○ 1₉ : 9+2+9 = 20.

₉	○	₉
S R G m p m	d p	S R G m p d
R G m p d p	n d	R G M p d n
G M P d n d	ś n	G M P d n ś
Ś N D p m p	g m	Ś N D p m g
N D P m g m	r g	N D P m g r
D P M g r g	s r	D P M g r s

Lesson 3

11. Rūpaka tāla—Tisra jāti (*Chakra tāla*) III₃
 Total Aksharakāla :—○ 1₃ : 2+3 = 5.

○	₃
s r	g m p
r g	m p d
g m	p d n
m p	d n ś
ś n	d p m
n d	p m g
d p	m g r
p m	g r s

12. Rūpaka tāla—Chaturasra jāti (*Patti tāla*) III₄
 Total Aksharakāla :—○ 1₄ : 2+4 = 6.

(See Book 1 p. 80)

13. Rūpaka tāla—Khanda jāti (*Rāja tāla*) III₆Total Aksharakāla :—○ 1₅ : 2+5=7.

○	5
s r	s r g m p
r g	r g m p d
g m	g m p d n
m p	m p d n s
s n	s n d p m
n d	n d p m g
d p	d p m g r
p m	p m g r s

14. Rūpaka tāla—Misra jāti (*Kula tāla*) III₇Total Aksharakāla :—○ 1₇ : 2+7=9.

○	7
s r	s r g m p d n
r g	r g m p d n s
s n	s n d p m g r
n d	n d p m g r s

15. Rūpaka tāla—Sankirna jāti (*Bindu tāla*) III₉Total Aksharakāla :—○ 1₉ : 2+9 = 11.

○	9
s r	S R G m p d
r g	R G M p d n
g m	G M P d n s
s n	Ś N D p m g
n d	N D P m g r
d p	D P M g r s

Lesson 4.

16. Jhampa tāla — Tisra jāti (*Kadamba tāla*) IV_3
 Total Aksharakāla :— $1_3 \cup \circ : 3+1+2=6$.

1_3	\cup	\circ
s r g	m	P
r g m	p	D
g m p	d	N
m p d	n	Ś
ś n d	p	M
n d p	m	G
d p m	g	R
p m g	r	S

17. Jhampa tāla—Chaturasra jāti (*Madhura tāla*) IV_4
 Total Aksharakāla :— $1_4 \cup \circ : 4+1+2=7$.

1_4	\cup	\circ
s m g r	g	M
r p m g	m	P
g d p m	p	D
m n d p	d	N
p ś n d	n	Ś
s p d n	d	P
n m p d	p	M
d g m p	m	G
p r g m	g	R
m s r g	r	S

18. Jhampa tāla—Khandā Jati (*Chana tāla*) IV₅Total Aksharakāla : 1₅ ∪ ○ : 5+1+2=8.

1 ₅	∪	○
s r g m g	m	P
r g m p m	p	D
g m p d p	d	N
m p d n d	n	Ś
ś n d p d	p	M
n d p m p	m	G
d p m g m	g	R
p m g r g	r	S

19. Jhampa tāla—Misra jāti (*Sura tāla*) IV₇Total Aksharakāla : —1₇ ∪ ○ : 7+1+2=10.

(See Book I p. 81)

20. Jhampa tāla—Sankīrna Jāti (*Kara tāla*) IV₉Total Aksharakāla : —1₉ ∪ ○ : 9+1+2=12.

1 ₉	∪	○
S R G m p m	p	D
R G M p d p	d	N
G M P d n d	n	Ś
Ś N D p m p	m	G
N D P m g m	g	R
D P M g r g	r	S

Lesson 5

21. Triputa tāla—Tisra jāti (*Sankha tāla*) V_3
 Total Aksharakāla :— $1_3 \bigcirc \bigcirc : 3+2+2=7$.
 (See Book I p. 82)

22. Triputa tāla—Chaturasra jāti (*Ādi tāla*) V_4
 Total Aksharakāla :— $1_4 \bigcirc \bigcirc : 4+2+2=8$.

$ _4$	\bigcirc	\bigcirc
s m g r	s r	g m
r p m g	r g	m p
g d p m	g m	p d
m n d p	m p	d n
p s n d	p d	n s
s p d n	s n	d p
n m p d	n d	p m
d g m p	d p	m g
p r g m	p m	g r
m s r g	m g	r s

23. Triputa tāla—Khanda jāti (*Dushkara tāla*) V_5
 Total Aksharakāla :— $1_5 \bigcirc \bigcirc : 5+2+2 = 9$.

$ _5$	\bigcirc	\bigcirc
s r g m p	g m	p d
r g m p d	m p	d n
g m p d n	p d	n s
s n d p m	d p	m g
n d p m g	p m	g r
d p m g r	m g	s

24. Tripura tāla—Misra jāti (Lila tāla) V_7

Total Aksharakāla :— $1_7 \bigcirc \bigcirc : 7+2+2 = 11.$

$ _7$	\bigcirc	\bigcirc
$\dot{s} r g m p d n$	$m p$	$d n$
$r g m p d n \dot{s}$	$p d$	$n \dot{s}$
$\dot{s} n d p m g r$	$p m$	$g r$
$n d p m g r s$	$m g$	$r s$

25. Tripura tāla—Sankirna jāti (Bhoga tāla) V_9

Total Aksharakāla :— $1_9 \bigcirc \bigcirc : 9+2+2 = 13.$

$ _9$	\bigcirc	\bigcirc
$S R G m p d$	$m p$	$d n$
$R G M p d n$	$p d$	$n \dot{s}$
$\dot{S} N D p m g$	$p m$	$g r$
$N D P m g r$	$m g$	$r s$

Lesson 6.

26. Ata tāla — Tisra jāti (Gupta tāla) VI_3

Total Aksharakāla :— $1_3 1_3 \bigcirc \bigcirc : 3+3+2+2 = 10.$

$ _3$	$ _3$	\bigcirc	\bigcirc
$s r g$	$r g m$	P	P
$r g m$	$g m p$	D	D
$g m p$	$m p d$	N	N
$m p d$	$p d n$	\dot{S}	\dot{S}
$\dot{s} n d$	$n d p$	M	M
$n d p$	$d p m$	G	G
$d p m$	$g m g$	R	R
$p m g$	$m g r$	S	S

27. Ata tāla—Chaturasra jāti (*Lekha tāla*) VI₄Total Aksharakāla :—1₄ 1₄ ○ ○ : 4+4+2+2=12.

1 ₄	1 ₄	○	○
s r g m	s r g m	P	P
r g m p	r g m p	D	D
g m p d	g m p d	N	N
m p d n	m p d n	Ṣ	Ṣ
ṣ n d p	ṣ n d p	M	M
n d p m	n d p m	G	G
d p m g	d p m g	R	R
p m g r	p m g r	S	S

28. Ata tāla—Khanda jāti (*Vidala tāla*) VI₅Total Aksharakāla :—1₅ 1₅ ○ ○ : 5+5+2+2=14.

(See Book I p. 83)

29. Ata tāla—Misra jāti (*Loya Tāla*) VI₇Total Aksharakāla :—1₇ 1₇ ○ ○ : 7+7+2+2=18.

1 ₇	1 ₇	○	○
s R g m p d	S r g m p d	N	N
r G m p d n	R g m p d n	Ṣ	Ṣ
ṣ N d p m g	Ṣ n d p m g	R	R
n D p m g r	N d p m g r	S	S

30. Ata tāla—Sankirna jāti (*Dhira tāla*) VI₉

Total Aksharakāla :—1₉ 1₉ ○ ○ : 9+9+2+2=22.

1 ₉	1 ₉	○	○
s R G M p d	S r G M p d	N	N
r G M P d n	R g M P d n	Ṣ	Ṣ
ṣ N D P m g	Ṣ n D P m g	R	R
n D P M g r	N d P M g r	S	S

Lesson 7.

31. Eka tāla—Tisra jāti

(*Sudha tāla*) VII₃

Total Aksharakāla : 1₃ = 3.

1 ₃
s r g
r g m
g m p
m p d
p d n
d n ṣ
ṣ n d
n d p
d p m
p m g
m g r
g r s

32. Eka tāla—Chaturasra jāti

(*Māna tāla*) VII₄

Total Aksharakāla : 1₄ = 4.

(See Book I p. 84)

33. Eka tāla—Khanda jāti
(Rata tāla) VII ₅

Total Aksharakāla : 1₅ = 5.

| ₅

s r g m p
r g m p d
g m p d n
m p d n s
s n d p m
n d p m g
d p m g r
p m g r s

34. Eka tāla — Misra jāti
(Rāga tāla) VII ₇

Total Aksharakāla : 1₇ = 7.

| ₇

s r g m p d n
r g m p d n s
s n d p m g r
n d p m g r s

35. Eka tāla—Sankirna jāti
(Vasu tāla) VII ₉

Total Aksharakāla : 1₉ = 9

| ₉

S R G m p d
R G M p d n
G M P d n s
S N D p m g
N D P m g r
D P M g r s

Lesson 8.
Additional Alankaras.

1. **Dhruva tāla — Tisra jāti**

3	○	3	3
s r g	s g	s m g	r g m
r g m	r m	r p m	g m p
g m p	g p	g d p	m p d
m p d	m d	m n d	p d n
p d n	p n	p s n	d n s
s n d	s d	s p d	n d p
n d p	n p	n m p	d p m
d p m	d m	d g m	p m g
p m g	p g	p r g	m g r
m g r	m r	m s r	g r s

2. **Dhruva tāla—Tisra jāti**

3	○	3	3
S r	G	s r g	r g m
R g	M	r g m	g m p
G m	P	g m p	m p d
M p	D	m p d	p d n
P d	N	p d n	d n s
Ṣ n	D	s n d	n d p
N d	P	n d p	d p m
D p	M	d p m	p m g
P m	G	p m g	m g r
M g	R	m g r	g r s

3. Dhruva tāla — Khanda jāti

5	○	- 5	5
s m G m	r g	s g R g	S r g m
r p M p	g m	r m G m	R g m p
g d P d	m p	g p M p	G m p d
m n D n	p d	m d P d	M p d n
p s N s	d n	p n D n	P d n s
s p D p	n d	s d N d	S n d p
n m P m	d p	n p D p	N d p m
d g M g	p m	d m P m	D p m g
p r G r	m g	p g M g	P m g r
m s R s	g r	m r G r	M g r s

7	○	7	7
s m G m r g	s r	s g R g s r	S R G m
r p M p p g m	r g	r m G m r g	R G M p
g d P d m p	g m	g p M p g m	G M P d
m n D n p d	m p	m d P d m p	M P D n
p s N s d n	p d	p n D n p d	P D N s
s p D p n d	s n	s d N d s n	S N D p
n m P m d p	n d	n p D p n d	N D P m
d g M g p m	d p	d m P m d p	D P M g
p r G r m g	p m	p g M g p m	P M G r
m s R s g r	m g	m r G r m g	M G R s

5. Matya tala — Tisra jāti

s	○	s
s r g	m g	r g m
r g m	p m	g m p
g m p	d p	m p d
m p d	n d	p d n
p d n	s n	d n s
s n d	p d	n d p
n d p	m p	d p m
d p m	g m	p m g
p m g	r g	m g r
m g r	s r	g r s

6. Jhampa tala — Khanda jāti

s	⌣	○
s r g s r	g	M
r g m r g	m	P
g m p g m	p	D
m p d m p	d	N
p d n p d	n	S
s n d s n	d	P
n d p n d	p	M
d p m d p	m	G
p m g p m	g	R
m g r m g	r	S

7. Jhampa tāla - Sankirna jāti

$ _9$	○	○
smgmrsg	r	gm
rpmppgmr	g	mp
gdppdmpgp	m	pd
mndnppdmpd	p	dn
psnsdnppdn	d	ns
spdpndsnd	n	dp
nmpmddpndp	d	pm
dgmppmddpm	p	mg
prgrmgppmg	m	gr
msrsgrmgr	g	rs

8. Tripura tāla - Khanda jāti

$ _8$	○	○
srggrs	rg	M
rgmgr	gm	P
gmpmg	mp	D
mpdpm	pd	N
pdndp	dn	Ś
sndns	nd	P
ndpndn	dp	M
dppmpd	pm	G
pmgmp	mg	R
mgrgm	gr	S

10. Ata tāla—Tisra jāti

$ _3$	$ _3$	○	○
s r g	m g r	s r	g m
r g m	p m g	r g	m p
g m p	d p m	g m	p d
m p d	n d p	m p	d n
p d n	s n d	p d	n s
s n p	p d n	s n	d p
n d p	m p d	n d	p m
d p m	g m p	d p	m g
p m g	r g m	p m	g r
m g r	s r g	m g	r s

9. Tripura tāla—Misra jāti

$ _7$	○	○
s m g m r g m	s r	g m
r p m p g m p	r g	m p
g d p d m p d	g m	p d
m n d n p d n	m p	d n
p s n s d n s	p d	n s
s p d p n d p	s n	d p
n m p m d p m	n d	p m
d g m g p m g	d p	m g
p r g r m g r	p m	g r
m s r s g r s	m g	r s

∞	4	4	○	○
s r g r	g m g r	G	M	○
r g m g	m p m g	M	P	P
g m p m	p d p m	P	D	D
m p d p	d n d p	D	N	N
p d n d	n s n d	N	S	S
s n d n	d p d n	D	P	P
n d p d	p m p d	P	M	M
d p m p	m g m p	M	G	G
p m g m	g r g m	G	R	R
m g r g	r s r g	R	S	S

$ _7$	$ _7$	○	○
s m G m r g	s g R g s r	s r	g m
r p M p g m	r m G m r g	r g	m p
g d P d m p	g p M p g m	g m	p d
m n D n p d	m d P d m p	m p	d n
P s N s d n	p n D n p d	p d	n s
s p D p n d	s d N d s n	s n	d p
n m P m d p	n p D p n d	n d	p m
d g M g p m	d m P m d p	d p	m g
p r G r m g	p g M g p m	p m	g r
m s R s g r	m r G r m g	m g	r s

CHAPTER V

GITAS

The four gītas in Malahari rāga included in Lessons 9—12 are the compositions of Purandara Dāsa. (1484—1564).

Lesson 9

15. Malahari raga—Rūpaka tāla $\left\{ \begin{array}{l} s \ r \ m \ p \ d \ \dot{s} \\ \dot{s} \ d \ p \ m \ g \ r \ s \end{array} \right.$
1. శ్రీ గణనాథ సింధూరవర్ణ కరుణాసాగర కరిషదన
లంబోదర లకుమికరా అంబాసుత అమరవినుత
లంబోదర లకుమికరా ||
 2. సిద్ధవారణ గణసేవిత సిద్ధివినాయక తే నమో నమో (లం)
 3. సకలవిద్యాది పూజిత సర్వోత్తమ తే నమో నమో (లం)
1. శ్రీ కణనాథ నిర్మలతారవర్ణ కర్ణాణ్ణసాకర కరిషదన
లంబోదర లకుమికరా అంబాసుత అమరవినుత
లంబోదర లకుమికరా
 2. నిర్మలతార కణసేవిత
నిర్మలతార కణసేవిత తే నమో నమో (లం)
 3. సకల విద్యాది పూజిత
సర్వోత్తమ తే నమో నమో (లం)

Vighnesvara gita.

○ 4	○ 4	○ 4	○ 4
m p d s s r	r s d p m p	r m p d m p	d p m g r s.
1. Sri Ga na nā tha	sin dhū . ra var na	ka ru nā sā ga ra	ka ri va da na .
2. Sid dha chā . ra na	ga na se . vi ta	sid dhi vi nā ya ka	te . na mo na mo
3. Sa ka la vi dyā .	di pū . ji ta	sa . rvo . tta ma	te . na mo na mo
{ S r m g r	s r g r S	r m p d m p	d p m g r s
Lam bo . da ra	la ku mi ka rā	am . bā . su ta	a ma ra vi nu ta
{ S r m g r	s r g r S		
Lam bo . da ra	la ku mi ka rā		

Gāṇakrama—The three khandikas in the above gita have the same music; at the conclusion of each, the portion marked within brackets [i. e., Lambodara . lakumikarā] should be sung.

Lesson 10.

15. Malahari rāga—Rūpaka tāla $\begin{cases} s r m p d \dot{s} \\ \dot{s} d p m g r s \end{cases}$

1. కుందనౌర గౌరీపర ముందిరాయ మానమకుట
మందార కుసుమాకర మకరందం వాసితువా ||
2. హేమకుట సింహాసన విరూపాక్ష కరుణాకర (మం)
3. చందమామ మందాకిని ముందిరాయ మానమకుట (మం)

1. కుంతకెలర కెలరీవర మంతిరాయ మానమకుట
మంతార కుసుమాకర మకరంతం వాసితువా ||
2. శ్రేణుమకుట లిమ్మలూసన విరూపాక్ష కరుణాకర (మంతార)
3. శంతమామ మంతాకిని మంతిరాయ మానమకుట (మంతార)

Mahesvara gita.

Q	4	○	4	○	4	○	4
d p m g r s		r m p d m p		d r i s d p		d p m g r s	
1. Kun da gau . . ra		gau . ri . va ra		mandi rā . . ya		mā . na ma ku ta	
2. He ma kū . . ta		sim . hā . sa na		vi rū pā . . ksha		ka ru nā . ka ra	
3. Chan da mā . . ma		man . dā . ki ni		man di rā . . ya		mā . na ma ku ta	
{ S R R		d p m g r s		s r M g r		s r g r S	
man dā ra		ku su mā . ka ra		ma ka ran dam .		vā . si tu va	

Gānakrama :—The above three khandikas have the same music ; at the conclusion of each, the portion marked within brackets [mandāra.....vāsītuvā] should be sung.

15. Malahari rāga — Triputa tāla { s r m p d ś
{ ś d p m g r s

1. కెరెయ నీరను కెరెనచల్లి వరప పడెదప రంతి కాణిరో
హరియ కరుణ దొళద భాగ్యప హరిసమర్పణ హుడిబతుకీరో
హరియ కరుణ దొళద భాగ్యప॥
2. శ్రీ పురందర విఠలరాయ చరణ కమలప నోడి బతుకీరో (హరియ)
1. కెరెయ నీరను కెరెనచల్లి వరప పడెదప
రమతికాణిరో
హరియ కరుణ దొళద భాగ్యప హరిసమర్ప
[పణెమాడి పతుకిరో.
హరియ కరుణ దొళద భాగ్యప
2. శ్రీ పురందర విఠలరాయ చరణ కమలపణెడి
పతుకిరో (హరియ)

3 ○ ○	3 ○ ○
1. d ś ś d p m p ke . re ya ni . ra nu d d ś d p m p va ra va pa de da va { s r r s r s r Ha ri ya ka ru na do d p d ś d p Ha ri sa mar pa ne s r r s r s r Ha ri ya ka ru na do	d d p m m P ke re ge cha . lli d d p m g r s ram . ti ka . ni ro d d p m g r s lā . da bhā . gya va d d p m g r s mā . di ba tu ki ro d d p m g r s ॥ la . da bhā . gya va ॥
2. d ś ś d p m p Sri . Pu ran . da ra d d ś d p m p cha ra na ka ma la va	d d p m m P vi ta la rā . ya d d p m g r s no . di ba tu ki ro

Here, repeat the portion within brackets and conclude

Lesson 12

15. Malahari rāga—Triputa tāla.

$$\begin{cases} s & r & m & p & d & \dot{s} \\ \dot{s} & d & p & m & g & r & s \end{cases}$$

వదుమనాభా పరమపురుషా పగంజ్యోతి స్వరూపా
విదురవంద్యా విమలచరితా విహంగాది రోహణా

ఉదదినివాస ఉరగశయన ఉన్న తోన్నత మహిమ
యదుకులోత్తమ యజ్ఞరక్షక యజ్ఞశిక్షక రామనామ (పదుమనాభా)

విభీషణపాలకా నమో నమో ఇభవరదాయకా నమో నమో
శుభప్రద సుమ నోరథ సురేంద్ర మనోరంజనా
ఆభినవ పురందర విఠల్లబల్లరే రామనామ (పదుమనాభా)

పతుమనాబా పరమపురుషా పరబ్రహ్మేయాతి స్వవ్రాపా
విత్తురవంత్యా విమల శరీతా విహుంకాతి రోహణా
உததி நிவாஸ உரகசயன உன்ன தோன்னத மஹிம
யதுక్ருలోத்தమ யక్రூరక్షక யక్రூசிக్షక రామ నாம
(పతుమనాబా)

విఠిషణణ పాలకా నమో నమో ఇబవరతాయకా నమో నమో
శుభప్రద సుమనోరథ సురేంద్రమనోర బ్రహ్మ
అపి నవ పురందర విఠ్ఠల్ల పల్లరే రామ నామ (పతుమనాబా)

Vishnu gita

3	○ ○ ○	3	○ ○ ○	3	○ ○ ○
r s d S S	m g r m m P	s D d p m p	d d p m g r s		
Pa du ma nā bhā	pa ra ma pu ru shā	pa ran jyo . ti	sva rū . pā . . .		
*Vi du ra van dyā	vi ma la cha ri ta	vi ham gā . di	ro . ha na . . .		
p m p d s d s	i s d d s d p	d d p P p m	r m m P P		
u da di ni vā . sa	u ra ga sa ya . na	u . nna ton na ta	ma hi . ma .		
d d p P p m	R m m g r s	S s d d d p	P p m g r s		
ya du ku lo tta ma	yaj na ra . ksha ka	yaj na si . kshaka	Rā ma nā . . ma		
			r s d S S		
			Pa du ma nā bhā		

*The music of this line is the same as that of the previous line.

3 0 0 0	3 0 0 0	3 0 0 0	3 0 0 0
<p>d Ṣ d p m p Vi bhī sha na pā</p> <p>p m p d s d s su bha . pra da su ma</p> <p>d d p P p m a bhi . na va Pu</p>	<p>d d p m g r s la kā . na mo na mo</p> <p>r ṣ d d ṣ d p no . ra da . . su</p> <p>R m m g r s ran da ra . . vi</p>	<p>d Ṣ d p m p i bha va ra dā .</p> <p>d d p P p m re . ndra ma no .</p> <p>S s d d d p ta lla bha l . la re</p>	<p>d d p m g r s ya kā . na mo na mo</p> <p>r m m P p ran . ja na .</p> <p>P p m g r s Rā ma nā . ma</p> <p> r s d S S Pa du ma nā bhā </p>

Lesson 13.

29. *Suddha sāveri rāga—Triputa tāla*

$$\left\{ \begin{array}{l} s \ r \ m \ p \ d \ s \\ s \ d \ p \ m \ r \ s \end{array} \right.$$

అనలేకర వున్నిబోలతి సకలశాస్త్ర పురాణ ధిన్నం
 శాళధిన్నం శాళపరిఘతు రేరే అ . . . సేతువాహ పరిఘతం నం
 జటాజూట సకలశాస్త్ర పురాణ ధిన్నం శాళ ధిన్నం
 శాళపరిఘతు రేరే అ . . . సేతువాహ పరిఘతం నం ||

ஆனலேகர வுன்னிபோலதி ஸகல சாஸ்த்ர புராண தின்னம்
 தாள தின்னம் தாளபரிகது ரேரே அ.....ஸேது வாஹா

பரிகதம்னம்
 ஜடாஜுட ஸகல சாஸ்த்ர புராண தின்னம் தாள தின்னம்
 தாளபரிகது ரேரே அ...ஸேதுவாஹா பரிக தம்னம் ||

3	○	○	3	○	○
r	m	r	r	s	d s
ā	.	na	le	.	ka ra
d	d	s	D	d	p
sa	ka	la	sās	tra	pu
P	p	d	d	d	p
ta	la	dhi	.	nnam	.
p	m	r	s	r	s r
re	.	re	a	.	.
p	p	d	p	p	m r
.
d	p	d	S	S	
pa	ri	gha	tam	nam	
r	r	s	d	p	m p
ja	tā	.	jū	.	ta

(Repeat here the portion within brackets and conclude.)

Lesson 14.

GHANARAGA GITAS

Ambika gita

Appayya Dikshitar

36. Nāta rāga—Eka tāla

$$\begin{cases} s & r & g & m & p & d & n & \dot{s} \\ \dot{s} & n & p & m & r & s \end{cases}$$

అమరీ కబరీ భార భ్రమరీ ముఖరీ కృతం

దూరీ కరోతు దురితం గౌరీ చరణ పంకజం ||

అమరీ కబరీ బార బ్రమరీ ముఖరీ క్కృతమ్

తూరీ కరోతు తురితమ్ కెలూరీ శరణ పంకజమ్ ||

4	4	4
\dot{s} \dot{s} \dot{s} n a ma ri . \dot{p} \dot{s} \dot{s} n bhra ma ri . \dot{p} \dot{n} \dot{s} \dot{r} dū . ri . \dot{p} \dot{n} \dot{s} n Gau . ri .	\dot{p} \dot{s} \dot{s} n ka ba ri . \dot{p} \dot{n} \dot{s} \dot{r} mu kha ri . \dot{m} \dot{r} \dot{s} \dot{r} ka ro . tu \dot{p} \dot{s} n \dot{p} cha ra . na	\dot{p} \dot{m} \dot{g} \dot{m} bhā . . ra \dot{s} \dot{s} \dot{S} kru ta m \dot{s} \dot{s} \dot{s} n du ri tam . \dot{m} \dot{m} \dot{r} \dot{s} pan . ka jam

Lesson 15.

Sri Rama gita

29. Arabhi rāga—Triputa tāla

$$\begin{cases} s & r & m & p & d & s \\ s & n & d & p & m & g & r & s \end{cases}$$

రేరే శ్రీరామచంద్రా రఘువంశబీలకా

రాఘవేంద్రా అ.....అశ్రితజనపోషకురే

సీతామనోరంజను రేరే ధీరా రావణాసుర అంతకురే

అ ..ఇ్య ఇ్య అ.. ఇ్య ఇ్య అ.. ఇ్యరే దీన జన మందారు మామవ॥

రేరేరే ధీరామచంద్రా రకు వంశతిలకా

రాకవేంద్రా అ.....అశ్రిత జన పోషకురే

సీతామనోరంజను రేరేరేరేరే రావణాసుర అంతకురే

అ..ఇయియి అ..ఇయియి అ..ఇయిరే తీన జన

మంతాను మామవ ॥

3 ○ ○	3 ○ ○
<p> P p m m P Re re Sri . Rā r r s d d r s m g r , r s S vām . sa ti la ka </p>	<p> m g r s r m g . . ma cham . R , , , s r drā . . . Ra ghu p m m P P Rā . gha ven dra m g r s r s s d S d d d p . ā sri ta ja na r s r m g r r Si . . . tā . . . ma P p P P re re dhi rā m g r s r s s an . ta ku . re . </p>
<p> p m p m g r r a d d r s r s s p m p d s S po . sha ku . re m g r m m p m no . . ran . ja nu p m p d s s r Rā . va nā . su ra </p>	

3 ○ ○	3 ○ ○
d d r s r s s	d d s d d d p
a . . i ya i ya	a . . i ya i ya
p m p d s S	S s d d P
a . . i ya re	dī na ja na man
p m p m g r r	(Here repeat the portion within brackets and conclude.)
dā . ru mā . ma va	

Lesson 16.

Lakshmi gita

28. Mohana rāga—Rūpaka tāla

$$\begin{cases} s r g p d s \\ s d p g r s \end{cases}$$

పరవీణా మృదువాణీ వనరుహలో చసురాణీ
 సురుచిరబం బరవేణీ సురసుత కల్యాణీ
 నిరుపమశుభ గుణలోలా నిరతజయ ప్రదశీలా
 వరదప్రియ రంగనాయకీ వాంచితఫల దాయకీ
 సరసిజా సనజననీ జయజయజయ ||

వరవీణా మృదువాణీ వనరుహలోలా శనురాణీ
 సురుచిరబం బరవేణీ సురసుత కల్యాణీ
 నిరుపమశుభ గుణలోలా నిరతజయ ప్రదశీలా
 వరదప్రియ రంగనాయకీ వాంచితఫల దాయకీ
 సరసిజా సనజననీ జయజయజయ ||

○ 4	○ 4	○ 4
g g P P	d p Š Š	r š d d P
va ra vi nā	mru du pā nī	va na ru ha lo
d p g g R	g p d š D	d p g g R
cha nu rā . nī	su ru chi ra bam	ba ra ve . ni
g g d p G	p g g r S	g g g g r g
su ra nu ta kal	yā . . . ni	ni ru pa ma su bha
p g P P	g g d p D	d p Š Š
gu na lo la	ni ra ta ja ya	pra da sī la
d g r r š š	d š d d d p	g p d š d p
va ra da . pri ya	Ran ga nā . ya ki	vān . chi ta pha la
d p g g r s	s g G G	g r p g R
dā . . . ya ki	sa ra si ja	sa na ja na ni
s r s g r s		
ja ya ja ya ja ya		

Lesson 17.

Vishnu gita

65th Melakarta: Kalyāni rāga—Triputa tāla { s r g m p d n ś
ś n d p m g r s

கமலஜதஜ விமலஸுநயந கரிவரத கருணாம்புதே

கருணசரதே கமலாகாந்தா

கேசினரகா சுரவிபேதந வரதவேலஸுர புரோத்தம

கருணசரதே கமலாகாந்தா ||

கமலஜதஜ விமலஸுநயந கரிவரத கருணாம்புதே

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கேசினரகா சுரவிபேதந வரதவேலஸுர புரோத்தம

கருணசரதே கமலாகாந்தா ||

३ ० ०	३ ० ०	३ ० ०
ś ś ś n d n ś ka ma la ja . da la	n d p d p m p vi ma-la su na ya na	g m p p d d n ka ri va ra da ka ru
d p m p g r s nā . mbu dhe . . .	d d d g g G ka ru nā sa ra dhe	m P m g r s ka ma lā . . .
R , S ; kān . tā . }	g m p m p d p ke . si na ra kā .	n d p d p m p su ra vi bhe . da na
g m p p d d n va ra da ve . la .	d p m p g r s su ra pu ro . ttama	d d d g g G ka ru nā sa ra dhe
m P m g r s ka ma lā . . .	R , S ; kān . tā .	

Lesson 18.

20.

Bhairavi rāga—Dhruva tāla

$$\left\{ \begin{array}{l} s \ r \ g \ m \ p^* d \ n \ s \\ s \ n \ d \ p \ m \ g \ r \ s \end{array} \right.$$

శ్రీరామచంద్ర శ్రీతపరిజాత సమస్తకల్యాణగుణ భిరామ

సీతాముఖ అంభోరుహ చంచరీక నిరంతరం మంగళ మాతనోతు ||

ஸ்ரீராம சந்திர ச்ரிதபாரிஜாத ஸமஸ்த கல்யாண

குண அபிராம ஸீதாமுக அம்போருஹ சம்சரீக

நிரந்தரம் மங்கள் மாதனோது ||

N. B —The foreign note chatussruti dhaivata is shown with an asterisk wherever it occurs.

4	○	4	4
g r g m Sri . Rā .	P ma	m g r g chan . dra .	m p M Sri ta pā
p d n n . ri ja .	d p . ta	m n d p sa ma . .	m g r s . . . sta
s r s p ka . l yā	m p . na	g r g m gu na a bhi	g g r s Rā . . ma
r r g g Si . tā .	m m mu kha	g g - r g . . am .	m p m m bho . ru ha
p *d *d n cham . . .	n s . cha	p *d n s rī . . .	r g r s . . . ka
n r s g ni ram . ta	r s ram .	n n d m man . ga la	p *d n s mā . . ta
p d p s no . . tu	n s . .	p d m p	G r s

$$\left\{ \begin{array}{l} g \ r \ g \ m \ P \\ \text{Sri} \ . \ \text{Ra} \ . \ \text{ma} \end{array} \right\}$$

20. Anandabhairavi rāga—Dhruva tāla $\left\{ \begin{array}{l} s\ g\ r\ g\ m\ p^*d\ p\ \dot{s} \\ \dot{s}\ n^*\ d\ p\ m\ g\ r\ s \end{array} \right.$

பாணி ஸ்ரீராமசந்திர கௌஸல்யா பாக்யரூபா
க்ருபாளோ திசமே பக்திம் தேவதேவ கர்மித தாயக
ரமாகாந்த ஸுரஸேவ்ய கீத அம்ருதபான
அகிலலோக வந்தித சரண ஆச்ரிதஜன மந்தார
ஜலஜாதா ப்ரபாவா ஆதிபூஜித கமலாக்ஷ
நிகமவேத்ய நீலவர்ண ஸ்ரீ குரு மூர்த்தே ||

1 4	○	1 4	1 4
{ S S	g r	s g g m	g r s n
Pā hi	Srī .	Rā . . ma	chan . . dra
s m G	r s	s r s n	N S
{ Kau . sal	ya .	bhā . . gya	rū pā
m g G	M	s n N	S S
kru pā .	lo	di sa me	bhak tim
S s p	m g	G m g	r g r s
de va de	. va	ka mi ta	dā . ya ka

। ॥	○	। ॥	। ॥
n S g	g m	g m d p	m g r s
Ra mā kā	. nta	su ra se vya
P M	P	m g p m	g r s r
gi ta	a	mru ta pā na
s n s g	g m	p d p m	g r S
a khi la lo	. ka	van . di ta	cha ra na
S s d	p m	m p m g	G m m
ā sri ta	ja na	man . . .	dā . . ra
p n N	S	p s n n	S S
ja la jā	tā	pra bhā vā
P p s	, s	s n n d	d p p m
ā di pū	. .	ji ta ka ma	lā . . kṣha
g m p d	p m	m d p m	g r s n
ni ga ma ve	. dya	ni . . la	va . . rna
s g g m	p m	g r - g m	p d P
(a)
S n d	p m	P - m p	m g r s
sri . .	Gu ru	mū rte

Here, repeat the portion within brackets and conclude.

JATISVARAS

[Swāti Tirunāl

LESSON 20

1. Todi rāga—Adi tala

{ s r g m p d n ś
ś n d p m g r s

8.

4	○	○
<p>Pallavi</p> <p>Ś ; ; - S N D P M</p> <p>~R ; ; - R S N D N</p>	<p>~G ; ; - ~D</p> <p>S ; ; - ~G</p>	<p>; P M G</p> <p>M P D N </p>
<p>Charanas</p> <p>1. ś r ś N, - n s n D - n s n s r</p> <p>s r ś N, - n s n D - n s n s r</p>	<p>Ś ; ; - s n</p> <p>s N d - p G r</p>	<p>d p m - g m p d n</p> <p>s G m - p D n </p>
<p>*2. ~D ; ; - d n d p m - g m p d n</p> <p>~D ; ; - d n D ; ; - n s</p>	<p>~D ; ; - d r</p> <p>~D ; ; - n s r</p>	<p>ś N - r ś n d n</p> <p>~D ; ; - g m g</p>

1.	○	○
<p> $\tilde{D} n d p m - g m \tilde{D} n . p d n s n$ 3. $\dot{S} ; ; - i n \dot{s} - d N n - p d m$ $S ; ; ; - - d n s r n$ $\dot{s} S n - d n s n D ; - u N d$ $\dot{s} g r s n d - n \dot{s} i r s n d - p m g m$ </p>	<p> $\tilde{D} n \dot{s} - \tilde{D} r \dot{s}$ $P p - g m r g - s$ $s r g - s r g m - g$ $p d n d - P , m$ $\underline{P}, \underline{d} n d - \underline{D}, n s d$ </p>	<p> $\tilde{D} \dot{g} \dot{r} \dot{s} - D n \parallel$ $r n s - d n d s n$ $m p d / - n d m d n$ $d D m d n \dot{s} r$ $n d - s n r - s r n \parallel$ </p>

* Note (The occurrence of the dhaivata svara both as the initial note and terminal note of phrases invests the second charana with a special charm).

Lesson 21

29. Bilahari rāga—Adi tala

$$\left\{ \begin{array}{l} s r g p d \ddot{s} \\ \ddot{s} n d p m g r s \end{array} \right.$$

Note :—This composition though strictly a jatiswara, is popularly called a svarajati. The s̄ahitya Rāravenu gopā pālā given here is a later interpolation. Faulty prosody is seen in some parts of this s̄ahitya.

పల్లవి

రా రా వేణు గోపా పాలా రాజిత సద్గుణ జయశీలా ॥

అను పల్లవి

సారసాక్ష నేరమేమి మారుబారి కోర్వలేరా ॥

చరణములు

1. ననవిలుతుని గర్వమడంచి సదా ననునీయెడపై దయతో పొదుగుర ॥
2. సందగోపాల నే నెందుబోజాలా నీ
విందురారా సదమలమదితో ముదమలరగ నాకెదురుగ గదియర ॥
3. పలుమారును గారవముననిన్ బిలచిన బలుగప్పు నలుగకురా
కరివరదా మరిమరి నా యధరముగ్రో లరకనికరముగ ॥
4. రా సగధర రామురహర రా భవహర రావేరా
ఈ మగువను ఈ లలనను ఈ సొగసిని చేకోరా
కోరిక లింపొందా తెందము నీయెడ జేరెను నిజెంద
మరువకురా కరములచే మరిమరి నినుశరణనెదర ॥
5. నా తలపుల సమగూర్చు సరసత వెలయంగ కరముల
ననుగొని చిత్తము మెప్పింప మరివా తెరలానుచు నీ వశమున
నా సకలముజేర్చు మారునియనిలోన సారెకుజయ మొంద
నీవిటు వలకొనురా నాకిదె వలయునురా సరగుననిటు ॥

பல்லவி

ராரா வேணுகோபாபால ராஜிதஸத்குண ஜயசீலா ||

அனுபல்லவி

ஸாரஸாஷு நேரமேமி மாருபாரி கோர்வலேரா ||

சரணங்கள்

1. நன்னிலுதுனிகர் வமடம் சிஸதா நனுநீ யெடபை
தயதோ பொதுகுர ||
2. நந்தகோபால. . நே னெந்துபோஜால. . நீ
விந்து ராரா - ஸதமலமதிதோ - முதமலரக நா
கெதுருக கதியர ||
3. பஜமா ருனுகா ரவமுனநின் பிலசின பலுகவு நலுககுரா
கரிவரதா மரிமரி நா யதரமுக்ரோ லரகனி கரமுக ||
4. ரா . நகதர ரா . முரஹர ரா . பவஹர ராவேரா .
ஈ மருவனு ஈ . லலனனு ஈ . ஸொகஸினி சேகோரா
கோரிகலிம்பொந்தா . டெந்தமு நீயெத .
ஜேரெனு நின்ஜெத்
த . மருவகுரா கரமுலசே . மரிமரி நிணுசரணனெதர||
5. நா . தலபுல ஸமகூர்சன் - ஸரஸத வெலயங்கன்கரமுல
னனுகொனி சித்தமு மெப்பிம்பன் - மரிவா
தெரலானுசநீ வசமுன
நா ஸகலமு ஜேர்பன் மாருனி யலிலோலன்
ஸாரெகு ஜயமொந்தன்
நீவிடு வலகொனூரா - நாகிதெவலயுனூரா ஸரகுனனிடு ||

Pallavi

S , r G P D Ś N D | P d p m g r s | r s n d S ; ||

Rā - ra ve nu go pā pā lā | rā ji ta sa . dgu na | ja ya sī . lā . ||

Anupallavi

S , r G P M , g P D | R , ś N D | P , m G R ||

sā . ra sāk sha ne . ra me mi | mā . ru bā ri | ko : rva le ra ||

Charanas

* 1. g p d r s s S - g g G - r r R | p p P - m g G | r s S - r s n d ||
na na vi lu tu ni gar va ma dam chi sa dā | na nu ni ye da pai | da ya to po du ga ra ||

(m g r g)

2. S , r G G G ; ; - r g | P , p P P | P ; ; - d p
nan . da go pā lā . . ne . | nen . du bo jā | lā . . ni .

S , s S S - g r s n n d P | p d p m g g R | g p m g r s r g ||
vin . du rā rā sa da ma la ma di to | mu da ma la ra ga nā | ke du ru ga ga di ya ra ||

3. p p P-r r R-g p m g G ; | g p m g-m g r s | r g r s-S ;
 pa lu mā ru nu gā ra va mu na nin . | bi la chi na ba lu ka vu | na lu ga ku rā .

r s n d S ; -m g r r g P ; | d p d r S ; | r s n d p m g r
 ka ri va ra da . ma ri ma ri nā . | ya dha ra mu gro . | la ra ka ni ka ra mu ga ||

4. P ; m g r r g-D ; m g r r g [P ; m g r g | P P P ;
 rā . na ga dha ra rā . mu ra ha ra | rā . bha va ha ra | rā ve rā .

G ; r s n d-R ; r s n d | S ; r s n d | S S S ;
 i . ma gu va nu i . la la na nu | i . so ga si ni | che ko rā .

G r s R R R ; - R s n | D D D ; | P m g G G
 ko ri ka lim pon dā . den da mu . | ni ye da . | je re nu nin jen

G ; - s r g d P . - r s r g | S ; - g r s n | d p m g r s n d ||
 da . ma ru va ku ra . - ka ra mu la | che . - ma ri ma ri | ni nu sa ra na ne da ra ||

*5. D ; p d p m g r G G ; | p d p m g r G | G ; - p d p m
nā . ta la pu la sa ma gūr chan . | sa ra sa ta ve la yan | gan . ka ra mu la

g g r g s s S S S ; | s r G r g P | d p D m g r g
na nu go ni chi tta miu mep pim pan . | ma ri vā te ra lā | nu chu ni va sa mu na

D p m g r S S ; - R s n | d p D D ; | G r s n d R
nā sa ka la mu jer pan . mā ru ni | ya ni lo lan . | sā re ku ja ya mon

R ; - S r g s r s n D ; | P d* n p d p m | G - g d p m g r ||
dan . ni vi tu va la go nu rā . | nā ki de va la yu nu | rā - sa ragu na ni tu ||

* The dhātu and mātu of charanas 1 and 5 are later interpolations.

SVARAJATIS

Lesson 22.

28.

Mohana rāga—Adi tāla

$$\begin{cases} s & r & g & p & d & \dot{s} \\ \dot{s} & d & p & g & r & s \end{cases}$$

పల్లవి

సామి దయమీరా చెలినేలుకోరా
యీ మోడితగునేమిరా చలమా ముమ్మాటికిని॥

అనుపల్లవి

భూమి వెలసిన శ్రీ కరివరద

నెమమున నెరనమ్మిన చానను ముదమొదవగ నరసకు పిలువర యిక॥

చరణములు

- 1: చారావగ డేలాయిపు తెలర మాబాలను నీదానిక నేలుకో
బాలిజెంది దయతో పలుమారును గారవమున బలుకర విరసమొలదు॥
2. ఇంతిచెలులమేల్పుం తి నడలచౌ దంతిచనుల బంతుల బిగువెంతని
పంతగించి మంతుకెక్కు కాంతుని చేతి బంతిరా పరాకు వలదుర॥
3. మరులుమీరి మరునిదూరి సారెకు విరహమొంది మరుకేలిని గూడర
నిరతమున కనికరమున కరమరుదుగ మరిమరినిను శరణనెరా మరువకిక॥

பல்லவி

ஸாமிதய மீரா செலிநேலு கோரா

யீ மோடிதகு னேமிரா சலமா மும்மாடிகினி ||

அனுபல்லவி

பூமி வெலஸின ஸ்ரீ கரிவரத்

நேமமுன நெரநம்மின சானனு முதமொதவக

ஸரஸகு பிலுவர டிக ||

ரணங்கள்

1. ராரா வகலேலாயிபுடேலர-

மாபாலனு நீதானிக னேலுகோ

ஜாலிஜெந்தி தயதோ-பலுமாருனு காரவமுன

பலுகர விரஸமொலது||

2. இந்தி செலுலமேல் பந்தினடல செளதம்தி

சனுல பம்துல பிகுவெந்தனி

பந்தகிஞ்சி மந்துகெக்கு காந்துனி

சேதி பந்திரா பராகு வலதுர||

3. மருலுமீரி மருனிதூரி ஸாரெகு

விரஹமொந்தி மருகேளினி கூடர

நிரதமு கனிகரமுன கரமருதுக

மரிமரி நினு சரணனெர மருவகிக||

Pallavi

G ; ; P - G R R ; | S ; ; - r s | D P D S

Sā . . mi da ya mi . | rā . . che li | ne lu ko rā

S ; ; - S ; R G P | G , d P - g p | G - r G r s r ||

yi . . mo . di ta gu | ne , mi ra cha la | mā - mu mmā ti ki ni ||

Anupallavi

P ; ; D Ḋ P G R | G ; ; - G | Ḋ P G R

Bhu . . mi ve la si na | sri . . ka | ri va ra da

G , p d p - d s D p d P g r | g p d s d p - s d | p g - d p g r - s r ||
ne - ma mu na ne ra nam mi na chā na nu | mu da mo da va ga sara | sa ku bilu vara yika ||

Charanas

1. P P d p - G G p g - R g r | R R g r - S | S r s - R s d

Rā rā va ga le la yi pu de la ra | mā bā la nu ni | da ni ga ne lu ko

S s R r - s r G - r g P d p | G p d r s - d s | p d - g p g r s r ||
jā li jen di da ya to palu mā ru nu | gā ra va mu na - balu | ka ra vi ra sa mo la du ||

2. D p d p g-P P-g p g r G|G-d p d p G|p g p g R-g r

In ti che lu la mel ban ti na da la chau | dan ti cha nula ban | tu la bi gu ven ta ni

R g R s-R s D p-D s r | G p D s-P | d-G p g r s r||

pan ta gin chi-man tu kek ku kan tu ni | che ti ban ti ra | pa ra ku va la du ra||

3. g g p G r-r r g R s-R s d | s s r R s-s r | G-r g P d p

ma ru lu mi ri ma ru ni du ri sa re ku | vi ra ha mondi maru | ke li ni gu da ra

g g p p d d s s-r r g r r s d p | d r r s d p-d s | s d p-p g r s r ||

nt ratamu kani ka ra munakara maruduga | mari mari ninu sara | na nera-maruva kika||

Lesson 23.

28. Senjurutti rāga—Adi tāla

$$\begin{cases} d s r g m p d n \\ d p m r g r s n d p d s \end{cases}$$

పల్లవి

మానాయకా నీదు పాదములే సదానమ్మితి ||

చరణములు

1. మారజనక ఉమావర వినుత ||
2. మహేశ చాపభంజనా - మునీంద్ర హృన్మండన ||
3. మావర మొరవిన బహు చలమా సరవర నను మరువకు
మా పదములపై బడితిసుమా పరములిం మా కులధనమా ||
4. మారమణ వినుమా మనవికొను మా-నను మరుపుమా-పొడతర
మా అభిమానము మానక మారన మాన రుచిర సుకుమార సురవినుత ||

“

పల్లవి

మానాయకా నీతుబాతమల్ల సతా నమ్మితి ||

శరణాంగులు

1. మారజనక ఉమావర వినుత ||
2. మధేహుశ శాప పంజర - మునీంద్ర హృన్మండన ||
3. మారవర మొరవిన పంజరశలమా నరవర నను మరువకు
మా పదములపై బడితి సుమా వరములింమా కులధనమా ||
4. మారమణ వినుమా మనవి కొనుమా -
ననుమనుమా మా పొకడతర
మా - అభిమానము - మానక మా రసమాన రుచిర
సుకుమార సురవినుత ||

Pallavi

M , G r S ; N , d P | D S , - s R | ; G s R g ||
 Mā . nā ya ka . ni du pā | da mul . sa dā | . nam . mi ti ||

Charanas

1. M ; ; G R S R G | M ; ; G | R S R G ||
 Mā . . ra ja na ka U | mā . . va | ra vi nu ta ||

2. m G m P ; - m P d P ; | m N d P ; | ; m g s s r g ||
 ma he sa chā . pa bhan ja na . | mu nin dra hrun . | . man . . da . na ||

3. M ; ; m g m r g s - r g - r g | M ; ; - d P | m p d p m g m p
 Mā . . va ra mo ra vi na ba hu chala | mā . . na ra | va ra na nu maru vaku

M ; ; - p d n d - N d p - M p d | M, d p d m p | M, - m g s r g ||
 mā . . pa da mu la pai ba di ti su . | mā va ra mu lim . | mā . ku la dha na ma ||

4. M , n d p m g M, - d p m g r | M , p m g r g | M, g r s r g
 mā . ra ma na vi nu ma . ma na vi ko nu | mā . na nu ma nu pu | mā . po ga da ta ra

M - g r M - r g M - d p M - p d | M - n d d p m g | M g r g s r g ||
 mā abhi mā namu mā na ka ma ra sa | ma na ru chi ra su ku | mā ra su ra vi nu ta ||

Note. This composition is full of Svarāksharas of the Suddha and Suchita varieties.

CHAPTER VI

ACOUSTICS

A musical note is produced by a continued vibration of regular frequency. A complete vibration is a whole to and fro movement. Musical notes are measured in terms of vibrations per second. The *pitch* or *frequency* of a note is its number of complete vibrations per second.

If the frequencies of two notes bear the ratio 2 : 1, the former note will be found to be the octave of the latter. This relationship is called *dvigunatva*. The octave notes bear the *dvigunatva* relationship.

In other words, if the pitch of a note, say like the *madhya sthāyi antara gāndhāra* is equal to 300 vibrations per second, the pitch of the *antara gāndhāra* of the *tāra sthāyi* will be equal to 600 vibrations per second and so on.

A $\frac{9}{8}$ interval is called a major tone and is a
Chatussruti interval

A $\frac{10}{9}$ „ „ minor tone and is a
tisruti interval

A $\frac{16}{15}$ „ „ semi-tone and is a
dvisruti interval

The *chatussruti rishabha* is a major tone above the *shadja* : $1 \times \frac{9}{8} = \frac{9}{8}$; the *antara gāndhāra* is a minor tone above the *chatussruti rishabha* : $\frac{9}{8} \times \frac{10}{9} = \frac{5}{4}$; the *suddha madhyama* is a semi-tone above the *antara gāndhāra* : $\frac{5}{4} \times \frac{16}{15} = \frac{4}{3}$.

The major tone and the minor tone differ by an interval called *comma* $\frac{81}{80}$ (*pramāna sruti*) $\frac{9}{8} \div \frac{10}{9} = \frac{81}{80}$.

TABLE VIII

Giving the relative frequencies of the svaras of the Sankarābharana and Māyāmālavagaula scales, assuming $sa=240$ vibrations per second.

Name of the rāga	Relative frequencies of the svaras.							
	s	r	g	m	p	d	n	ś
Sankarābharana	1	$\frac{9}{8}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{2}$	$\frac{27}{16}$	$\frac{15}{8}$	2
	240	270	300	320	360	405	450	480
Māyāmālavagaula	1	$\frac{16}{15}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{2}$	$\frac{8}{5}$	$\frac{15}{8}$	2
	240	256	300	320	360	384	450	480

The sthāyis proceed in the ratio of 1, 2, 4, 8 etc. This is geometrical progression. In consequence, the vibration numbers of the corresponding notes of the sthāyis also proceed in the same ratio. For instance the vibration numbers of the note *g* in the different sthāyis are in the following ratio :—

Mandra sthāyi	Madhya sthāyi	Tāra sthāyi	Ati tāra sthāyi
g	g	ḡ	ḡḡ
1	2	4	8

Some problems

Problem 1. The tāra sthayi suddha madhyama is equal to 640 vibrations per second. What is the frequency of mandra sthāyi panchama ?

$$\ddot{m}=640. \quad \therefore \dot{s}=640 \times \frac{3}{4}=480$$

$$\therefore s=240 \text{ and } \underset{\cdot}{s}=120$$

$$\therefore \underset{\cdot}{p}=120 \times \frac{3}{2}=180 \text{ (Answer).}$$

Problem 2. Two notes have the frequencies 320 and 480 vibrations per second respectively. Assuming the note of the lower pitch to be antara gāndhāra, determine the other note ;

Antara gāndhāra=320 vibrations per second.

$$\therefore \text{shadja}=320 \div \frac{5}{4} \text{ i.e., } 320 \times \frac{4}{5}=256$$

$$\text{Now } \frac{480}{256} = \frac{15}{8} = kākali \text{ nishāda (Answer).}$$

Harmonic series

A harmonic series of notes is a series of notes whose vibration numbers progress in the following proportion :—

1 2 3 4 5 6 7 8 9 10 11 12 etc.

This is Arithmetical progression.

TABLE IX.

Giving the frequencies and the values of the notes upto the 12th harmonic :—

No.	Frequency	Name of the note	Interval reduced to one octave
1	240	s	1
2	480	s	2
3	720	p	$\frac{3}{2}$
4	960	s	2
5	1200	g	$\frac{5}{4}$
6	1440	p	$\frac{3}{2}$
7	1680	n	$\frac{7}{4}$
8	1920	s	2
9	2160	r	$\frac{9}{8}$
10	2400	g	$\frac{5}{4}$
11	2640	m	$1\frac{1}{8}$
12	2880	p	$\frac{3}{2}$

Note :— The svaras s r g m p with three dots above them, belong to the *ati ati tāra sthāyi*.

If a stretched string like that of a tambura or a vina is plucked or bowed, the string vibrates as a whole. The amplitude of vibration is greatest at the centre, and this part of the string is called the *antinode*. The two ends on either side of the vibrating length of the string are at rest and are called the *nodes*. A node is a place where there is no motion.

Every performer on a stringed instrument like the vina or the violin knows that ;—

1. When he plays on open strings, the entire length of the string vibrates ;

2. When he stops a string by pressing his finger against the finger-board, he makes only a portion of its length i. e., the length between the bridge and the finger to vibrate ;

3. With the shortening of this vibrating length of the string, the pitch increases ;

4. With the increase in the tension of the string, the pitch increases ;

5. Also that thicker strings give notes of lesser pitch.

These truths are summed up in the following laws relating to the transverse vibration of strings :—

1. The pitch of a string is inversely proportional to its length.

2. The pitch of a string is inversely proportional to its thickness.

3. The pitch of a string is directly proportional to the square root of its tension.

Thus in a stringed instrument, the three factors that affect and determine the pitch of a note are the length, tension and thickness of the stretched string.

CHAPTER VII

TECHNICAL TERMS

Accidental, the *anya svara* or the visiting note in a *bhāshāṅga rāga*.

Adhama vaggeyakara, composer of an inferior type; (see also under *vāggeyakāra*).

Adhara shadja; the *shadja svara* that is taken as the key-note or *sruti*; tonic note.

Adi, the name given to the *chaturasra jati tripata tala*; | ₄ ○ ○ *Avarta*=8 *aksharakālas*.

Antinode, the mid-point in the vibrating length of a string and at which the amplitude of vibration is maximum.

Antiphony, alternate singing of solo and chorus; or responsive singing of two groups of singers.

Anupallavi, the second section of a melody in *Karnātic music*, occurring after the *Pallavi* (also see under *Pallavi*.)

Anyā svara, visiting note or accidental; the foreign note in a *bhāshāṅga rāga*; opposite of *svakīya svara*. *Anyā svaras* give a flashing touch to the melodic beauty of *bhāshāṅga rāgas* and also contribute to their individuality.

Applied music, compositions wherein the music serves merely as a vehicle for a specific purpose. The *sāhitya* is an important factor in such compositions; ex. sacred songs and songs belonging to operas and dance dramas.

Āsraya raga, the *prasiddha* or wellknown raga after which a mela is named. Thus Sankarābharana is the āsraya raga of the 29th mela, Dhira Sankarābharana.

Audava-audava raga, same as audava rāga.

Audava raga, a rāga wherein only five of the sapta svaras are represented in both the ārohana and avarohana i. e., two notes being *varja* (deleted) both ways. Ex. Madhyamāvatī, Mohana, Hamsadhvani and Suddha sāveri.

Audava-sampurna raga, a rāga wherein only five of the sapta svaras figure in the ārohana and all the sapta svaras find a place in the avarohana. Ex. Dhanyāsi, Abheri, Salaga bhairavi, Kedāragaula, Arabhi and Bilahari.

Audava-shadava raga, a rāga wherein five of the sapta svaras figure in the ārohana and six of them figure in the avarohana. Ex. Malahari, Jaganmohini and Sāma.

Audava, Shadava, Sampurna, terms used to describe the ārohana and avarohana of rāgas; they indicate the number of svaras present in the ascent and descent and denote the numbers, 5, 6 and 7 respectively.

Audava-syarantara raga, a rāga with an audava ārohana and a svarāntara avarohana.

Bhandira, a variety of sanskrit figuring in the sāhityas of earlier gītas; it is a form of Prākṛit.

Bhashanga raga, a janya raga wherein one or two foreign notes (notes foreign to its parent melakarta rāga) come in for the sake of enriching its beauty; Ex. Bhairavi; the foreign note herein is the chatussruti dhāivata.

Thus in a Bhashanga raga, both the varieties (komal and tivra) of a note occur, the note pertaining to its mela being called the *svakiya svara* and the foreign note the *anya svara*. Bhashanga ragas admit of the five divisions :—

- (1) Rishabha dvaya bhāshānga raga i.e., taking both the varieties of *ri*. Ex. Asaveri and Pun-nagavarali.
- (2) Gandhara dvaya bhāshānga raga i.e. taking both the varieties of *ga*. Ex. Ānandabhairavi and Athana.
- (3) Madhyama dvaya bhāshānga raga i.e. taking both the varieties of *ma*. Ex. Hindusthani Behag and Sāranga.
- (4) Dhaivata dvaya bhāshānga raga i.e. taking both the varieties of *dha*. Ex. Bhairavi and Mukhāri.
- (5) Nishada dvaya bhāshānga raga i.e. taking both the varieties of *ni*. Ex. Kambhoji, Bilahari, Nilambari and Athana.

Bhoga, the name given to the sankirna jāti Triputa tāla ; $|_9 \bigcirc \bigcirc$ Avarta = 13 aksharakālas.

Bhuvana, the name given to the sankirna jāti Dhruva tāla ; $|_9 \bigcirc |_9 |_9$ Avarta = 29 aksharakālas

Bindu, the name given to the sankirna jāti Rūpaka tāla ; $\bigcirc |_9$ Avarta = 11 aksharakālas.

Chakra, the name given to the tistra jāti Rūpaka tāla ; $\bigcirc |_3$ Avarta = 5 aksharakālas.

Chana, the name given to the khanda jāti Jhampa tāla ; $|_5 \cup \bigcirc$ Avarta = 8 aksharakālas.

Charana, the third section of a melody in Karnātic music ; (also see under pallavi).

Chaturasra, four.

Chatusvara vakra raga, a vakra rāga with four vakra svaras in both the ārohana and avarohana.

Chitta tanas, set exercises for developing the finger technique in vina play.

Claque : a set of persons employed in a concert to stimulate approbation or criticism. This group of applause - makers may consist of the admirers of the performers or even hired for the purpose. They sit amongst the members of the audience at key-places.

Dance form, a composition belonging to the sphere of dance music.

Dhatu, (ధాతు) the music of a composition as opposed to the mātu (మాతు) or the words, sāhitya or text of a musical composition.

Dhira, the name given to the sankirna jati Ata tāla
| 9 | 9 ○ ○ Avarta=22 aksharakālas.

Drone, a musical instrument that is used for sounding the key-note or sruti. It is kept sounding throughout a musical performance. Instead of the drone music, giving rise to a feeling of monotony, it makes a most pleasing back - ground and greatly enriches the effect. Drones like the ektār, tuntina and ottu give single notes—the ādhāra shadja. These are called *monophonous drones*. But the tambura, the best of the sruti vādyas, is designed to give

the basic shadja, the lower panchama and the lower shadja, in addition to rich harmonics. Drones like the tambura and the sruti-box designed to give more than one note at a time are called *polyphonous drones*. Drones of the stringed group are played on open strings.

Dushkara, the name given to the khanda jati Triputa tāla ; | 5 0 0 Avarta=9 aksharakālas.

Dvignatva, doubleness ; the frequencies of a note and its octave note bear the dvignatva relationship i.e. 1 : 2.

Dvisvara vakra rāga, a vakra raga with two vakra svaras in both the ārohana and avarohana. Ex. Suposhini.

Dvisvara varja raga, a raga wherein two of the sapta svaras other than the shadja are deleted ; same as audava rāga ; Ex. Mohana, Madhyamavati, Hamsadhvani.

Ekasvaran vakra raga, a vakra raga with one vakra svara in both the arohana and avarohana. Ex. Nilambari.

Ekasvara varja raga, a raga with one note eschewed in both the ascent and descent i. e., a shādava rāga. Ex. Sriranjani, Malayamārutam.

Equal temperament, a system of tuning obtaining in key-board instruments of the piano type. Here the sthāyi is divided into twelve equal semitones or intervals with the consequence that the frequencies of all the notes (other than shadja) are slightly below or above their true ratios. The difference in pitch is so subtle, that it is not generally perceptible to the average ear. (opposite of just intonation).

Gandharva nagara, the celestial place in Heaven wherein music and dancing are said to be performed continuously.

Gandharva veda, the branch of vedic study dealing with music. It is one of the four *upa vedas*: the other three *upa-vedas* being *Ayurveda*, *Dhanurveda* and *Artha sastra*.

Gandharva vidya, music.

Gati, the under-lying rhythm of a *tāla*.

Gayakabrandam, a choir or group of singers. When the number of singers in the group is small it is called, **Laghu gayaka brandam** and when the number of singers is a hundred and more it is called a **Brihat gayaka brandam**.

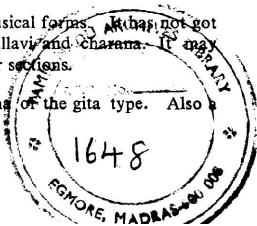
Gayaka vadya brandam, a group of singers and instrumentalists, performing together or alternately. According to its strength, it also admits of the divisions: *Laghu* and *Brihat*.

Getti melam, (கெட்டி மேளம்) the loud music played by the *nāgasvaram* band to mark auspicious events during marriage rituals.

Ghanaraga gita, a *gita* in a *ghana rāga* like *Nāta*, *Gaula Arabhi* or *Srirāga*.

Gita, the simplest of the musical forms. It has not got the divisions into *pallavi*, *anupallavi* and *charana*. It may however have 2 or 3 *khandikas* or sections.

Gita prabandha, a *prabandha* of the *gita* type. Also a vocal form.



Gupta, the name given to the tistra jati Ata tala ;
| 3 | 3 O O Avarta=10 aksharakālas.

Hindusthani music, the system of music prevailing in North India ; (also see under Indian music.)

Homophony, see under polyphony.

Indian music, the system of music in vogue in India. It is one of the oldest systems of music in the world. The bifurcation of Indian music into Karnātic and Hindusthani sub-systems came about seven centuries ago.

Instrumental form, a composition intended for being played on instruments i. e. Vādya prabandha. Ex. Marches and Overtures. (நடைகீதம், முககீதம்).

Interval, the ratio of the frequency of a note to that of a lower note.

Janaka raga, a raga with a krama (non-vakra) sampūrna ārohana and avarohana and with svaras which retain their identical character in both the ascent and descent. Melakarta rāga, mela rāga, karta rāga, sampūrna rāga, fundamental rāga, root-rāga and primary rāga are other terms signifying the same concept.

Janya raga, derivative rāga.

Jati, (ஐ) the name given to the tāla solfa syllables : taka tari kita naka tatin gina tom. Also called Patam ஷடபதம் solkattu (சொல்கட்டு).

Jati, (ஐ) kind. (1) The term is used with reference to the laghu. The five kinds of the laghu are : tistra jāti

laghu | ₃ chaturasra jati laghu | ₄ khanda jati laghu | ₅
 misra jati laghu | ₇ and sankīrna jati laghu | ₉

(2). The term also signifies *rāga* in ancient music.

Jatisvarā, a composition very much like the svarajati in point of musical structure and arrangement but without a sāhitya. It has the divisions into pallavi, anupallavi and charana. The charanas are set in different dhātus.

Just Intonation. In the scale of just intonation the notes that are employed are absolutely true in their pitch. Opposite of equal temperament.

Kadamba, the name given to the tisra jati Jhampa tāla : | ₃ ∪ ○ Āvarta = 6 aksharakālas.

Kalpita sangita, music already composed and ready for being performed and taught.

Kampita svara, a note subject to the kampita gamaka (shake).

Kara, the name given to the sankīrna jati Jhampa tāla ; | ₉ ∪ ○ Āvarta = 12 aksharakālas.

Karnatic music, the system of music prevailing in the whole of South India.

Karta raga, same as janaka' rāga.

Katakam, (கடகம்) a rāga lexicon containing the exposition of rāgas in the form of tānas or simple phrases.

Khanda, (1) section ; (2) also five.

Khandika, section of a musical composition.

Krama regular, The terms ; **krama sampurna**, **krama shādava** and **krama audava** indicate that the ārohana or avarohana signified by them are regularly ascending and descending i. e., take a non-tortuous course in addition to their sampūrna, shādava or audava character.

Kula, the name given to the misra jūti Rūpaka tāla ;
○ | 7 Āvarta = 9 aksharakālās.

Kutapa, (కుతపం కుతపమ్) is an orchestra or Vādyā brinda. *Tata Kutapa* was a band of stringed instruments. *Avanaddha kutapa* was a band of drums. There were also singers in the Kutapas. According to the number of performers in these bands, Kutapas were classified into *Uttama*, *Madhyama* and *Kanishtaka*.

Lakshana, the characteristic features ; used with reference to rāga, tāla or musical composition.

Lakshana gita, a composition of the gita type, wherein the sāhitya instead of being praise of God, enumerates the lakshana of its rāga.

Lakshana prabandha, a musical composition wherein the sāhitya concerns itself with the elucidation of a certain law, phenomena or fact pertaining to musicology. The *Murchchanā kāraka Mela Rāgamalika* is good example.

Lakshya, (1) musical compositions ; (2) current or established practice.

Lakshya gita, the ordinary gīta, as contrasted from the lakshana gita.

Lekha, the name given to the chaturasra jati Atatala |₄ |₄ ○ ○ Āvarta=12 aksharakālas.

Lila, the name given to the misra jati tripura tāla ;
 17 0 0 Āvarta = 11 aksharakālas.

Loya, the name given to the misra jati ata tāla ;
 | 7 | 7 ○ ○ Āvarta=18 aksharakālas.

Madhura, the name given to the chaturasra jāti jhampa tāla ; $|_4 \cup \bigcirc$ Āvarta=7 aksharakālas.

Madhyama vāggeyakāra, composer of an ordinary or middling type ; (also see under vāggeyakāra).

Major tone, a chatussruti interval ($\frac{9}{8}$).

Māna, the name given to the chaturasra jati eka tāla ;
 1. **Āvarta**=4 aksharakālas.

Mangala vādyam, a musical instrument played on auspicious occasions : ex. Nāgasvaram.

Mani, the name given to the tīra jati dhruva tāla
 $\begin{array}{|c|c|c|} \hline \textcircled{3} & \textcircled{3} & \textcircled{3} \\ \hline \end{array}$ Āvarta=11 aksharakālas.

Manodharma sangita, improvised music.

Matruka padam, quaint phrases like *a iya*, *ti iya*, *a i yam*, *vā iya*, occurring in gitas and which are introduced for decorative effects.

Matu, the *sāhitya* or the words of a musical composition.

Melakarta raga, same as *janaka rāga*.

Melam, the tamil word corresponding to *Kutapa* in Sanskrit. Melam denoted a group of musical instruments played together. It provided a collective music.

(1) *Periya melam* is the *nagasvaram* group.

(2) *Chinna melam* is the *Bharata nāṭyam* group inclusive of the dancer or dancers and the instrumental accompaniment.

(3) *Sangita melam* is the orchestra that provided classical music. *Sangita melam* is referred to by Shahaji Maharajah in his Telugu opera, *Pallaki seva prabandham*. There was a *Sangita melam* in the establishment of Rajah Serfojee of Tanjore and this melam provided music to distinguished visitors.

(4) *Naiyandi melam* (நையாண்டி மேளம்) is the folk band. It provided accompaniment to folk dances as in *Karagam* (கரகம்) and *Kāvadi* (காவடி). In this rustic orchestra, there are two players on the *nāgasvaram*, one player on *ottu*, two players on *tavil* (drum), a performer on *pambai* (a pair of cylindrical drums), a performer on *kirikatti* கிரிகட்டி (a pair of conical drums), a performer on *dolak* and a performer on cymbals, altogether nine in number. The peculiarity of this melam is that the performers all stand around and perform and dance off and on in consonance with the dance movements of the principal dancers. At the commencement, the members of the *naiyandi melam* stand in a circle and the dancer with the

kavadi or karagam stands in the middle. The dolak is played upon with two thin leather straps. A fast and powerful rhythmic accompaniment is provided by this band. The number of wind instruments and percussion instruments used in the melam bear the ratio 2 : 3. Towards the close of a khandika or section, music in accelerated rhythm is played by the band and this is worked up to a climax. The next part of the dance is begun with music in slow tempo.

(5) *Urumi melam* is a rustic band. The band is named after the principal drum, *Urumi*. This is an instrument with an onomatopoeic name. It is a two-faced drum. It is stroked on one side with a bent stick and struck on the other side with a straight stick. The other instruments played in this melam are nagasvaram, tavil, dolak and cymbals.

(6) *Muzhavu melam*, (முழவு மேளம்) the band of musical instruments including the muzhavu (முழவு) drum.

Mela raga, same as melakarta rāga.

Minor tone, a tirsuti interval ($\frac{10}{9}$),

Misra, (1) mixed (misra rāga); (2) also seven.

Mudra, mudra in a musical composition reveals a particular fact; ex. that it is the composition of so-and-so (vaggeyakāra mudra); that its raga is such and such (rāga mudra) and so on.

Music, one of the fine arts; it appeals to us through the sense of hearing. Pleasing sounds are used in music. The Greeks gave the name 'music' to this art, since it was the art of the Muses. In Arab language, this art is called 'musiki.'

Musical composition, a piece of music set to time and conforming to the lakshana of the form in which it is set ; prabandha ; rachana.

Musical form, musical composition.

Musical instrument, any contrivance, mechanism, thing or apparatus capable of producing a musical note.

Musical type, same as musical form.

Nava sandhi talas, nine talas figuring in the ritualistic music of temples.

Niyama (నియమ, நியமம்), rule. There are the various *niyamas* or rules laid down by sangita smritikāras (musical law-givers). Some of these rules are mandatory and the rest are advisory. *Mandatory niyamas should be observed.* That in singing or performing, *sruti suddha* (faithful adherence to the tonic note) and *laya suddha* (accuracy in rhythm) should be observed is a mandatory rule. The singing of ragas in the times allotted to them is an advisory rule. These *rāgas* sound best if sung during the times allotted to them. It does not mean that one is prohibited from singing them at other times. At that rate, one can never hear morning ragas in the sabha concerts which usually take place during evenings. Further, in a *rāgamālika*, ragas of varying *gānakāla* come in succession. The entire composition has to be sung at a stretch. *Rāgamalikas* are highly enjoyable art forms. Decorative details abound in them.

The following are some of the *niyamas* :

1. *Sruti niyama*, adherence to the chosen key-note or tonic note.

2. *Tāla niyama* :—There is the rule that some musical forms should be in particular talas. For instance, Adi, Ata, Khanda tripata and Jhampa talas are suitable for tāna varnas. Likewise Adi, Ata and Rupaka talas are suitable for Pada varnas.

3. *Laya niyama*, adherence to the chosen tempo.

4. *Sahitya niyama* :—Vyāpakāksharas can come only in particular musical forms like tana varnas and kritis. Jatis can come interspersed amidst sahitya letters only in certain compositions.

5. *Chchandas niyama*, adherence to the rules of prosody in musical compositions.

6. *Vishaya niyama* : It is laid down that the sāhityas of particular musical forms should be on particular themes. For example, the sahitya of a sanchari gita should be in praise of God or in praise of a great preceptor. The sahitya of a pada should pertain to nāyakā-nāyaki theme and so on.

7. *Prabandha niyama*, adherence to the rules relating to the musical structure, constituent angas and other rules pertaining to musical forms. For example, chitta svaras are out of place in compositions like the padam.

8. *Gānakāla niyama*, the rule relating to the time most appropriate for singing ragas.

9. *Kachcheri niyama* : Two compositions in the same raga should not be sung in a concert. But the varna sung at the commencement may be in the same raga as a Kriti or Pallavi sung later.

Songs on themes of a *Vairāgya* nature, should not be sung in concerts given on marriage occasions. *Vairāgya* songs are songs like ఎటు నమ్మినావో మనసా (Saveri raga), పరలోక సాధనమే మనసా (Purikalyani raga) and என்னத்துக்குதவி இக்கரాయம் (Suddha saveri raga) which point out the illusory character of this life and worldly existence and which have an emphasis on the other world.

10. *Sādhaka niyama*, Rules pertaining to sangita abhyāsa or practice of music.

11. *Vādyā sankhya niyama*, the rule pertaining to the proportion in the number of different instruments used in the vadya brinda or an orchestra.

12. *Geyanātaka niyama* i. e. the rule that the opening and closing songs of an opera should be in the same raga and that that raga should be an auspicious raga.

Node, the two ends of the vibrating length of a string and at which there is no motion.

Nyasa svāra, a note in a rāga on which phrases can legitimately end.

Pallavi, the first section of a melody in Karnātic music. Compositions like the Svarajati, Jatisvara, Varna, Kriti, Padam, Jāvali and Rāgamālīka have the three divisions: pallavi, anupallavi and charana. The pallavi is repeated at the conclusion of the anupallavi and each charana.

Patti, the name given to the chaturasra jāti rūpaka tāla; ○ | 4 Āvarta=6 aksharakalās.

Polyphony, a type of music, where several melodies, all of equal importance and each having its own individuality are simultaneously performed. In the homophonic type of music, which also consists of several melodies, one part sustains the melodic interest and the other parts simply form an accompaniment.

Prabandha, a musical composition ; also the particular type of composition bearing that name.

Pramāna, the name given to the khanda jāti dhruva tāla : $\mid_5 \bigcirc \mid_5 \mid_5$ Āvarta=17 aksharakālas.

Pure music, manodharma sangita ; also compositions whose claims to posterity lie in the value of their dhātu. The opposite of this is applied music.

Pūrṇa, the name given to the misra jāti dhruva tāla ; $\mid_7 \bigcirc \mid_7 \mid_7$ Āvarta=23 aksharakālas.

Raga, (1) the name given to the misra jāti eka tāla ; \mid_7 Āvarta=7 aksharakālas ;

(2) also melody-type.

Ragamala gita, a gita in rāgamalika form.

Ragamalika jatisvara, a jatisvara composition in the form of a rāgamalika.

Rāga rūpa sanchāri, a svara passage set to a specific tāla and which reflects the form or entity of the raga.

Rāja, the name given to the khanda jāti rūpaka tāla ; $\bigcirc \mid_5$ Āvarta=7 aksharakālas.

Rata, the name given to the khanda jati eka tāla;
 | 6 Āvarta=5 aksharakālas.

Rava, the name given to the sankirna jati matya tāla ;
 | 9 ○ | 9 Āvarta=20 aksharakālas.

Rhythmical harmony, the cross-rhythmical accompaniment provided by the player of the mridanga or other tāla vādya to all measured music in a concert ; the jatis or tāla mnemonics played by him emphasize the rhythmical construction of the pieces.

Sacred form, a composition belonging to the realm of religious music.

Sadhārana gita, same as sanchāri gita.

Sāhitya, (1) musical composition

(2) Mātu or words of a musical composition.

Sahitya karta, the author of a musical composition i.e., a composer.

Sama, (1) the name given to the chaturasra jati matya tāla; | 4 ○ | 4 Āvarta = 10 aksharakālas.

(2) Also, the name of one of the classical 108 tālas ;
 | | ○ ∪ ○ Āvarta=13 aksharakālas.

Sāmānya gita, same as sanchāri gita.

Sambhava sāhitya, a musical composition occasioned by a particular incident or circumstance in one's life. Thus, *Teratiyyaga rādā* (Gaulipantu rāga) of Tyagaraja is an

instance of a *Sambhava kirtana* ; *Vadaraka pove* (Kambhoji rāga) of Kshetravyya is an instance of a *Sambhava pada* ; *Pranatārtihara prabho purāre* of Maha Vaidyanatha Iyer is an instance of a *Sambhava ragamalika* ; and *Girrani palukunā* (Saveri raga) is an instance of a *Sambhava pallavi*. *Sambhava sāhityas* furnish internal evidences of a valuable nature.

Sampurna-audava rāga, a raga with all the sapta svaras in the ārohana and with only five of them in the avarohana. Ex. *Garudadhvani* and *Sāramati*.

Sampūrna rāga, a raga wherein all the sapta svaras are present in both the ārohana and avarohana e. g. *Māyāmālavagaula*.

Sampūrna-sampūrna rāga, same as sampūrna raga.

Sampūrna-shādava rāga, a rāga with all the sapta svaras in the ārohana and with only six of them in the avarohana. Ex. *Bhairavam*.

Sampurna - svarantara rāga, a rāga with a sampūrna ārohana and a svarāntara avarohana.

Sanchāra, combination, prayoga, pidippu (சேர்ப்பு) ; a musical phrase ; also a short exposition of a rāga.

Sanchari, a short exposition of a rāga in solfeggio and set in a tāla.

Sanchari gita, the ordinary gita, wherein the theme of the sāhitya is praise of God. Also called *sāmānya gita* and *lakshya gita*.

Sangita kavītvam, musical creation ; writing musical poetry. Sangita kavītvam is the ability to conceive of original and new tunes.

Sankha, the name given to the tīśra jāti triputa tāla ;
 $|_3 \bigcirc \bigcirc \bar{A}varta = 7$ aksharakālas.

Sankīrna, (1) mixed (sankīrna rāga).

(2) Also nine.

Sāra, the name given to the tīśra jāti matya tāla ;
 $|_3 \bigcirc |_3 \bar{A}varta = 8$ aksharakālas.

Seaular form, composition of a non-religious character ;
 ex. jāvalis and martial songs.

Semi-tone, a dvīśruti interval ($\frac{1}{2}\frac{6}{5}$).

Shādava-audava rgāa, a rāga wherein six of the sapta svaras are present in the arohana and only five of them are present in the avarohana. Ex. Nātakuranji.

Shādava rāga, a rāga wherein only six of the sapta svaras are represented in both the arohana and avarohana i. e. one note is *varja* both ways. Ex. Suddha simantini, Malayamārutam, Srīranjani.

Shādava-sampūrṇa rāga, a rāga with six of the sapta svaras in the ārohana and with all the sapta svaras in the avarohana. Ex. Kambhoji.

Shādava-shadava rāga, same as shādava raga.

Shādava-svarāntara rāga, a raga with a shādava ārohana and a svarāntāra avarohana.

Slur, a curved line placed above a series of svaras to indicate that the notes are to be played smoothly as a single continuous phrase.

Srikara, the name given to the chaturasra jati dhruva tāla ; $|_4 \bigcirc |_4 |_4$ Āvarta=14 aksharakālas.

Sruti svaras, the drone notes i. e., shadja, panchama and tara shadja. These notes can be sounded simultaneously or successively and with a pleasing effect. In madhyama sruti, the panchama is replaced by the suddha madhyama and sounded.

Sruti vadya, drone.

Sudha, the name given to the tisra jati eka tāla ; $|_3$ Āvarta=3 aksharakālas.

Sūlādi, a musical form of the tālamālika type.

Sura, the name given to the misra jati jhampa tāla ; $|_7 \cup \bigcirc$ Āvarta=10 aksharakālas.

Svakiya svara, In a bhāshānga raga, both the komala and tivra varieties of a note or notes occur. That note which belongs to the parent scale is called the *svakiya svara* and the note which is foreign to the parent scale and which comes occasionally for enriching the melodic beauty of the raga is called the *anya svara*. Thus in Bilahari raga, Kakali nishada is the svakiya svara and the Kaisiki nishada is the anyā svara.

Svarajati, a composition with the divisions, pāllavi, anupāllavi and charana—the charanas being set in different dhātus.

Svarāntara - audava rāga, a raga with a svarāntara ārohana and an audava avarohana.

Svarāntara raga, a raga with four notes only in both the ārohana and avarohana.

Svārantara - sampurna rāga, a raga with a svarāntara arohana and a sampurna avarohana Ex. Vivardhani.

Svarāntara - shadava raga, a raga with a svarantara arohana and a shādava avarohana. Ex. Navarasa kannada.

Svarantara - svarantara raga, same as svarantara raga.

Svara pallavi, A *solfeggio pallavi* (i. e. a Pallavi theme sung with svaras alone) to which kalpana svaras are sung or performed.

Svarasthana, literally position of the note. In stringed instruments with plain finger-boards, the term indicates the geometrical point on the string, which when touched by the finger, sounds the particular note.

Svara sthana is also a region comprising a certain number of srutis of minute intervals, which for the practical purposes of raga formation is treated as a unit. The sthayi consists of 12 svarasthānas and the 22 srutis are distributed amongst them.

Svarupa, form or individuality ; raga svarupa means the melodic entity of the raga.

That (தரட்), the name for a janaka raga in Hindusthani music.

Tisra, three. The terms, *Tisra*, *Chaturasra*, *Khanda*, *Misra* and *Sankirna* respectively denote the numerals, 3, 4, 5, 7, and 9. These are used to denote the laghu jāti and tāla gati (the sub-rhythm of a time-measure).

Transilient scale, varja raga.

Trikāla, the three degrees of speed—prathama, dvitiya and tritiya ; or vilambita, madhya and druta.

Tristhayi sadhakam, practising in the three Octaves, mandra, madhya and tara. Thus in stringed instruments like the Veena and Violin in the orthodox system of training, students are asked to practise the Scale in the three octaves

thus : $\overset{\cdot}{s} \overset{\cdot}{r} \overset{\cdot}{g} \overset{\cdot}{m} \overset{\cdot}{p} \overset{\cdot}{d} \overset{\cdot}{n} \overset{\cdot}{s} | \overset{\cdot}{s} \overset{\cdot}{r} \overset{\cdot}{g} \overset{\cdot}{m} \overset{\cdot}{p} \overset{\cdot}{d} \overset{\cdot}{n} \overset{\cdot}{s} | \overset{\cdot}{s} \overset{\cdot}{r} \overset{\cdot}{g} \overset{\cdot}{m} \overset{\cdot}{p} \overset{\cdot}{d} \overset{\cdot}{n} \overset{\cdot}{s} | \overset{\cdot}{s} \overset{\cdot}{n} \overset{\cdot}{d} \overset{\cdot}{p}$
 $\overset{\cdot}{m} \overset{\cdot}{g} \overset{\cdot}{r} \overset{\cdot}{s} | \overset{\cdot}{s} \overset{\cdot}{n} \overset{\cdot}{d} \overset{\cdot}{p} \overset{\cdot}{m} \overset{\cdot}{g} \overset{\cdot}{r} \overset{\cdot}{s} | \overset{\cdot}{s} \overset{\cdot}{n} \overset{\cdot}{d} \overset{\cdot}{p} \overset{\cdot}{m} \overset{\cdot}{g} \overset{\cdot}{r} \overset{\cdot}{s} ||$ and in the three

degrees of speed. This practice may appear tedious and boring at first, but in the long run, it will be realised that this practice gives to the fingers, strength, flexibility, responsiveness, deftness of execution and ability to perform any phrase in a neat polished and graceful manner.

Trisvara vakra raga, a vakra raga with three vakra svaras either in the ārohana or avarohana or both.

Trisvara varja raga, a svarāntara rāga.

Ubhaya vakra raga, a rāga whose ārohana and avarohana are vakra. Ex. Ritigaula, Sahāna and Nilāmbari.

Ubhaya varja raga, a rāga which has varja svaras in both the ārohana and avarohana.

Udaya, the name given to the khanda jāti matya tāla :
 $|_5 \text{ } \bigcirc \text{ } |_5$ Āvarta = 12 aksharakālas.

Udirna, the name given to the misra jati matya tāla ;
 $|_7 \text{ } \bigcirc \text{ } |_7$ Āvarta = 16 aksharakālas.

Upanga raga, a derivative raga which takes only the notes figuring in its janaka rāga.

Uttama vāggeyakara, composer of a superior type; (also see under vāggeyakāra):

Vadya brindam, music by a group of performers on musical instruments ; orchestra ; melam.

Tata vadya brindam is a stringed band.

Sushira vadya brindam is a band of wind instruments.

Avanaddha vadya brindam is a band of performers on drums giving a rhythmical exposition.

Vaggeyakara, composer ; *dhātu-mātukāra* i. e., one who is the author of both the music and the sāvitya of a musical composition. Even composers of compositions like the jatisvara which admit of dhātu alone may, by courtesy be called vāggeyakāras.

An **uttama vāggeyakāra** is one who is the author of both the music and the sāvitya of a musical composition.

A **madhyama vaggeyakara** is one who is the author of the music alone but has appropriated the *sāhitya* of another composer in his composition.

An **adhama vaggeyakara** is one who appropriates the music or *dhātu* of another composer and inserts his own *sāhitya*.

The prominence given to *sangita kavītvam* is clearly evident from this classification.

Vakra, irregular. The terms : **vakra sampurna**, **vakra shadava** and **vakra audava** indicate that the *ārohana* or *avarohana* signified by them, take a tortuous course in addition to their *sampūrṇa*, *shādava* or *audava* character.

Vakrāntya svara, the note in a *vakra rāga*, at which the *vakratva* ends and the prior course is resumed.

Vakra rāga, a *rāga* whose *ārohana* or *avarohana* or both, take a zig-zag, crooked or tortuous course. Ex. *Anandabhairavi*, *Srīrāga* and *Sahāna*.

Vakra sampurna rāga, a *vakra rāga* wherein all the seven *svaras* are present in both the *ārohana* and *avarohana* Ex. *Sahāna*.

Vakra sanchāra, a musical phrase containing *vakra svara* or *svaras*. *Vakra prayoga* or *jatila* (ജ്വല) *prayoga*.

Vakra svara, the note in the *ārohana* or *avarohana* of a *vakra rāga* at which a change in the course takes place ; i. e., the note at which there is an interruption or break in

the regular course of the ārohana or avarohana. The original course is resumed from the vakrāntya svara.

Vakratva, tortuousness.

Varja raga, a raga wherein one, two or three svaras are absent either in the arohana or avarohana or both.

Varja svara, the eschewed note in a raga ; ex. panchama is the varja svara in Sriranjani raga.

Varjatva, deletion or elimination of notes.

Vasu, the name given to the sankirna jāti Eka tāla ; | 9
Āvarta=9 aksharakālas.

Vidala, the name given to the khanda jāti Ata tāla ;
| 5 | 5 ○ ○ Āvarta=14 aksharakālas.

Visranti, period of rest or silence in a musical composition.

Vocal form, a composition intended for being sung; ex-
Tevāram and *Divyanāma kirtana*.

Vyāpakāksharas, the vowels *a*, *i*, *u*, *ē*, *ō*, occurring, in between sahitya letters and which enrich the musical effect. These are seen in tana varnas and kritis.

QUESTIONS

Technical terms :—

1. Explain the following terms :—

Just intonation, Equal temperament, Polyphony, Anya svara, Dhātu, Mātu, Varja rāga, Svakiya svara, Vakratva.

2. (a) Define musical instrument. Explain if the following are musical instruments :—

(i) Police-man's whizzle.

(ii) Horn of a motor-car.

(iii) Church bells and Temple bells.

- (b) What is a drone ? Give some examples.

3. What do you mean by the term *foreign note* or *accidental* ? How are accidentals denoted in a musical composition ?

4. Explain the use of vowel extensions in the *sāhitya* of a musical composition.

Raga :—

5. Define rāga and rāga ālāpana.

6. Distinguish between :—

(i) Janaka rāga and Janya rāga

(ii) Upānga rāga and Bhāshānga rāga.

(iii) Vakra rāga and Non-vakra rāga.

(iv) Vakra svara and Vakrāntya svara.

Give some examples for each of the above.

7. Explain the terms : sampūrna, shādava and audava.

8. Give two examples for each of the following :—

(i) Audava rāga. (ii) Audava-sampūrna rāga.

(iii) Nishāda varja rāga. (iv) Ubhaya varja rāga.

(v) Ubhaya vakra rāga.

9. Give the ārohana and avarohana and the janaka rāgas of the following janya ragas :—

(i) Malahari, (ii) Arabhi, (iii) Mohana,

(iv) Suddha sāveri.

10. Point out the anya svaras occurring in the following bhāshānga rāgas ;—

(i) Bhairavi (ii) Bilahari.

11. Classify the varja rāgas and vakra rāgas.

12. Explain the principle underlying the scheme of the 72 melakarta rāgas.

13. Give short phrases of your own in the following ragas :—Mohana, Bhairavi, Kalyāni, Bilahari.

14. Write the ārohana and avarohana of a shādava-shādava raga with the last note of the purvānga deleted. Assuming that the raga is a janya of the 16th mela, mention the svaras taken by the raga.

Tala :—

15. Explain briefly the scheme of the 35 tālas.
16. Write the names of tālas whose total aksharakāla for an āvarta consists of :—
 - (i) 14 units of time. (ii) 12 units of time.
 - (iii) 10 units of time. (iv) 7 units of time.
17. Explain how tālas whose āvartas are equal in point of duration, yet differ from each other.
18. What do you mean by presumptions in talas ?
19. Which of the seven main tālas has :—
 - (i) The largest number of laghus.
 - (ii) Two drutams. (iii) All the three angas.
20. Name the tāla which has for an āvarta :—
 - (i) The maximum number of aksharakālas.
 - (ii) The minimum number of aksharakālas.
21. (a) Which tāla excludes the drutam and which tālas exclude the anudrutam ?
 - (b) Is there any tāla which entirely excludes the laghu ? If not, can you assign any reason for this ?
22. What is the order in which the laghu jātis are traditionally mentioned ? Is there any principle underlying it ?

23. Explain the law of homogeneity with reference to the laghus in the thirty-five tālas.

24. Mention two tālas in the 35 - group, the sum of whose āvartas will be equal to an āvarta of sankīrna jāti ata tāla.

25. Name the tāla that has 23 aksharakalas for an āvarta. Suggest a pair of tālas the sum of whose āvartas will be equal to an āvarta of this tāla.

26. Suggest a pair of tālas the difference of the aksharakāla values of whose āvartas, will be equal to an avarta of tisra rūpaka.

27. In the scheme of 35 tālas, point out two talas wherein the number of aksharakālas of an āvarta of one is equal to the root of the number of aksharakalas of an avarta of the other.

28. How many aksharakalas are there in an avarta of the longest Matya tala and the shortest Jhampa tala.

29. Two musicians started singing simultaneously two different alankāras and they were found to finish simultaneously, although one sang in prathama kāla and the other in dvitiya kāla. Assuming that the tālas of both the singers were in khanda jāti, determine the tālas of the two alankāras.

30. In the 35 tālas, point out the constituent angas and the total number of aksharakalas of an āvarta of the 9th, 17th, 23rd and 31st tālas.

31. Mention three tālas whose aksharakālas are together equal to an āvarta of khanda jāti dhruva tala.

32. Name the tala which has 12 aksharakālas for an āvarta and wherein the beats fall on the first, fifth, ninth and eleventh aksharas.

33. Name two talas of sankirna jāti, whose aksharakala values for an avarta bear the ratio 3 : 5.

34. Name three tālas taking 11 aksharakalas each for an avarta and point out in each case the number of the counts on which the beats fall.

35. Name two talas wherein the aksharakala - value of the avarta of one happens to be the square of the aksharakala-value of the avarta of the other.

36. Complete the following alankāra and suggest the possible talas in which it may be reckoned :—

s R m g r s r g m

Musical form :—

37. Distinguish between Kalpita sangita and Manodharma sangita.

38. How are musical compositions classified and what are the peculiar characteristics of the different groups ?

39. Mention the characteristic features of a gita.

40. Point out the difference between a gita and a svarajati in respect of :—

- (i) Constituent angas. (ii) Sāhitya.
(iii) Musical structure

41. Mention the languages that have figured in the sāhityas of gītas. Illustrate your answer with examples.

42. Distinguish between jatisvara and svarajati.

43. Give an example for each of the following :—

(a) A composition not having the divisions ;
pallavi, anupallavi and charana.

(b) A composition with charanas in different
dhātus.

(c) A composition with angas in different tālas.

44. Mention the names of composers of gītas and svarajatis.

Acoustics :

45. Distinguish between :—

(i) Node and Antinode.

(ii) Major tone and Minor tone.

46. Explain what is meant by a series of notes in the Harmonic series.

47. Enumerate the factors that determine the pitch of of note on a stretched string.

48. State and explain the laws of transverse vibration of strings.

Problems :—

49. The tāra sthāyi Panchama=768 vibrations per second. Find the frequency of the kakali nishada of the mandra sthayi.

50. The frequency of middle octave shadja=240 vibrations per second. Determine the frequency of the rishabha of the tara sthayi in Sankarabharana raga.

51. The frequency of antara gandhara of the mandra sthāyi=150 vibrations per second. Find the frequency of the tara sthayi panchama.

52. The frequency of tara sthayi kakali nishada=960 vibrations per second. Find the frequency of the panchama of the mandra sthayi.

53. Assuming madhya shadja is equal to 240 vibrations per second, calculate the frequencies of the Tara sthayi, antara gandhara and mandra sthayi madyama.

General :—

54. Name the raga that will be heard when a person after sounding the sarani string of the vina, places his fingers on the 2nd, 4th, 7th, 9th, and 12th frets respectively and plays.

55. You are given a printed musical composition. How will you proceed to find out whether it is a gīta or a svarajati ? Explain.

56. Write a short essay on the relative merits of vocal music and instrumental music.

57. Complete the following passage by supplying another ādi tāla āvarta music of your own :—

Kalyani - Adi

S n d n s r s - g g r r s n n d | P m n d m g r | g m p d n D ,

58. Determine the rāga of following passage :—

Rupaka tala

P , m g r	g p d s n d	Ś , ś r ś	n d Ś :
Ś , g r ś	n d P m g	r g p m g r	s n d Ś ,

59. Passages for Sight singing :—

(a) Mohana raga - Rupaka tala

Ś , ś d p	p d r ś p d	d ś d d p g	p g r g p d
Ś , ś d p	d g r ś d p	d ś d d p g	p g r S ,
Ś , ś d p	p d ś r g r	Ġ , p g r	Ś , d p d
D , d g r	D , d r ś	D , d ś d	p g r S ,

(b) Kalyani raga - Adi tala

Ś , N , D , P M G r	G , N , D	, M G R s
D , N , R , G M D n	R , N , D	, M D N ś
D , N , R , N R Ġ m	Ġ , R , N	, D N Ś r
D , Ġ , R , N D m d n	R , N , D	, M G R s

60. Passages for Musical Dictation.

(a) Bhairavi raga - Rupaka tala

$\tilde{n} \tilde{n} d P,$	$\tilde{N} d P,$	$p m p n d p$	$m g r g m p$
$\tilde{n} \tilde{n} d P,$	$s n d P,$	$m g m p d p$	$m g r S,$
$\tilde{n} \tilde{n} d P,$	$s n d P,$	$p m p n d p$	$m p d n \hat{S}$
$\hat{S}, n d n$	$\hat{S}, g r s$	$\hat{S}, n d p$	$m g r S, $

(b) Mohana raga—Adi tala

$ _4$	○	○
$D p g d p g r - s r g p G g r$	$s r g R s d p$	$p g p d S ;$
$D p g d p g r - g p d s d d p g$	$P g d d p g r$	$g g p d \hat{S} ;$
$\hat{S}, s d p - g p d s - d g r s d p$	$D, r r s d p$	$d d s s R ;$
$P, g r s - G, r s d - p g p d$	$R, s d p - D$	$, p g r S ; $

(c) Bilahari raga—Chapu tala

$P, p m g r$	$S, s n n d$	$S, s r r g$	$P, p m g r$
$G, p d \hat{S}$	$\hat{S}, s n n d$	$\hat{S}, s r r s$	$s n d \hat{S} ;$
$P, p d s r$	$G, g r r g$	$P, p m g r$	$\hat{S}, s n d p$
$D, d g r s$	$D, r s n d$	$P, r s n d$	$p m m g g r$

 $\overline{s n n d} S ||$

61. Complete the following passage in four āvartas, by inserting svaras, commas or semicolons as you think fit, in the *blanks*. Indicate also the *anya svaras*, graced notes, phrasing and the *sthāyis* of the notes :—

Bhairavi raga—Adi tala

4	○	○
N, n d p m n d p m p — r g	M—p d p m p	m n d d P —
N, n d p m p d n — n d p m g	r—r g m P	m g m p — r s
S, n d p m p d n s r g — s n	S, g r s—d	n s — s R —
r g m—g r s n g r—n d p	p r S—n d p	P, m g r S

62. Sing the following sāhityas in the given music:—

(a) Bhairavi raga—Rupaka tala

\tilde{N} , s r s Mā . dha vu ni	n r s n d p so . . . da ri
m p d n s n d p ma hi shā . . . su ra	m g m p p m G r s ma r dha ni

(b) Bhairavi raga—Chapu tala

n g r s n d p Nan . da nan . da na	m d p m g r s In . du va . da na
r n s r g m p sūn . da rā . na na	m g r S ; pā . hi mām .

(c) Kalyani raga—Adi tala

S , n n d p m Nā . ra da r chi ta	d d p m \tilde{G} , m ve . . da sa . nnu
P ; ; m p ta . . pa ri	d n s n d p d n pā . la ya mam sri .

APPENDIX I

Manufacture of Musical Instruments

The three branches of the musical heritage of a country are :—

- (1) The Science of music developed by her Sangita smritikāras (musical law-givers).
- (2) the rich compositions left as a legacy by her vaggeyakaras (composers).
- (3) the variety of musical instruments that have been developed.

Musical instruments constitute an important item of a nation's cultural wealth.

Making of musical instruments is one of the most ancient of arts. It is also one of the ancient musical careers. *Jyā* is the bowstring of the Vedic period and *Jyākāra* was the maker of bow-strings. An analytical study of the musical instruments of the ancient, medieval and modern periods shows how the musical instruments of the ancient period were simple in character and how they gradually grew in complexity and attained perfection in technique of play and kept pace with the developments in music. The medieval and modern periods witnessed the birth of new instruments and improved types of older instruments.

Musical instruments may be classified into :—

- (1) those whose make and manufacture were revealed to man by Nature; and

- (2) those which were developed and manufactured through man's inventive genius and cleverness.

Early Instruments.

Musical instruments have existed from the dawn of human history. The earliest instruments were time-keeping instruments. When the early man danced in ecstasy, he kept time either by clapping his hands or by striking two sticks.

The flute is an example of an instrument revealed to man by Nature. This is one of the reasons for the ubiquitous occurrence of the flute. During his sojourn in forests in the course of hunting, the early man heard sweet musical notes emanating from bamboo stems. Closer observations revealed to him the fact that those notes emanated from the holes drilled on the sides of bamboo stems by beetles and chafers in their innocent quest after food. The grains and flour inside the bamboo stems offered a wholesome food to the insects. The currents of winds which dashed against these holes made the air column inside to vibrate and musical notes resulted. The idea of making a flute by boring holes on the side of a cut stem of bamboo suggested itself to man. The earlier flutes were direct flutes and side-blown flutes came at a later stage. Thus the earliest resonant wood to come to the notice of man is the bamboo (*Bambusa arundinacea*).

Strips of bamboo giving notes of different pitch are used in Xylophones in S. E. Asian countries. In the Bambolin or the Bamboo violin, excepting for the strings and the silken hairs of the bow, the entire instrument inclusive of the body, finger-board, pegs, bridge, tail-piece, button and bow is made of bamboo.

The phenomenon of hollow bodies giving resounding notes was also noticed by early man. Birds with strong beaks and claws while sitting over hollow trunks of trees or while scratching them with their beaks and claws produced a peculiar sound. That a hollow body with air enclosed inside gave an amplified sound was noticed by him. The idea of preparing drums naturally suggested itself to him. The *Bhumi dundubhi* referred to in the *Vedas* is only a pit dug in the ground and covered with a stretched skin. It was beaten with long sticks by people standing around.

The early man also found that when he shot an arrow, the string of the bow gave a musical note. He noticed that a string in a state of tension when pulled and released gave a musical note. The inventive instinct worked within him. He tied strings of different lengths to the same bow and noticed that notes of different pitch resulted. This discovery paved the way for the development of the harp i. e., the *Jyā* of the *Vedas*, and the *Yazh* of South India. By attaching a hollow boat-shaped resonator to a section of the bow, the tone was found to increase in volume. It is the string-lengths of the harp and the finger-holes bored on the wall of the flute at progressively increasing distances from the mouth-hole that suggested the development of the fretted finger-board on the *Vina*, the former the speaking length of the wire and the latter the disposition of the fret positions.

Thus it will be seen that the main principles underlying the construction and manufacture of stringed, wind and percussion instruments were revealed to man thousands of years ago by Nature herself. The conch is one of the instruments of Nature. A hole is bored on the top of the spiral of the conch and blown.

Life of a Musical Instrument

An interesting point about musical instruments may be mentioned here. The voice of a person dies with him. We have no idea now about the lustrous and ringing voices of illustrious singers and composers of the last century like Tyagaraja and Mahā Vaidyanatha Ayyar. But musical instruments when carefully preserved and used can have a long life. There are Vinas in some musical families which have been used for over seven generations and which are still giving a magnificent and delightful tone.

The subject of *Making of Musical Instruments* in general may be studied under the following heads :—

- (1) Wood and other material used in making the instruments and their parts;
- (2) Mode of manufacture and the assembling of parts.
- (3) Tools and implements required to make these instruments.
- (4) Seasoning of the wood used for the Resonator.
- (5) Testing the concert-worthiness of the instruments made.

Seasoning

Seasoning of the wood in making musical instruments is very important. The raw wood, if used will not give a sustained and beautiful tone. It is common experience that green flutes i. e., flutes newly made will not produce certain

graces by cross-fingering devices. Such graces can be played with ease on used flutes. Used flutes are highly responsive. Thus the resonating wood in a musical instrument acquires a certain responsiveness and excellence in tone quality by long use. Seasoning results in a fixed condition in the structure of the wood. Seasoned wood gives a good tone.

If a musical instrument is made of green (raw) wood, the quality of growth which still persists there may result in the instrument developing a crack.

The *purposes of seasoning the wood* are many. Some of them may be mentioned here :—

- (1) To give stability and firmness to the wood so that it may withstand the tension of strings. In Vinas made of unseasoned wood, it will be found that they become a prey to seasonal variations and warp. The pegs in such instruments often get loose and do not stick on. Unseasoned wood sometimes results even in the change of the original shape, much to the annoyance of the owner of the instrument.
- (2) To free the wood of fat, oily matter, dust, germs and all unnecessary matter embedded in it, so that the wood as a homogeneous body will become sensitive and highly responsive.
- (3) To prevent it from becoming a prey to insects and vermins.
- (4) To remove the innate moisture in the wood.

Types of Seasoning.

1. Steam bath
2. Hot water bath.
3. Shelter seasoning.
4. Sand seasoning.
5. Water bath seasoning.
6. Fly seasoning.

Various processes of seasoning are adopted. The wood is sometimes subjected to a *steam bath*. The wood is also kept plunged in hot water for the needed period. The wood is dried in the shade for some months or years and then used. This is *shelter seasoning*. In the case of the bamboo organ in St. Pina's Church in Rizal, near Manila, Philippines, the 950 bamboo tubes were seasoned by burying them under sand near the beach, for six months. The quality of the tone emanating from this bamboo organ is as good as the tone from any of the organs in the well-known churches.

In water bath seasoning, the piece of wood is allowed to float in water for a particular period and then used.

In fly seasoning, small holes are drilled on the top corners of the pieces of wood and they are strung and suspended loosely in the air and kept in that condition for the required period.

The study of resonant wood is an important branch of instrumentation. Without a resonator made of resonant wood, there can be no concert instrument of the stringed,

wind or drum class. The gourd stands as the earliest example of a nature-made resonator.

Materials used

The materials used in the manufacture of musical instruments may be studied under the heads of :—

- (1) Materials used in making the body.
- (2) Materials used for making parts and accessories like frets, finger-board, bridge, sound - post, bass bar, pegs, peg-box, end-pin, tail-piece, bow, bamboo nails, braces etc.
- (3) Materials used for decorative work.
- (4) Glue used for pasting the parts.
- (5) Materials used for manufacturing strings.
- (6) Materials used in devices for exciting the strings i. e., to set them in vibration like the wire plectrum, horn plectrum, striker and the bow.
- (7) Materials used for making stands, cases and cloth covers.

In South India, jackwood (*Artocarpus Integrifolia*) is used extensively for making the Vīna, Tambura, Gottu-vadyam, Mridangam, Suddha Maddalam, Kanjira, Jamidika, Tuntina, Timila and Chenda. Even in Jack wood, it is the variety that is known as Tēn pala (தேன் பலா) that is useful for making musical instruments. Rosewood (*Dalbergia nigra*)

is sometimes used for the top-plank of the Vina and Gottuvadyam. It is also used for making pegs in stringed instruments. The Teak (*Tectona grandis*) is not useful as a resonant wood, since, during the rainy season, it absorbs moisture and swells slightly and as a consequence gives a dull tone. It is however used for the top-plank of the Sitar and in making Sruti-boxes. Blackwood is used for making the bowl of the Vina. Sometimes Redwood (*sequoia sempervirens*) is used for making the Mridangam, bow of Sarangi and Castanets. The wood of margosa tree (*Azadirachta indica*) is also used for making the shells of some drums. The core of the cocoanut and the palmyra tree are used sometimes for making the shell of the mridangam.

Gourds are used for the bowl of the Tambura, Sitar, Ektar, Dotar and Magudi. Three gourds are suspended from the stem in Kinnari. The Rudra vina has two large gourds. The Batta bin also has two large gourds. A violin made with a gourd resonator also sounds well.

Blackwood (*Dalbergia latifolia*) is used in the Swaramandali and in making castanets. Stems of bamboo are used in the Ektar, Dotar, Tuntina, Ravanastra, Kinnari and Sur sota. The bamboo flute is very common in India. But flutes may also be made of Ivory, Sandal wood, Ebony, (*Diopyros ebenum*), Rakta Chandana (*Pterocarpus santalinus* - red variety of sandal-wood), Iron, Bell metal, Silver and Gold. The bamboo is used in making the shepherd's flute (beak-flute), and the long flute (Nedunkuzhal). The Nāgaswaram and ottu are made of a kind of ebony called ஆச்சாமரம் (*Āchchamaram* in Tamil) i. e. *Diospyros ebenaster*. The mouth piece (Narukku நறுக்கு in Tamil) of the Nagaswaram is made

from a reed called கொறுக்கை Korukkanthattai in Tamil. The wood, Tanakku தணக்கு (Morinda umbellata) was used for making the Yazh in ancient times. An Ivory violin made in Trivandrum in 1834 can still be seen. A nagaswaram made of Ivory is used in the temple at Tiruvārur. A stone nagawaram can be seen in the temple at Azhvar tirunagari (ஆழ்வார் திருநகரி). The piece of cylindrical or barrel-shaped wood used to glide over the strings of the Gottuvadyam is made of the core of the tamarind tree (Tamarindus indica) and also of buffalo horn, Ivory and Ebony. In the chinese flute, there is a special hole between the mouth-hole (mukha-randhra) and the first finger-hole or the tara-randhra. This hole is covered with a thin membranous tissue from a plant. When blown, this tissue vibrates and gives a reed-like sound which is pleasant to hear. Reeds (Phragmites) are used in the magudi (Snake-charmer's pipe) and in Reed dulcimer or Panpipes. The spathe of arecanut (Areca catechu) is used in the instrument, Villukottu (வில்லுகொட்டு) of Malabar. In making the Violin, Pine (pinus), Maple (Acer soccharum), Sycamore, Silver Oak (Grovellicar obusta), Silver wood, Spruce (Picea excelsa) and Himalayan fir are used. In the circular drum, Kanaka tapapttai (கனக தப்பட்டை) the ring is of bamboo கல்முங்கில் (Dendrocalamus strictus). This is a variety of bamboo in which the wall is thicker and the hollow is half filled up. In Violin, the stick of the bow is made of Pernambuco (Haucorina speciosa) or Brazil wood. Horse-hair is used for the hair of the bow. The stick of calotropis plant is used to strike the semakkalam. Cane (calamus rotung) and bamboo stricks are used to strike the Jalata-rangam cups. In the drum called Urumi, the milky juice of a plant is applied and rubbed over the central part of the

right head. This head when stroked, gives that characteristic tone. Hempen hoops are used for the Taval.

Cheap vinas are made of நுனாமரம் (Morinda umbellata). This kind of vina may serve as a practice instrument. It cannot supersede the vina made of Jackwood and become a concert instrument.

The resonator of sitar made in Kashmir is of walnut and mulberry. Deal wood is used in making sruti boxes.

Metals

Brass is used in making wind instruments like the Tiruchinnam, Kombu, Ekkalam, Gauri-kālam, Tārai, and Nāgapāni. The shell of udal (உடல்) is made of brass. Copper is used in making trumpets. Bronze is used in making the kombu of the Pancha-vadyam in Kerala. It is also used in making the shell of the Pancha-mukha vadyam, Viravandi வீரவண்டி (drum) and in making various kinds of cymbals. Bronze is used in making bells, gongs, cymbals, ankle-bells and bridge plate. Royalties use Tamukku with shells of bronze. Brass, bronze, steel and silver are used for making the frets of the Vina. Nickel and Zinc are used to make Bāyas.

Iron filings mixed with rice provide the black paste on the right head of the mridangam. Sheet iron rivetted together is used in the body of the Nagāra. Rings of iron are used in Morsing and in Sūryapirai and Chandrapirai (drums). A metallic finger-board of steel is used in Sarod.

Wire plectra are generally used for plucking stringed instruments. But plectrum made of horn is also used.

Amongst precious metals, gold and silver have been used in making musical instruments. There are big *S-shaped horns* of silver in Tanjore Palace. Golden cymbals பொற்றாம்பல் (Potralam) has been used by Tirujnāna Sambandar. There are golden bells in the Anantapadmañābha Swami Temple at Trivandrum which give a fine ringing tone. The possibility of flute made of gold is suggested in the *Sangita ratnākara*.

Cords of cotton and rings of metal are used in the Dolak.

Skin

The skin of calf and sheep are used in drums. In one of the Kandyan drums, monkey skin is used. Leather braces of buffalo-skin are used in the mridangam. The skin of varanus is used in the Kanjira and Idakka. The bowls of instruments like the Esraj, Taus, and Sārangi are covered on the top with skin. The skin of deer is used to cover the resonator in Sārangi. Snake-skin is used to cover the top of Veena kunju in Malabar. Snake-skin is also used in Chinese drums.

Earth

Mud-pots are used in drums. The shell of the Mridangam was originally made of clay as the name itself indicates. For the Jalatarangam, porcelain cups are now used. In ancient times, only metallic cups were used. These metallic cups turned upside-down and suspended from a frame and played became the Gamelon of Java.

In ancient times Jalatarangam was called *Udāka vādyam* (water-instrument). *Udaka vādyam* is referred to by Vatsyāyana in his work, *Kāma sutra*. The art of playing this instrument is included amongst the *Chatush-shashti kalas*—64 arts.

Strings

Steel strings, brass strings and strings made of gut are commonly used. Aluminium strings, silver strings and nylon strings have recently come into vogue. Silken strings are used in Svarabat and in some Chinese and Japanese instruments. Twisted strings i. e., strings of silk, gut or metal wound round by thin foils of silver, copper or gold are also used. In ancient times, strings of Darbha grass were used but we have now lost the method of seasoning the Darbha grass for the purpose.

Thin fibres extracted from the stem of the calotropis plant and twisted carefully have been used as strings for the Violin (2nd, 3rd and 4th strings) in South India. Likewise, thin fibres extracted from the Kumizha maram குமிழ்மரம் (*Gmelina tomentosa*) and twisted well, were used as strings in ancient yazh (யாழ்) and Vīna.

Assembling of parts

In the assembling of parts in musical instruments, man has exercised the greatest intelligence. The setting of the sound-post in the proper position in the Violin, the placing of the silken-thread (jivali) in the correct position on the bridge of the Tambura, the correct weight of the bow used to play the violin, the correct gauges of the strings used in the Gottuvadyam and the Veena are all vital factors. In the Gottuvadyam, the strings are kept in full tension. The

weight of the sliding wood has to be such, that it will not cause the strings normally to bend perceptibly. The correctness of the mittu and chāpu is one of the important factors in the Mridangam, shining as an ideal rhythmic accompaniment.

Miscellaneous

Calico, leather and marble paper are used for the bellows of sruti-box and harmonium. Various kinds of glue are used in glue-ing parts of musical instruments. Cocoon shell is used in the Ravanastram and Vina kunju. The pair of thin twines or four or five horse-hairs running across the face of the drum-head in Edaka and Udukkai give a fine buzzing effect.

There are stone gongs and stone pillars giving musical notes. There are bronze images like the *Chakkarattālvār* in the Tanjore Art Gallery, whose limbs when struck give notes of different pitch.

Cases and Covers for Musical Instruments

Cases for the Violin are made of leather, compressed card-board or ply wood and covered with calico, rexine or crocodile skin. The cases are lined inside with velvet, flannel or woollen cloth. Cases of teak-wood, lined inside with velvet are used for keeping the Vina and Gotuvadyam. Sometimes these two instruments are kept on wooden stands. Woollen cloth covers are stitched for the Tambura, Vina, Gotuvadyam and Mridangam. Cases of plywood are also made for musical instruments. Velvet-lined teak-wood boxes are made for keeping flutes. Cylindrical boxes of tin are made for keeping Kanjiras.

Care of Musical Instruments

If musical instruments are to give a good, sustained and faithful performance for all time, adequate care should be taken of them. Whereas brass wind instruments, cymbals and castanets may not need as much attention, instruments of the stringed, wood-wind and drum class should be taken care of. They are delicate and sensitive instruments.

The following precautions should be taken :—

1. Musical instruments should be kept in cases which are lined inside with silk, velvet, flannel or other cloth. This will ensure immunity against climatic changes.
2. Musical instruments should not be kept in moist places. Nor should they be kept in places which are subject to extremes of heat and cold.
3. After use, instruments should be kept back in cases or stands as the case may be.
4. Steel strings get rusty and especially so, in places situated near the sea-coast. A thin application of cocoanut oil or ghee periodically will prevent the string from rusting. This problem will not arise, when stainless steel strings are used.
5. A weekly or fortnightly check up of the soundness of parts like the Nāgapāsam (attachment), Langar, Bridge, Pegs, Button, Gut of the Tail-piece, Sound-post and Strings is necessary. *A stitch in time saves nine.* For instance, if the gut of the tail piece shows signs of wearing out, remove it forthwith and replace it by a new one. Do not wait for the

gut to snap, causing the tail piece and the strings to come away and the bridge to fall down. If strands come off from a gut string, replace the string by a new one.

6. Care should be taken to maintain the correct bend of the Violin bow. By overscrewing, the bend of the bow may get altered.

7. When a bridge in the Violin, has to be replaced by a new one, see that the feet of the new bridge are in perfect contact with the top plank of the Violin. Otherwise a nasal sound will result. The feet of the bridge and the middle points of the *f*-holes should be in a straight line. In the Violin bridge, care should be taken to see that the side with closed grains faces the finger-board.

8. Taking into consideration the pitch to which the instrument is to be tuned, use strings of appropriate gauges, so that the frame of the instrument will not be subjected to an undue tension.

APPENDIX II

Varga Vadyas

Varga vadyas are musical instruments belonging to particular families. Certain common features are noticeable in the instruments belonging to one and the same family. For example, there are the four instruments belonging to the Violin family viz., Violin, Viola, Violin Cello and Contra Bass. The bodies of all these four instruments are alike in shape though they are of different sizes. All of them are played with a bow. The commonness may also be noticed in the technique of production of tone.

The musical instruments of India furnish many instances of Varga vadyas. Taking the Udukkai or the hour-glass shaped drum, for example, we find a number of instruments of this shape though they are different in size. The Davandai, Sanna udal, Idakka, Damaru and the Budubudukkai are all of the same shape. The shells in these cases may be of wood, clay or metal. In the case of the Damaru and the Budubudukkai there is a string tied to the centre. At the other end of the string, there is a knot. When the drum is rattled, this knotted end strikes against the two faces alternately and the rhythmical strokes are produced. In the Udukkai, the instrument is actually played by the fingers of the right hand. The squeezing of the braces by the left hand results in the slight sharpening of the tone. The Davandai is struck with a stick and played. The timila with its mortar-shaped body also belongs to this family.

The single-faced open drum furnishes an interesting example under the group of Varga vadyas. The Dep, Tambattam, Kanjira and Khanjeri are instruments similar in shape but they vary in size. In all these four cases, the skin is merely strained over the wooden frame or mud frame as the case may be. The Surya pirai and Chandra pirai are instances of open drums wherein the skins are strained over iron rings of the shape of the sun and moon and provided with an extended arm. In the *Kanaka tappattai*, the skin is stitched over a circular ring of thin strips of bamboo.

To the class of barrel-shaped drums belong the Mridangam, Suddha Maddalam, Dolak, Dolki, Pakhawaj and Khol. The ordinary mridangam used in concerts is known in technical parlance as *Sangita maddalam* to distinguish it from the longer variety of the same species called the *Suddha maddalam* and used exclusively in temple rituals and Kathakali plays. Compared to the mridangam, the right face of the Suddha maddalam is loaded with a greater quantity of the black paste. This results in a deep and resonant tone. When played along with the Panchamukha vadyam, as for example in the ritualistic music in Tiruvarur temple, the combinational effect has a dignity and solemnity of its own.

To the family of conical drums belong the Bheri, Damaram, Kirikatti and Kundalam.

The Nagara has a huge hemi-spherical resonator.

The family of pot-drums is widely distributed. Herein the mouth of the pot may be covered with skin or a circular part of the bottom may be sliced off and covered with skin and played. The Gummati, Tumbaknāri of Kashmir and

Narakunda are all members of this family. When the pot is not covered with skin and simply played, it becomes the Ghatam.

The metallic cymbals furnish another example. There is the Ilattalam used in the Kathakali plays. The Brahma talam is used in temple rituals. The Jalra, Kuzhi talam and Talam are similar instruments but smaller in size. In the case of the Nattuva talam however, one plate is of steel or iron and the other is of bronze. In the case of all the other instruments of this species, both the plates are of the same metal.

The Semakkalam, Segandi and Chengala belong to the family of Gongs. Herein the circular plates of metal are struck with a light stick.

Wind Instruments

The Nagaswaram, Kurumkuzhal, Mukha Vina and Sanai belong to the family of wood-wind instruments with a conical tube and provided with a mouth-piece.

The common Flute, Nedunkuzhal and Ayarkuzhal belong to the family of wind instruments with cylindrical tubes. Drone instruments of the wind group are represented by the Ottu, Donai and Turutti.

Stringed Instruments

The drone family is represented by the Ektar, Dotar, Tuntina, Sursota and Tambura (4 stringed, 7 stringed and 8 stringed varieties). All these are played on open strings.

To the family of plucked instruments belong :

- (1) The fretted instruments like the Veena, Kinnari, Bin, Sitar and Swarabat.
- (2) The fretless instruments (i.e., with a plain finger-board) like the Gotuvadyam, Vichitra Bin, Pradarsana Vina and Sarod.

To the family of bowed instruments belong :

- (1) The fretted instruments like the Dilruba and Esraj.
- (2) The fretless instruments like the Sarangi.

APPENDIX III

Vocal music vs. Instrumental music

Vocal music

1. The voice (Gātra vīna) is a free gift to us from God and it is upto everyone to learn to sing. The voice is intended not only for speaking but also for singing. Singing is an art which is within the easy reach of every one. But a musical instrument has to be acquired and the art of playing it learnt.

2. Ability to sing sometimes comes by mere imitation; but this is not the case with instrumental music. The art of playing on an instrument has to be actually learnt from a master.

3. The unseen instrument of the voice is carried by a person unnoticed wherever he goes ; but a musical instrument cannot be carried without being noticed. Some instruments are so big and heavy that they have to be carried by a disciple or servant.

4. A singer can straightaway start singing but in the case of an instrumentalist he has to tune the instrument beforehand and play, unless it is a wind instrument like the flute.

5. In singing, there is the continuity of tone but in plucked instruments like the Vīna, this is not the case.

6. The special merit of vocal music is that the sāhitya or the words of a composition can be heard; but in instrumental music only the dhatu or the music alone can be heard.

7. Songs wherein the sahitya has a special value as in the case of compositions belonging to the spheres of sacred music, dance music, operas, dance dramas and folk music, are fully enjoyed through vocal renderings.

National songs arouse the national sentiments on account of their inspiring ideas.

8. Literary beauties like yamakam, svarākshara sabdālankāra, antya prasa, anuprasa, yati pattern, kondukūttu, and the raga mudra, tala mudra, kshetra mudra etc. cleverly interwoven into the texture of the sahitya cannot be made explicit in instrumental renderings.

9. The sahitya bhāva sangatis are enjoyed in full in vocal renderings. Niravals in kritis and pallavis are effective in vocal renderings.

10. The Sahityas help to identify the tunes and fix them in our mind.

11. In medieval times, when the art of rendering songs in notation was not cultivated, the tunes of songs were indicated as "set in the tune of *Ratisukha sāre* or to be sung like *Rati sukha sāre*" i. e., the 11th Ashtapadi of Jayadeva and so on.

12. Songs of a lighter nature are enjoyed more through the medium of the voice than through instrumental music.

13. To appreciate instrumental music more fully, one has to possess a lot of knowledge in music and some knowledge at least relating to the technique of play on the instrument. But this is not the case with regard to vocal music.

14. While singing, the vocalist has the advantage of being able to reckon the tala himself, but the instrumentalist has to depend on the services of another musician for this purpose. Flutists sometimes reckon the tala with their legs and Vainikas reckon the tala with the tala strings. But these are not of much use, when compositions and pallavis in long talas like Simhanandana and Simhavikridita are attempted.

15. Vocal renderings of passages of jatis (solkattus) are very effective. Tillanas are fully enjoyed when sung.

16. The aphorism, குரலில்லாதவனுக்கு விரல் only emphasises the importance of vocal music. Likewise is the of tasked query, வாத்தியம் பாடுமா ?

17. When an instrumentalist renders a piece whose musical setting is nearly like that of another it becomes difficult to identify the piece. For example when he renders a piece like *Nammi vachchina* (Kalyani Raga), the listener may get the impression that he is playing the piece “*Devi Meenakshi mudam*”. But when he comes to the anupallavi, the identity of the piece gets established.

18. Likewise when he plays a kriti in which tune, there are at least three different sahityas, the listener is left in a state of suspense. Thus when he plays the piece “*Naraharini nammaga*” (Bhairavi) of Bhadrachala Ramadas, the listener may legitimately conclude that he is playing ‘*Pasyata pasyata*’ figuring in the *Krishna Lila Tarangini* of Narayana Tirtha or ‘*Mugattaik kattiye deham*’ of Papanasa Mudaliar since all the three sahityas are in the same tune or Varnamettu. Vocal rendering of the piece will serve to clarify the song.

19. Instrumentalists in general do not care to learn the sahitya of the songs they play. They play with the picture of the dhatu in their mind. Their play will be much better and would faithfully reflect the original if they have the sahitya in their mind and play.

20. Very often it happens, that instrumental performers blindly repeat the music of the anupallavi, while playing the latter part of the charana, even though the music of this latter part may slightly differ on account of an addition or reduction in the number of the sahitya letters. For example, compare the music of the anupallavi of *Sitapatte* (Khamas raga) and the music of the latter part of its scharana.

21. Instrumentalists in general desire to provide accompaniment to scholarly vocalists of standing, since such chances help them to enhance their reputation and gives them good training in playing kalpana svaras to themes in intricate eduppus, and identify intricate pallavis. Faculties, like alertness and quick response are also developed.

Instrumental Music.

1. In spite of its limitations, instrumental music has a charm all its own.

2. Human genius has evolved a fine and attractive technique of play in concert instruments. It is a delight to watch the Vainikas play trikāla tanas and chakra bandham.

3. Instrumental music is absolute music.

The Trimurtis : Siva, Vishnu and Brahma (His consort Sarasvati) are associated with musical instruments. Narada played the Vina, Mahati. Anjaneya was a Vainika. The episode relating to the Gundakriya raga bears this out.

4. Most of the lakshanakaras and composers of India like Sarngadeva, Ramamatya, Somanatha, Tyagaraja and Muthuswami Dikshitar have been Vainikas.

5. It was instrumental music that helped man to get a clear grasp of the subtleties of the tone system and the graces and nuances used in ragas.

6. Instrumentalists are in a better position to render accurately songs in notation.

7. Possibilities of deriving new scales through the process of modal shift of tonic were revealed only through the harp and the fretted vina.

8. Knowledge of *dvigunatva* (doubleness) and knowledge of the frequency ratios of the notes used in various ragas were obtained through musical instruments.

9. Every instrument has a characteristic tone-colour.

10. Instrumental music is capable of universal appreciation.

11. In an instrumental rendering of a piece like 'Nagumomu ganaleni' (Abheri raga) we are able to appreciate the musical cast much better, since all the time we listen only to its pure musical setting.

12. Instrumental music has a wider range extending from 5 to 7 octaves whereas the compass of a brilliant and gifted voice is only 3 octaves.

13. In *Vadya brindas* (orchestras) men and women can join together and play on their respective instruments. But in *Gayaka brindas* (choirs) men alone or women alone have to sing on account of the pitch structure of their voices. Of course men and women can sing together by doubling in octaves ; but then the effective range of music will be considerably reduced. This limitation in group singing applies only to a melodic system of music. In the harmonic system of music, however, men and women can sing together on account of the possibilities of part singing.

14. Instrumental music can be cultivated by one and all but to be a good singer, one should possess a good voice.

15. Instrumental music answers to the wider needs of the society.

Instrumentalists not only perform in Sangita Sabhas, but also in temples during services and processions. There are also the martial bands and instruments used for propaganda purposes.

16. Drums have been used for communicating messages. The Nagara mantapas (drum stations) installed by Tirumal Naik (17th Cent.) of Madurai may be remembered in this connection.

17. Instrumental accompaniment is absolutely essential in concerts of vocal music and dance and in operas and dance dramas.

18. Instrumental forms like *vadya prabandhas* shine well when performed by bands.

19. The combinational tone-colour of orchestral music provides a pleasing variety. Orchestral music has an impressive effect.

20. It should be remembered that an instrumentalist is a vocalist plus an instrumentalist. Every performer on an instrument first learns the piece vocally and then reproduces it on his instrument in a stylish, embellished and artistic manner.

21. Relatively speaking, an instrumentalist possesses a far higher degree of *svarajnanam*, compared to the vocalist.

22. Vocalists sometimes stray away from the pitch (*adhara sruti*) causing annoyance to themselves, their accompanists and the attentive listeners. But there is no such problem as far as the instrumentalists are concerned.

23. When a singer catches cold, he or she cannot sing well. But there is no such problem as far as the instrumentalist is concerned.

24. For enjoying vocal music in full, one must have a knowledge of the language of the songs, sung. But in instrumental music, there is no such problem. It is the *dhatu* alone that is played.

25. The voice is a monophonous instrument but instruments like the *Vina*, *Gotuvadyam* and the *Violin* are polyphonous instruments and effects like double stops and doubling in octaves can be produced.

26. With few exceptions, old age has an adverse effect on the voice. The pitch of the voice goes down and its capacity for producing clearly fast phrases also gets reduced. But there is no such problem in instrumental music. There are vinas which have been used for more than a hundred years and they still give a delightful tone.

27. Very high speed is attainable in instrumental music particularly in the flute and jalatarangam. Trikala tanas played on Vina are delightful.

28. Gamakas like Tribhinna can be played only on instruments like the Vina and Gotuvadyam.

29. Proficiency in instrumental music is a good accomplishment even in a vocalist.

30. There are some delightful compositions on love theme. They are not sung on account of their erotic sahityas but instrumentalists can keep them *alive* by performing them.

31. Instrumental music is a good vehicle for effecting cures (musical therapy).

32. Without an instrumental accompaniment no concert of vocal music can shine.

33. On account of its richness and volume, instrumental music is capable of being heard by large audiences and in big halls. It can reach long distances.

34. Rising performers of vocal music desire to be accompanied by senior instrumentalists with a view to not only enhance their reputation, but also to develop self-confidence and establish themselves in the professional world.

35. After all, the larynx or the human voice is also a musical instrument, concealed securely in the throat. It is a wind instrument. The two vocal cords are set in vibration by the rush of air from the lungs. The mouth acts as the resonator.



APPENDIX IV

Raga rupa sanchari

Huseni raga — Adi tala

[Sambamoorthy

{ s R G m p n d n s
s n d p M g r s

4			○	○
<u>S s s</u>	s s	s s	<u>P p p</u>	p n d m
<u>P p p</u>	p p	p n	<u>S s n r s</u>	n d P
<u>P p p</u>	p p	p s	<u>s s s n r s</u>	n d p m
m m	<u>P d n</u>	d p	<u>m g m P m</u>	g r S
R ; G ;			<u>m g M p m</u>	g r S
r g m g	R	g r	S ;	;
S ;		nd N	S ;	;
p M	G r	g r	S ;	S ;

	○	○
<u>p m</u> g r S ;	<u>p n d m</u> g r	S ;
p s n s p * d m p	<u>m g m P m</u>	g r S
<u>S s s</u> S <u>P p p</u> P	<u>S s s</u> S	g r S
n s <u>r g M</u> g r S	<u>n s s n r s</u>	n d p m
<u>P p p</u> P <u>S s s</u> S	<u>S s n r s</u>	n d p m
m m <u>P d n</u> d p * d p	<u>m g m P m</u>	g r S
R r g m p * d p	<u>m g M p m</u>	g r S
p m g r S ;	n d <u>N</u>	S ;