

**Competency-Based Dynamic Curriculum for MD/MS SIDDHA
(PRESCRIBED BY NCISM)**

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**Semester II
Applied Basics of Siddha Maruthuva Adippadai Ariviyal
(Basic Principles of Siddha Medicine)
(SUBJECT CODE : SIDPG-AB-SMAA)**

(Applicable from 2024-25 batch, from the academic year 2024-25 onwards until further notification by NCISM)



**BOARD OF UNANI, SIDDHA AND SOWA-RIGPA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026**

PREFACE

This basic principles of Siddha Medicine consists of all scientific constitutions of Siddha Medicine. Through this syllabus, one can understand the history and growth of Siddha Medicine that occurred over around 5000 years. One of the modules has been discussed is about logic (Alavai). It provides a powerful skill with logical thinking and complements creativity. The content has been structured to offer a balanced blend of theoretical knowledge, clinical guidelines and practical applications in Siddha basic principles. Students can also learn about Gurugula educational system of Siddhars with proper integrity and credibility. When the students learn this, they can analyse the subtle components and perceive that profound scientific knowledge in Siddha Medicine. Many deep and insightful knowledge of Siddha Medicine has been added in this curriculum. It encompasses key topics ranging from the basic sciences to advanced therapeutic strategies, ensuring relevance across various stages of medical education and practice. It contributes all the noteworthy achievements regarding basic principles of Siddha Medicine.

A part of this syllabus is designed in such a way that the students can also be able to understand the intricate technical terminologies of Siddhars. This work ensures that the Siddha Philosophies will be preserved through methods rooted in Siddha system of medicine. This curriculum consists of all the components of Siddha maruthuvam based on Anatomy, and Physiology. Siddha philosophy and basic sciences, alongside clinical applications and advancements in diagnostic methodologies is well designed. The syllabus has been meticulously crafted to align with Modern Embryology and Genetics while promoting the scientific validation of Siddha principles of foetal development. This curriculum focuses on scientific approach towards 96 Thathuvams. Various types of clinical case discussions are structured with combination of 96 Thathuvams and five elemental theory. Students will be expertised in clinical applications by learning the subtle science as naadi, saram, vaasi, kundalini, and aadhaarangal. Scientific approach of muththegam and mukkutram studies will improve the Siddha based clinical skills of the students.

Practical and experiential learnings are individually designed depending on the contexts. This curriculum will be a guide to the students in the forthcoming years to research and learn all aspects of Siddha Medicine like Vaatham, Vaithyam, Yogam and Gnanam. The students can understand the micro elements of Siddha Medicine like Yoga science, Varmam energy and its functions, Varmam practice and the principles of life force. This curriculum imparts the desire to improve the aptitude in clinical practice, specialisation in Siddha research in both descriptive and analytical research. This syllabus incorporates interactive learning modules, clinical applications, evidence-based practices, and research opportunities to prepare students for dynamic challenges of modern health care. It promotes the scientific validation of Siddha principles while nurturing a respect for its traditional roots. This work represents the collective effort of experienced educators, researchers, and practitioners who have contributed their expertise to ensure the curriculum is comprehensive and adaptable to the needs of students at various levels. I extend my heartfelt gratitude to all who have participated in this endeavour, including the institutions and governing bodies that supported its development.

We hope this syllabus will serve as a guiding framework for educators and students, preserving the legacy of Siddha Medicine while propelling it into the future. May it inspire the next generation of healers to uphold the values of compassion, knowledge, and service that lie at the heart of this ancient Siddha system.

INDEX

Summary & Credit Framework	5
Course Code and Name of Course	6
Table 1 : Course learning outcomes and mapped Program learning outcomes	6
Table 2 : Course contents (Modules- Credits and Notional Learning Hours)	7
Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods	23
Table 4 : Practical Training Activity	105
Table 5 : Experiential learning Activity	108
Table 6 : Assessment Summary: Assessment is subdivided in A to H points	111
6 A : Number of Papers and Marks Distribution	111
6 B : Scheme of Assessment (Formative and Summative Assessment)	111
6 C : Calculation Method for Modular Grade Points (MGP)	111
6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)	113
6 E : Question Paper Pattern	113
6 F : Distribution for summative assessment (University examination)	114
6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)	116
6 H : Distribution of Practical Exam (University Examination)	117
Reference Books/ Resources	118
Abbreviations	126

We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet.

-Swami Vivekananda

NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Competency-Based Dynamic Curriculum MD/ MS SIDDHA

Applied Basics of Siddha Maruthuva Adippadai Ariviyal (SIDPG-AB-SMAA)

Summary & Credit Framework

Semester II

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
M1. History of Siddhars and siddha medicine.	2	60	50
M2. Gurukula Tradition of Siddha system.	2	60	50
M3. Components of Dharkam (Alavai) in Siddha Literatures .	2	60	50
M4. Tamil language and Siddha Medical system	2	60	50
M5. Creation of universe in Siddhars' perspectives.	2	60	50
M6. Siddhars' Creation theory of Jeevan (Urpathi thathuvam)	2	60	50
M7. Elucidation of 96 Thathuvams.	2	60	50
M8. Clinical aspects of Kaarana and Sookuma thathuvangal .	2	60	50
	16	480	400

Credit frame work

SIDPG-AB-SMAA consists of 8 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Important Note: The User Manual MD/MS Siddha is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding the curriculum, write to syllabus24sid@ncismindia.org.

Course Code and Name of Course

Course code	Name of Course
SIDPG-AB-SMAA	Applied Basics of Siddha Maruthuva Adippadai Ariviyal (Basic Principles of Siddha Medicine)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) SIDPG-AB-SMAA At the end of the course SIDPG-AB-SMAA, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Interpret and decode the poems in Siddhars' moola noolgal, palm leaf manuscripts, appreciate the lineage ,contribution of different Gurus and Siddhars, analyze and explain the milestones in the history of siddha.	PO8
CO2	Apply the 96 Thathuvam in the aspect of Sthoola, Sookkuma and kaarana thathuvams and demonstrate the applied aspects of <i>alavai</i> (logic) in contemporary basic sciences and clinical settings.	PO7
CO3	Explore the covert titles of Rasavatham,secrets of muppu,it's transitional process,uses,values,and interpret in terms of contemporary sciences	PO4,PO5
CO4	Apply Siddha basic principles in examination, diagnosis, mode of drug administration, investigations, interpretations and different treatment modalities.	PO1,PO3,PO4
CO5	Appraise the scientific concepts, preventive ,promotive and treatment aspects of yogam and kaya siddhi.	PO1,PO2,PO4
CO6	Comprehend the fundamental principles of anda pinda thathuvam, apply the concepts of Meignanam and Siddhars' spiritual practices.	PO7,PO8
CO7	Appraise the knowledge of Vatham, Vaithiyam, Yogam and Gnanam for research and entrepreneurship in the current age and impart the knowledge of basic principles	PO5,PO6

Table 2 : Course contents (Modules- Credits and Notional Learning Hours)

2A Module Number	2B Module & units	2C Number of Credits	Notional Learning Hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
1	<p>M-1 History of Siddhars and siddha medicine. This module contains chronology of siddhars and Siddha Medicine. It reveals categorization of Siddhars and their legacy.If the students learn this module they can able to Decode Siddha Literatures. An unit consists of comparative analysis on other Traditional systems ,that improves the research attitude of the students.</p> <p>• M1U1 History of Siddha System.</p> <p>1.1.1. Age of Siddha medicine through Literary evidences from sangam literatures, epigraphic references, <i>cheppedukal</i> (Copper plates) and <i>chuvadikal</i> (palm leaf manuscripts).</p> <p>1.1.2 .Position of Siddha medicine in Sangam literature period with references from sangam literatures. History of Siddha medicine with monumental evidences and available literatures written at the period from Ethical literature period to recent period . Recent History of Siddha maruthuvam.</p> <p>1.1.3. The antiquity and History of siddha system reviewing <i>sangam literatures, Kaapiyangal, Neethi noolkal</i> , philosophical texts avialable <i>chuvadikal</i> and <i>cheppedukal</i> .</p> <p>• M1U2 Virtuosity of Siddhars' Vaithyam and gnanam.</p>	2	10	20	30	60

1.2.1. Siddhars' achievements on *Gnanam* (Wisdom) and *Vaithyam* (Medicine).

1.2.2. Siddhars' history , accomplishments and their literatures on *Vaidhyam* and *Gnanam*.

1.2.3. The proficiency , excellence , lineage and legacy of *Vaithyam* and *Gnanam* based Siddhars .

• **M1U3 Analysis of ancient scripts of Siddha system (moola noolkal).**

1.3.1. Siddhars' *kaappupaadalkal* and it's significance. The meanings of literal notations, *Siddhar uvamaikal* and *Thirumoolar's soonya sambaashanai*.

1.3.2 .The meanings and significance of titles in *siddhar noolkal* (*Siddha Literatures*). The enigmatic meanings of Siddhars' *Kuzhookurikal* , *paripaashaikal* by using *Nigandukal* and *Agaraadhikal*.

1.3.3. Enigmatic Titles, *kaappu paadalkal*, structure, linguistics and hidden meanings in Siddhars' verses .

• **M1U4 Decoding spiritual and supernatural attainment of Siddhars (Siddhi muraikal)**

1.4.1. Sixteen higher order Alchemical aspects of *Vaatha siddhis* mentioned by Siddhar Boganaathar . Detailed study on *Chaaranaai* , *kattu*, *kiraavanam*, *parikkuru*, *Chinthooram*, *lavanam*, *chatthu* , *chembu* , *Pathangam*, *Kuligai*, *Jeyaneer*, *Thiravaham*, *Mayanakoottam*, *Mooligai*, and *Avizhtham* from *Vaatha Siddhi*. *Kaaya siddhi*, *Yoga siddhi*, *Kuligai siddhi*, *Kamana siddhi*, *Gnana Siddhi* and *Manthira siddhi*.

1.4.2. The different types of Siddhis and difference between various theories of siddhis of Siddhis. Ways to attain Siddhis.

	<p>1.4.3. The different types of Siddhis explained by Siddhars. The Siddhis in <i>Vaatham, Vaithyam, Yogam and Gnanam</i>.</p> <p>• M1U5 Comparative analysis on Siddha system with other Traditional systems</p> <p>1.5.1. Relationship between Siddha system with other Indian traditional systems.</p> <p>1.5.2. Traditional systems of other countries , similar to Indian Traditional system.</p> <p>1.5.3. Differences and similarities between two aborigines of Indian Traditional medical systems (Siddha and Ayurvedha) and Traditional systems of other countries.</p>					
2	<p>M-2 Gurukula Tradition of Siddha system.</p> <p>This module highlights rules and regulations followed in <i>Siddha maruthva Gurukula kalvi muraikal</i>. It emphasizes the importance of Qualities of diligent disciple and proficient <i>Guru</i>. The Different school of thoughts about Guru is explained indepth. Exploring the teaching learning methods of <i>gurukulams</i> , lineage and legacy of Siddhars' <i>gurukulams</i> .Siddha medical ethics are also explained in detail.</p> <p>• M2U1 Siddhar’s gurukula Kalvimuraikal.</p> <p>2.1.1. Siddha maruththuva <i>Gurukula</i> education system. The descendants of Siddha medicine and the progress of Siddha medical system from generation through the <i>Gurukula education system</i>.</p>	2	10	20	30	60

2. 1.2. The teaching learning methods of ancient gurukula system. Basic principles of medical education in each Gurukula system. The texts based on tradition of *Moolan marabu* and *Agathiyar marabu*.

2. 1.3. Etiquettes of different *gurukulams*.

• **M2U2 Qualities of Diligent Disciple**

2 .2.1. Qualities of Diligent disciple . According to Siddhar 's statement that to learn Siddha medicine , needs a disciple with excellent character. Ethical guidance attributed by the Siddhar's gurukula education which impose the responsibilities of doctors and patients.

2. 2.2 . Agaththiar's concepts about good Disciple . Descendants of tradition from ancient guru to diligent disciple.

2. 2.3. The rules for good disciple to be experienced by the students.

• **M2U3 Qualities of Proficient guru**

2.3.1. The Qualities of Guru explained by Siddhars in the Siddha texts.

2. 3.2 . The Different school of thoughts about Guru. Qualities of guru explained by *Agathiyar, Thirumoolar and Theraiyar*. Concepts of *Gurugula* Traditions in *Varmam* medical education systems

2.3.3. The relationship between guru and seedan. Different concepts of proficient *Guru* and inexpert guru in the aspects of *Thirumoolar*.

• **M2U4 Attributes for good siddha physician.**

2.4.1. The attributes of good Siddha physician. The guidelines to be followed by a good Siddha physician.

2.4.2 . The qualities and knowledge of good Siddha physician defined by

	<p>Siddhars in Siddha source texts.</p> <p>2.4.3. Good Siddha physician which has been meticulously crafted by Siddhars. The discipline and dress code of Siddha physician explained by Siddhars.</p> <p>• M2U5 Medical ethics in Siddha Medicine .</p> <p>2.5.1. The principles of disciplines in Siddha Medical Ethics and the relationship between the physician and their adherence with the patient.</p> <p>2.5.2. The Siddha Medical ethics from various Siddhars' scripts and Siddha medical ethics to be followed in the routine clinical practice.</p> <p>2.5.3. The Medical Ethics of Siddha system and Medical Ethics of other systems , the theories of Siddha Medical Ethics and it's necessary for clinical practices.</p>					
3	<p>M-3 Components of Dharkam (Alavai) in Siddha Literatures .</p> <p>This module provides an introduction , definition, and components of <i>Dharkam(Alavai)</i> in Siddha Literatures. Through this module students can learn about <i>Dharka saasthiram</i> and <i>Uthikal</i> written by siddhars. It helps the students to apply the <i>Thvani</i>, <i>Anga amaippu</i> in clinical aspects. This part of study develops the students' Diagnostic approach and the skills in learning Siddhars perspectives.</p> <p>• M3U1 Implementation of 32 analysing technics(uththikal) and 10 logics (Alavaikal)in Siddha Medicine.</p> <p>3.1.1. Logic (<i>Alavai</i>)in all aspects of Siddha Medicine. The necessity of logics (<i>Pramaanagal</i>) to develop medical knowledge in new ways.</p>	2	10	20	30	60

3.1.2. Application of logic (*Alavai*) in Siddha clinical examination. Analysing *uththikal* (strategies) from Siddha literatures and apply in clinical diagnosis and treatment.

3.1.3. The 32 *uththikal* with real life scenarios. Utility of analyzing *uththikal* in the assessment of the patients. Discuss about analyzing strategies and it's different approaches in clinical practice, higher studies and research.

• **M3U2 Significance of Dharka Gnanam in Siddha Medicine.**

3.2.1. Indian philosophy explained in *Manimegalai*. The elements of the Indian philosophical tradition to shore up the Siddha medicine.

About *Bootha Vatham, Saiva vaatham, Vedha vaatham, Aseevakam, Saankiyam, and Boutham*. Siddha Medicine related Philosophical concepts like *Dhanmaathrai, Boothangal, Pancheekaranam, Anu, Uyir, Uyirathukkal, Iruvinai, Mooudal, Aadharams and Koshankal*.

3.2.2. The relationship between Indian Philosophical concepts with basic principles of Siddha Medicine.

3.2.3. Review of Siddha Literatures focused on *Bootha Vaatham, Saiva vaatham, Vedha vaatham, Aseevakam, Saankiyam, Samanam and Boutham*. Detailed study on Siddha Medicine related Philosophical concepts like *Dhanmaathrai, Maha Boothangal, Pancheekaranam, Anu, Uyir, Uyirathukkal, Iruvinai, Moo udal, Aadharams and Koshankal*.

• **M3U3 Dharka saasthiram of siddhars .**

3.3.1. *Agaththiar' s tharka saasthiram* and *dharkam* in other Siddha Literatures. Siddha medicine related assertions stated in the *Siddhars' Tharka noolkal*.

3.3.2. Siddhars' logical texts and it's necessity for Siddha system of Medicine.

3.3.3. Siddhars' *Tharka muraigal* (Reasoning methods) to learn Siddha

	<p>medical texts.</p> <p>• M3U4 Application of Alavai in Clinical interpretation.</p> <p>3.4.1. Ten types of <i>Alavaikal</i> (logics). <i>Thvani</i> (tone) of the patient to diagnose the conditions of <i>mukkutram</i>s through logical thinking. Role of <i>Alavai</i> (Logic) in <i>Anga saasthiram</i> based diagnosis and <i>Envagai thervugal</i> .</p> <p>3.4.2. The <i>Alavai</i> (logic) based diagnostic approach in Inspection, palpation, percussion and auscultation .</p> <p>3.4.3. Diagnose the diseases through signs and symptoms of patients with logical reasoning.</p>					
4	<p>M-4 Tamil language and Siddha Medical system</p> <p>This module discloses <i>Siddha maruthuvam</i> with the help of <i>maruthuva agaraathigal</i> and <i>nigandugal</i>. It exposes <i>Chuvadi payirchi muraikal</i> which improves the student's skills to compile and also edit the Scripts written by siddhars. The knowledge of Research in Rhetoric styles and <i>Ani ilakkanam</i> helps to find out the sentence pattern, and semantic meaning, extempo (rhythmic speech) of Siddhar's poetries.</p> <p>• M4U1 Significance of Tamil and Siddha Maruthuva Agraathigal and nigandugal</p> <p>4.1.1. The <i>Tamil agaraadhikal</i> ,<i>Siddha maruthuva agaraathigal</i> and <i>nigandugal</i> .(<i>Thesaurus and dictionary</i>) .</p> <p>4.1.2. Siddha Medical Terminologies in <i>nigandugal</i> and <i>agaraathikal</i>.</p> <p>4.1.3. Datas from <i>nigandugal</i> and <i>agaraathigal</i> which are related to Siddha Literary research . Purpose of <i>Thiravukol noolkal</i> .</p>	2	10	20	30	60

• **M4U2 Transcription of Tamil Medical palm leaf manuscripts, paper manuscripts and medical inscriptions .**

4.2.1. *Maruthuva chuvadikal* . (Medical Palm leaf manuscripts), paper manuscripts and medical inscriptions. Transcription of the list of available unprinted *maruthuva chuvadikal* .

4.2.2. Digitalization of *maruthuvachuvadikal*. *Chuvadippathippu* (Execution of the transcription) techniques to prepare a book from *moolachuvadi*. Scanning, correction of errors and explanation of writing materials in a manuscript.

4.2.3. Siddha medicine related inscriptions , *Samanar caves* medical and medical palmleaf manuscripts .

• **M4U3 Prosodical study on Siddha verses .**

4.3.1. Phonemic sounds, rhythmic structure and intonation of the Siddhar poetries. Prosodic features of Siddhar poetries. Significant role in accent patterns within words and phrases. prosody in Siddhar *paadalkal* (Siddhar verses) according to *Tholkaapiyam - marabiyal*.

4.3.2. Rhythm ,intonation, poetic meter and verification of Siddhar's poetries in ancient Siddha texts - *moola noolkal*.

4.3.3. Rhythmic structure, phonemic sounds, intonation, syntax, semantics, pragmatics and linguistics in Siddhar's verses.

• **M4U4 Anikal and porulkolal for revelation of Siddhar ilakkiangal .**

4.4.1. Objectification of Siddhar verses. *Ani ilakkanam* and eight types of *Porulkol* to understand the hidden meanings of siddhar verses.

Anikkotpaadukal in Siddhar's medical texts to understand the Siddhar's perspectives.

	<p>4.4.2.Subtle meaning of Siddhar’s poetries with the help of <i>Ani ilakkanam</i> and <i>Porulkolal</i>. Metaphors and similes to reveal the concealed informations in Siddhars' verses.</p> <p>4 .4 .3 .Varieties of <i>Anigal</i> in Siddhar texts. The hidden meanings of <i>siddhar paadalkal</i>. <i>Porulkolal</i> and <i>anigal</i> in Siddha Literatures.</p> <p>• M4U5 Rhetoric approach and language styles in Siddha Literatures.</p> <p>4 .5.1. <i>Pulappaattu neri and nadai iyal</i> (Rhetoric approach) of <i>Tamil ilakkiyangal</i> and Siddhar verses.</p> <p>4.5.2. Rhetoric approach and language styles (narrative, descriptive, expository, persuasive and formal) of Siddhar’s poetries.</p> <p>4 .5.3 . Meanings of Siddhar verses through Rhetoric approach and language styles.</p>					
5	<p>M-5 Creation of universe in Siddhars' perspectives.</p> <p>This module provides an indepth knowledge about Creation theory of Universe in the view of <i>siddhar's Naatha bindhu</i> theory and <i>paraveli</i> theory. It highlights creation of <i>Panchaboothams</i> and it's <i>Pancheekaranam</i> . Detailed study on <i>sthoola</i>, <i>sookuma</i>, and <i>kaarana thega pancheekaranam</i>. This module elicits comparative study with recent creation theories and other existing Indian Philosophical concepts . It detects and classifies the creation theory of Maaya.</p> <p>• M5U1 Cosmogony of universe in Siddhars' perspectives .</p> <p>5.1.1. Siddhar's <i>paraveli</i> theroy in the cosmogony of universe from Siddha literatures, . The origin and evolution of <i>panchaboothams</i> from <i>paraveli</i> in</p>	2	10	20	30	60

Siddhar's perspectives.

5.1.2. Siddhars' *paraveli* ?? concepts .

5.1.3. Comparison of the experience between broader theoretical concepts and frameworks about cosmogony of universe .

• **M5U2 Siddhars' Naadha bindhu concepts in cosmogony .**

5 .2.1. Siddhars' *Naadha bindhu* (sound and light) theory in cosmogony.

Emerging and Merging divine sounds of *Manthira beejangal*.

5.2.2. Role of *Naadham* (sound) and *Bindhu* (light) in the cosmogony of universe. Analytical study of voice production in human body and its link with *Naadha prabanjam*. Recent concepts of sound and light.

5.2.3. Creation theories of Siddhars with recent cosmogony theories.

• **M5U3 Maaya theory of creation**

5 .3.1. Maaya theory . In depth information about the Maaya theory of Siddhandhis and vedhanthis.

5 .3.2. Suddha maayai, Asuddha maayai and Prakruthi maayai in Maaya theories . Comparisons of these maayai theories with Siddhar's concept.

5. 3.3. Maaya theory of cosmogony with proper references.

• **M5U4 Formation of Panchaboothangal and its Pancheekaranam .**

5 .4.1. Creation of *Sthoola Panchaboothams* from *Sookuma Panchaboothams*.

5.4.2. Developmental stages of *Dhanmaathrai*, *Mahaa boothangal*, *Sookuma*

	<p><i>boothangal and Sthoola boothagal and their Pancheekaranam.</i></p> <p>5.4.2. <i>Sthoola thega pancheekaranam, Sookuma thega pancheekaranam & Kaarana thega pancheekaranam.</i></p>					
6	<p>M-6 Siddhars' Creation theory of Jeevan (Urpathi thathuvam)</p> <p>This module emphasizes the importance of Siddhar's Creation theory of Jeevan and fetal developmental disorders. This module evaluates the significance of Siddhar's Embryology in the view of <i>kaarana, sookuma and sthoola thathuvangal</i>. By exploring various concepts of Siddhars' foetal developmental theories, sex determination, lifespan, Fixation of <i>Jeevan</i> in Embryo level are highlighted. It compares the genetic diseases mentioned in Siddha medicine with the genetic disorders described in Modern medicine. It explores Doctrine of Birth in <i>Siddhar noolkal</i> and Tamil literatures.</p> <p>• M6U1 Siddhars' Karpakiriyai and Jeeva urpathi thathuvangal</p> <p>6.1.1. Thirumoolar's <i>karpakiriyai kotpaadukal. Urpathi thathuvam</i> in <i>Jeeva Urpathi Chinthamani</i>.(Foetal developmental theory)</p> <p>6.1.2.Role of <i>vaayus in Karu urpathi</i>. Comparative analysis of Karpakiriyai with modern embryology.</p> <p>6 .1.3. Siddhars theory of Sex determination and Lifespan fixation.</p> <p>• M6U2 Foetal developmental theory in various concepts of Siddhars .</p> <p>6 .2.1. Foetal developmental theory in Siddha texts like <i>Jeevorpathi kaandam</i> and <i>Panchasoothiram</i>. Congenital diseases acquired in Foetal developmental stages according to Siddha medicine and Modern medicine texts.</p>	2	10	20	30	60

6 .2.2.Diseases acquired in developmental stages of foetus in various Siddhars' concepts. Common antenatal and perinatal problems in India.

6 .2.3. Genetic diseases mentioned in Siddha Medicine with the genetic disorders described in Modern Medicine.

• **M6U3 Formation of Sookuma thathuvangal and Fixation of Jeevan in Embryo .**

6 .3.1.The formation of *SookumaThathuvangal* and Fixation of *Jeevan* (Foetal developmental theory) explained in *Thiruvalluvar Gnana Vettiyaan* and other Siddha texts.

6 .3.2.Foetal developmental theory described in *Thiruvalluvar Gnana Vettiyaan* with Modern Foetal developmental theory. The treatment protocol for Foetal diseases prescribed in Siddha medicine.

6.3.3.Siddhars' theory of *Sookuma Thathuvangal* in Foetal stages.(*vaayus, Naadis and other sookuma thathuvams*).

• **M6U4 Theory of Birth in Tamil Literatures and Indian Philosophy .**

6.4.1. Foetal development concepts in *Thevaaram, Thiruvaasagam* and other Indian Philosophical texts.

6.4.2. Diseases acquired in foetus and the mother's antenatal problems described in *Thiruvagasam* and the analysis of the *uyir kotpaadukal (life span)* in the aspects of Indian philosophy and Siddhar's perspectives.

6.4.3. Doctrine of Birth theory in Siddhar texts and Tamil devotional literatures like *Thevaaram, Thiruvaasagam, and Naalaayira divya prabandham*

• **M6U5 Protocols of Siddha medicine for natural birh and preemptive steps to**

	<p>secure baby and mother .</p> <p>6.5.1. Preemptive measures mentioned in Siddha Literatures to secure mother . Siddha system based recommendations for physiological delivery and birth of a flawless child .</p> <p>6.5.2. Precautionary measures for obstetric and gynecological disorders. Recommendations for the birth of a flawless child mentioned in Siddha literatures.</p> <p>6.5.3 .Siddha medicine based Medications, diet, lifestyle for pregnant women and foetus to motivating Natural birth and birth of a healthy child.</p>					
7	<p>M-7 Elucidation of 96 Thathuvams.</p> <p>This module analyzes 96 <i>thathuvangal</i> in different school of thoughts. It elicits concepts of 96 <i>thathuvangal</i> in physiological and pathological aspects. This module discloses composition of 96 <i>thathuvangal</i> in <i>Varma noolkal</i> and in <i>Saiva siddhantha saathirangal</i>. It brings a milestone in clinical application of Siddha basics of 96 <i>thathuvangal</i> and may help in the application of the same in treatment aspect. It organizes the <i>Sthoola thathuvangal</i> and its clinical application.</p> <ul style="list-style-type: none"> • M7U1 Concepts of 96 thathuvangal in Siddhars' view . <p>7.1.1. Different concepts of 96 <i>thathuvams</i> in Siddhar's perspectives.</p> <p>7.1.2 Interconnection between ?? <i>Panchabhoothams</i> & 96 <i>thathuvams</i> .</p> <p>7.1.3. Components of 96 <i>thathuvangal</i>.</p> <ul style="list-style-type: none"> • M7U2 96 Thathuvangal in the aspect of Saiva Siddhantham . <p>7.2.1. The concepts of 96 <i>thathuvangal</i> in <i>Saaththirangal</i> (literatures) of Saiva</p>	2	10	20	30	60

	<p><i>Siddhantham.</i> 7.2.2. 96 Thathuvams according to <i>Siddhantham</i> scripts. Comparative study on 96 <i>Thathuvams</i> between Siddhanthic view and Siddhar's view. 7.2.3. Clinical aspects of 96 <i>thaththuvangal</i> mentioned in <i>saiva Siddhantha Saaththirangal</i> .</p> <p>• M7U3 Composition of 96 thaththuvangal in Varma maruthuvam .</p> <p>7.3.1.The composition of 96 thaththuvangal in the <i>Varma</i> maruthuva texts such as <i>Varma Kannaadi</i> and <i>Pancheekarana pinnal</i>. 7.3.2 Different school of thoughts about 96 thaththuvangal in Varma maruthuva texts . Interpretations of <i>varmam</i> based 96 <i>Thathuvams</i> in clinical application. 7.3.3. <i>Varmam</i> based 96 <i>thaththuvangal</i> in clinical aspects.</p> <p>• M7U4 Sthoola thaththuvangal and its clinical application .</p> <p>7.4.1.Functions of <i>Sthoola thaththuvangal</i> . 7.4.2. <i>Sthoola thathuvangal</i> based diagnosis and treatment approach. 7.4.3. <i>Sthoola thaththuvangal</i> based diseases.</p>					
8	<p>M-8 Clinical aspects of Kaarana and Sookuma thathuvangal . This module introduces detailed study about components of <i>kaarana and sookuma thathuvams</i>. It discusses diagnostic, treatment aspect of <i>Kaarana and sookumaThathuvangal</i> in detail. It brings a pathway for students to do research on <i>Varma nilaikal ,Aadharangal, Vaasi, Saram, Vaayus , Kundalini , Avaththaikal and pathways of Naadis</i> and improves the human health in clinical application.</p>	2	10	20	30	60

• **M8U1 Components of kaarana thatthuvangal and it's clinical applications .**

8.1.1. Twenty five *Kaarana thatthuvangal* .

8.1.2 .Clinical interpretations of the *Kaarana thatthuvangal* and the diseases acquired in *Kaarana thatthuvangal*.

8.1.3.The diseases of *Anthakaranangal*, *Sapthaathi*, *vasanaathi*, *pulan*, *gunam* and *koshams*.The specific treatment for Kaarana thatthuvams in the aspects of varmam therapy including internal and external therapies.(aga, pura maruthuva muraikal)

• **M8U2 Clinical interpretation on Naadis,Vaayus and mukkuarangal.**

8.2.1.Pathways of naadis and their functions. .The functional relationship between *Naadis*, *mukkuaram* and *vaayus*.

8.2.2. Clinical interpretations of *naadis*, *vaayu*,*mukkuarangal*. *Documentation of the complaints related to Naadis,vaayus and mukkuarangal*.

8.2.3. *Vaayus*, *Naadis* and *mukkuarangal* in clinical aspects.

• **M8U3 Clinical aspects of Andhakaranangal and panchakoshangal .**

8.3.1.Functions of *Anthakaranangal* in detail and it's connections with *Avaththaigal*. Functions of *panchakoshangal* and the diseases occurred in *Panchakoshangal*

8.3.2.Dhiyanam with *Anthakaranangal*. Diseases associated with *Anthakaranangal* and *Avaththaigal* . Diseases occurred in *Panchakoshams*. *Anthakaranangal* based psychiatric diseases and treatment in *Agaththiar kirikai 64*.

8.3.3. Diseases of *Anthakaranangal* and *Panchakoshangal* .

	<p>• M8U4 Physical and Mental values of Avaththaikal .</p> <p>8.4.1. <i>Avaththaikal</i> and it's significance of Clinical and spiritual practice. 8.4.2. The physical values and Spiritual values of <i>Avaththaikal</i> in Siddhar's view. Clinically apply the <i>Avaththaikal</i> related problems in Cognitive functions, dreams ,and sleep pattern. <i>Avaitthaigal</i> related problems to conclude a diagnosis and treatment. 8.4.3. <i>Melaal avathai, keezhaal avathai, mathiyaal Avaththaikal.</i> The role of <i>Avaththaikal</i> in life of <i>Jeevan</i> in Siddhar's view.</p> <p>• M8U5 Energy based insights in Siddha Medicine.</p> <p>8.5.1. <i>Naadi,Saram, Vaasi, Aadharams and mukku-trangal.</i> 8.5.2. Interconnection between <i>Naadi, Vaasi, Saram, kundalini, Aadhaarams, mukku-trangal and varmam energy .</i> Correlation of five elements with above concepts. 8.5.3 The functions of <i>Naadis, Vaayus, Vaasi ,Saram and Aadhaarams in the basis of Varma pullikal.</i></p>					
		16	80	160	240	480

Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (D oes/Show s how/K nows ho w/Know)	3G Teaching Learning Methods
Module 1 : History of Siddhars and siddha medicine.						
<p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <p>Describe the History of Siddhars and Siddha medicine. Analyse the <i>Kaappu paadalkal</i> and Titles of Siddhars' scripts. Identify the Past and recent History of siddhars and siddha maruthuvam. Analyse the legacy and lineage of siddhars.</p>						
<p>Unit 1 History of Siddha System.</p> <p>1.1.1. Age of Siddha medicine through Literary evidences from sangam literatures, epigraphic references, <i>cheppedukal</i> (Copper plates) and <i>chuvadikal</i> (palm leaf manuscripts).</p> <p>1.1.2 .Position of Siddha medicine in Sangam literature period with references from sangam literatures. History of Siddha medicine with monumental evidences and available literatures written at the period from Ethical literature period to recent period . Recent History of Siddha maruthuvam.</p> <p>1.1.3. The antiquity and History of siddha system reviewing <i>sangam literatures</i>, <i>Kaapiyangal</i>, <i>Neethi noolkal</i> , philosophical texts avialable <i>chuvadikal</i> and <i>cheppedukal</i> .</p>						

References: 1,2,3,4,5,6,43,97,102,103,106,145

3A	3B	3C	3D	3E	3F	3G
CO 1	Determine the age of Siddha medicine through literary evidences from Sangam literatures, epigraphic references, <i>Cheppedukal</i> (Copper plates) and <i>chuvadikal</i> (Palm leaf manuscripts)	2	Lecture	CAP	Shows-how	DIS,LS,L &PPT
CO1	Identify the Age of Siddha medicine through Literary evidences from sangam literatures, epigraphic references, <i>cheppedukal</i> (Copper plates) and <i>chuvadikal</i> (palm leaf manuscripts) and available literatures from ethical literatures to recent period to prove the antiquity of Siddha maruththuvam.	4	Practical Training 1.1	CE	Shows-how	DIS
CO1	Interpret the antiquity and History of siddhars and siddha medicine through reviewing the Kaappiyangal (Epics) Sangam literatures, Neethi Noolkal (Ethical books), Epigraphic references, <i>cheppedukal</i> (copper plates), <i>chuvadikal</i> (palm leaf manuscripts), inscriptions, Siddha source texts, Folk lores, philosophical texts and explore the differences in concepts between contemporary Siddha Literatures and Ayurvedic literatures.	4	Experiential-Learning 1.1	CE	Shows-how	DIS,SY

Unit 2 Virtuosity of Siddhars' Vaithyam and gnanam.

1.2.1. Siddhars' achievements on *Gnanam* (Wisdom) and *Vaithyam* (Medicine).

1.2.2. Siddhars' history, accomplishments and their literatures on *Vaidhyam* and *Gnanam*.

1.2.3. The proficiency, excellence, lineage and legacy of *Vaithyam* and *Gnanam* based Siddhars.

References: 46,47,48

3A	3B	3C	3D	3E	3F	3G
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CO1	Categorize and enlist the available Siddhars' texts related with <i>Vaithyam</i> and <i>gnanam</i> to analyze the Siddhar's proficiency on <i>vaithyam and gnananam</i> .	2	Lecture	CS	Knows-how	L&PPT,DIS
CO1	Analyse the virtuosity and uniqueness of <i>Gnanam</i> related <i>siddhar paadalkal</i> and <i>Vaithyam</i> related <i>siddhar paadalkal</i> , history and accomplishments of Siddhars.	4	Practical Training 1.2	CAN	Knows-how	DIS,PL
CO1	Identify Siddhars' excellence and achievements in the field of <i>Vaithiyam</i> , <i>Meignanam</i> and <i>Vignanam</i> .	6	Experiential-Learning 1.2	AFT-RES	Does	DIS,PL

Unit 3 Analysis of ancient scripts of Siddha system (moola noolkal).

1.3.1. Siddhars' *kaappupaadalkal* and its significance. The meanings of literal notations, *Siddhar uvamaikal* and *Thirumoolar's soonya sambaashanai*.

1.3.2. The meanings and significance of titles in *siddhar noolkal* (*Siddha Literatures*). The enigmatic meanings of Siddhars' *Kuzhookurikal*, *paripaashaikal* by using *Nigandukal* and *Agaraadhikal*.

1.3.3. Enigmatic Titles, *kaappu paadalkal*, structure, linguistics and hidden meanings in Siddhars' verses.

References: 49,50,89

3A	3B	3C	3D	3E	3F	3G
CO1	Describe about significance of linguistics, hidden meanings, titles of Siddhar noolkal and <i>Kaappu paadalkal</i> .	2	Lecture	CAN	Knows-how	L&PPT
CO1	Evaluate the meanings of Siddhars' metaphors, riddles and cryptic language to convey profound truths about the life, the body, the universe and enlightenment and reveal the meanings of Literal Notations, <i>kuzhuookurikal</i> and <i>paripaashaikal</i> by using <i>Nigandukal</i> and <i>Agaraadhikal</i> .	4	Practical Training 1.3	CAN	Shows-how	SY
CO1	Interpret and explore the concealed secrets from Siddhars' scripts by analysing the Siddhar's verses and find out the structures, linguistic styles and meanings of Siddhar <i>paadalkal</i> .	5	Experiential-Learning 1.3	AFT-VAL	Shows-how	LS

Unit 4 Decoding spiritual and supernatural attainment of Siddhars (Siddhi muraikal)

1.4.1. Sixteen higher order Alchemical aspects of *Vaatha siddhis* mentioned by Siddhar Boganaathar . Detailed study on *Chaaranaai , kattu, kiraavanam, parikkuru, Chinthooram, lavanam, chatthu , chembu , Pathangam, Kuligai, Jeyaneer, Thiravaham, Mayanakoottam, Mooligai, and Avizhtham from Vaatha Siddhi. Kaaya siddhi, Yoga siddhi, Kuligai siddhi, Kamana siddhi, Gnana Siddhi and Manthira siddhi.*

1.4.2. The different types of Siddhis and difference between various theories of siddhis of Siddhis. Ways to attain Siddhis.

1.4.3. The different types of Siddhis explained by Siddhars. The Siddhis in *Vaatham, Vaithyam, Yogam and Gnanam.*

References: 7,18,20,49,77,113,114

3A	3B	3C	3D	3E	3F	3G
CO 1	Describe the sixteen branches of <i>Vaatha siddhi</i> in Siddha medicine told by <i>Siddhar Bogar</i> . Elaborate <i>Saaranai, Kattu, Kudori, Kiraavanam, Parikkuru, Chinthooram, Lavanam, Chaththu, Chembu, Pathangam, Kuligai, Jeyaneer, Thiravaham, Mayanakoottam, Mooligai and Avizhtham. Know about Kaaya siddhi, Yoga siddhi, Kuligai siddhi, Kamana siddhi, and Manthira siddhi.</i>	2	Lecture	CE	Know	L&PPT
CO1	Analyse and distinguish the different school of thoughts between <i>Vaatha siddhi, Yoga siddhi, Kuligai siddhi, Kamana siddhi, and Kaaya Siddhi.</i>	4	Practical Training 1.4	CAN	Shows-how	DIS
CO1	Appraise different types of <i>Siddhis</i> explained by Siddhars.	5	Experiential-Learning 1.4	CE	Shows-how	SY

Unit 5 Comparative analysis on Siddha system with other Traditional systems

1.5.1. Relationship between Siddha system with other Indian traditional systems.

1.5.2. Traditional systems of other countries , similar to Indian Traditional system.

1.5.3. Differences and similarities between two aborigines of Indian Traditional medical systems (Siddha and Ayurvedha) and Traditional systems of other countries.

References: 1,43

3A	3B	3C	3D	3E	3F	3G
CO 1	Evaluate siddha system with Indian and other traditional systems of medicine , conventional therapy and Alternative Medicine.	2	Lecture	CE	Knows-how	L&PPT
CO1	Analyse the Traditional systems in other countries ,which are similar to Indian Traditional system and tribal medicine, Folklore medicine, Inheritance treatment from <i>guru paramparai</i> .	4	Practical Training 1.5	PSY-SET	Shows-how	C_L
CO1	Distinguish the differences and similarities between Indian Traditional systems and other countries Traditional systems of medicine.	6	Experiential-Learning 1.5	AFT-VAL	Does	DIS,JC

Practical Training Activity

Practical Training 1.1 :

Antiquity of Siddha Medicine.

- Total activity hours: 4 .
- Activity -1 : (Discussion)Teacher guide the students to review the proper references and document the findings. Students are made into 2 or 3 groups and discuss about this topic.(1hr)
- Activity-2 : (Presentations): Students collect and discuss the references from sangam literatures and give presentation by using audio visual aids. (1hr)
- Activity -3 : (Compilation): Students Compile and narrate your literary reviews in Siddha Literatures, Sangam literatures, Folk lore ,*Cheppedukal* and *chuvadikal* to prove the age of Siddha system. (2 hrs)

Practical Training 1.2 : Identity and Virtuosity of Siddhars.

- Total activity hours : 4 Hrs.
- Activity -1: (Peer group Discussion):Teacher arrange a peer group discussion session for Siddhar *Samaadhi thalangal* to discern the Siddhar poetries in *Gnanam* and *vaidhyam* and compile the discussion material .(1 hr).
- Activity-2: (Audio visual presentation):Students give audio-visual presentation focused on the Siddhar *Samaathi thalangal* (1 hr).
- Activity -3:(Creativity writing):Students sort out *gnanam and vaithyam* related Siddha literatures and creatively write about Siddhars' Samaadhi sites where the Students visited .(2hrs).

Practical Training 1.3 : Enigmatics in Siddha Literatures.

- Total Activity hours: 4 hours .
- Activity -1:(Symposium):Teachers Organize a Symposium to analyze the different structures and titles of siddhar noolkal (1hr).
- Activity -2: (Compilation): Students Analyze and compile *Siddhar's kaappu Paadalkal* . Discuss the significance of *kaappupaadalkal* (1 hr)
- Activity-3: (Creativity writing): Interpret and *uvamaikal, paripaashaikal, kuzhuookurikal, linguistics, soonya sambaashanai and literal notations in Siddhars' noolkal*. Submit this as an assignment. (1hrs).

- Activity- 4: (Critical reading paper): Decode and critically read a paper about anyone of the *moola nool* written by Siddhars. Identify the meanings and significane of titles in *siddhar noolkal*. Identify the meanings of *Siddhars' Kuzhookurikal and paripaashaikal by using Nigandukal and Agaraadhikal*. (1 hr)

Practical Training 1.4 : Supernatural attainments of Siddhars.

- Total activity hours:4 hours .
- Activity -1 : (Compilation):The teacher will divide students into two to five groups.The teacher distributes the above topics to each groups to Evaluate the different types of Siddhis and distinguish various theories of siddhis.Each group collect and compile the details about 64 Siddhis expounded by Siddhars . (2 hrs).
- Activity-2: (Creativity writing):Students Analyse and interpret the sixteen branches of *Vaatha siddhi and give creatively write about Kaaya siddhi, Yoga siddhi, Kuligai siddhi, Kamana siddhi and Manthira siddhi*.(1hr).
- Activity-3 :(Audio visual Presentations) :Students should present by using Audio visual aids in the above topics. (1 hr).

Practical Training 1.5 : Siddha Medicine and other Traditional Medicine.

- Total activity Hours: 4 hrs .

- Activity -1: (PPT Presentations): The teacher encourage the students to do Comparative study on different concepts in Indian Traditional systems of medicine with Siddha system. Ask the students to propose their suggestions through a ppt presentation for the Globalization of Siddha system .(2 hrs).
- Activity-2: (Debate): Students Conduct debate between Specialities of Indian Traditional system of medicine and other countries' Traditional systems and search about the basic principles of Siddha with contemporary literatures in Ayurvedha.(2hrs)

Experiential learning Activity

Experiential-Learning 1.1 : History of Siddhars and Siddha Medicine.

Total activity hours : 4 Hrs .

- Activity -1:(Discussion)Students Discourse this topic with discussions(1 Hr)
- Activity -2: (Creativity writing):Students write creatively about the topic. Students can refer medical references coded in Tamil Literatures and analyze the contemporary medical literatures in Sanskrit (1 Hr)
- Activity-3 :(Symposium):Students arrange a Symposium in this topic with Ayush Doctors. (1Hr)
- Activity -4 : (Class presentations): Students collect the datas from Siddha literatures, Epigraphic references, Copper plates and Manuscripts that explain the History of Siddhars and their contributions through class presentations.(1 hr)

Experiential-Learning 1.2 : Historical events of Siddhars

- Total activity hours : 6 hours.
- Activity -1: (Compilation):Students perceive the significane of Siddhar's legacy by video clips . Summarize and compile the achievements and specialities of each group of siddhars and their legacy and lineage. (1hr)
- Activity-2:(Discussion &Peer learning):Students discuss about evidences and their observations with peer groups on wisdom and medicine proposed by Siddhars.(2hr)

- Activity-3: (Audio-visual presentation):Students Explain through Audio visual Presentations about the necessity of *Gnanam* to society. (2 hr)
- Activity-4 : (Record Keeping & Creativitywriting):Document Siddhar's life histories in *Samaadhi Thalangal* and the culture of people who worship Siddhars as God. Write your experiences creatively .(1 hr)

Experiential-Learning 1.3 : Concealed secrets of Siddhar Poetries.

- ?Total activity hours: 5 hrs.
- Activity -1:(Library session):Students Detect *Kuzhuookurikal, uvamaikal,meanings of titles, kaappu paadalkal, and paripaashaikal* in various Siddhars' scripts through Library session.(2 hrs)
- Activity-2: (Compilation):Students try to Identify and compile the enigmatic meanings hidden in Siddha Literatures . Teachers guide the students to select the source texts. (2 hrs).
- Activity- 3: (Presentations): Do presentation on above topics with illustrations. Submit a research paper relevant to above topics. (1 hr) .

Experiential-Learning 1.4 : Siddhis of Siddhars.

- Total activity hours: 5 hrs .
- Activity -1: (Symposium): Students arrange a Symposium on this topic to discuss the key principles of Siddhis and the scientific aspects of 16 branches of *Vaatha Siddhis* explained by Bogar .(2hrs)
- Activity-2: (Quiz):Teacher assess the students through conduct a quiz programme in *Siddhi muraikal*. (1hr))
- Activity-3: (Compilation): Students Compile and present the details about different types of Siddhis explained by Siddhars. (1 hr)
- Activity-4: (Critical reading a paper): Students compare and critical reading about the unique perspectives in *Siddhis* of various Siddhars. (1hr)

Experiential-Learning 1.5 : Uniqueness and Globalization of Siddha Medicine.

- Total activity hours :6 hours.
- Activity -1: (Journal Club): The students read through journal club and conduct a seminar in this topic with Doctors in similar traditional systems .(2 hrs)
- Activity-2: (Presentations):Students give class presentations on the approach of Indian and international Traditional systems of medicine. (1 hr)
- Activity-3: (Discussion): Students read voluntarily through online and discuss medical traditions of other countries and its developmental status. (1 hr)
- Activity-4 : (Making charts and Posters): Summarize the uniqueness of Siddha medicine for treating epidemic , endemic,pandemic diseases, Chronic illness, deadly diseases .Then Students can make a chart /posters about Globalization of Siddha system Specify the treatment techniques of Varma Maruthuvam in emergency conditions. (2 hrs)

Modular Assessment

Assessment method

4 hrs :

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks . Keep structured marking pattern. Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6c

1. VIVA VOCE EXAMINATION (20 Marks)

Assessment structure.

- Focus on deep understanding of the history and legacy of siddhars .
- Prepare 20 Viva questions covering all the topics from this Module.
- Prepare key points for the answer and assign marks to each step.
- Each question one Mark.

Hour

4

- Knowledge and understanding (5marks).
- Recite verses in *Siddhar moola noolkal*. (10 marks).
- Communication skills, Clarity of expression, Fluency and pronunciation skill, Proper response to questions about subject area. (5 marks)

2. Class Presentation :(10 marks)

This assessment typically evaluates several key aspects of Siddhar's scripts like *Thiravukolkal*, *sidka*, *virivakaradhi*, *Nikandukal*, *pooja vidhi*, *sillarai kovai*, *kowmuthi nool* etc.(M1U3)

Presentation on History of Siddhars and their *samaadhi thalangal*. (M1U1,M1U2). Presentation may involve main content, evidence to support each point, examples, charts, images, diagrams to simplify complex ideas. Presenter may ask rhetorical questions, involve the audience, or use analogies to keep attention. Use of technical support will be encouraged.

Mark distribution:

1. Organize the content logically (2 marks)
2. Ensuring to cover all main points within the allotted time .(4 marks)
3. Engage the audience by using questions, examples or anecdotes to maintain interest. (2marks)
4. Using Audio visual aids, Projectors or other tools.(2 marks)

3. Compilations : (20marks)

Write about the information from the Books and Research papers. The materials elucidate the differences and similarities between Siddha system and other Traditional systems. This compilation elicits history, basic principles, diagnostic tools and treatment methods mentioned in both systems. (M1U5)

Mark distribution:

- Relevance of the content (2 marks)
- Content quality and the information with originality(2marks)
- Coherence and organization in a logical structure, flow and consistency. (4marks)
- For impact and engagement (2marks)

Or

Any practical in converted form can be taken for assessment.(25marks)

and

Any experiential, such as portfolios/ reflections/

Presentations can be taken as an assessment.(25 marks)

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Module 2 : Gurukula Tradition of Siddha system.

Module Learning Objectives

(At the end of the module, the students should be able to)

Describe Siddhar's Gurukula education methods. Qualities of diligent disciple and proficient Guru.
Analyse the ethical concepts explained in different schools of Siddhars according to their lineage.
Execute the Siddha medical ethics.

Unit 1 Siddhar's gurukula Kalvimuraikal.

- 2.1.1. Siddha maruththuva *Gurukula* education system. The descendants of Siddha medicine and the progress of Siddha medical system from generation through the *Gurukula education system*.
2. 1.2. The teaching learning methods of ancient gurukula system. Basic principles of medical education in each Gurukula system. The texts based on tradition of *Moolan marabu* and *Agathiyar marabu*.
2. 1.3. Etiquettes of different *gurukulams*.

References: 18,22,25

3A	3B	3C	3D	3E	3F	3G
CO 1	Describe the descendants of Siddha medicine and the progress of medical system from generation through the Gurukula education system.	2	Lecture	CK	Knows-how	FC,IBL,L, L&PPT
CO1	Analyze the ancient Teaching learning methods of gurkula educational system and Lineage of Siddhars according to their <i>gurukulam</i> .	4	Practical Training 2.1	CAN	Knows-how	DIS,PAL, SDL

CO1	Appraise the uniqueness , rules and regulations and Specialities of different <i>Siddha Maruththuva Gurugulams</i> .	6	Experiential-Learning 2.1	CE	Shows-how	DIS,PL
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Unit 2 Qualities of Diligent Disciple

- 2.2.1. Qualities of Diligent disciple . According to Siddhar 's statement that to learn Siddha medicine , needs a disciple with excellent character. Ethical guidance attributed by the Siddhar's gurukula education which impose the responsibilities of doctors and patients.
- 2.2.2 . Agaththiar's concepts about good Disciple . Descendants of tradition from ancient guru to diligent disciple.
- 2.2.3. The rules for good disciple to be experienced by the students.

References: 8,109

3A	3B	3C	3D	3E	3F	3G
CO2	Illustrate the Ethical guidance attributed by the <i>Siddhar's gurukula</i> tradition which imposes the responsibilities of doctors and patients.	2	Lecture	CC	Knows-how	C_L,DIS, L&GD
CO2	Analyze the difference between <i>Aasiriyar</i> (Teacher) and <i>guru</i> and the difference between <i>Seedan</i> and student and recognize the Agasthiars concepts about qualities of good Disciple .	4	Practical Training 2.2	CAN	Shows-how	DIS,JC
CO1	Analyse the rules for life style, to be learned by a good disciple mentioned by Siddhars.	4	Experiential-Learning 2.2	CAN	Shows-how	DIS,PL

Unit 3 Qualities of Proficient guru

- 2.3.1. The Qualities of Guru explained by Siddhars in the Siddha texts.
- 2.3.2 . The Different school of thoughts about Guru. Qualities of guru explained by *Agathiyar, Thirumoolar and Theraiyar*. Concepts of *Gurugula* Traditions in *Varmam* medical education systems
- 2.3.3. The relationship between guru and seedan. Different concepts of proficient *Guru* and inexpert guru in the aspects of *Thirumoolar*.

References: 7,8,9

3A	3B	3C	3D	3E	3F	3G
CO2	Discuss the Qualities of Guru explained by <i>Siddhars</i> .	2	Lecture	CC	Know	SDL,L&P PT ,L&GD,F C
CO1	Analyse the Qualities of proficient <i>guru</i> and discuss different school of thoughts about <i>guru</i> .	4	Practical Training 2.3	CAN	Shows-how	DIS
CO1	Interpret different school of thoughts about relationships between <i>guru</i> and <i>disciple</i> .	5	Experiential-Learning 2.3	CE	Does	PL,DIS

Unit 4 Attributes for good siddha physician.

2.4.1. The attributes of good Siddha physician. The guidelines to be followed by a good Siddha physician.

2.4.2 . The qualities and knowledge of good Siddha physician defined by Siddhars in Siddha source texts.

2.4.3. Good Siddha physician which has been meticulously crafted by Siddhars.The discipline and dress code of Siddha physician explained by Siddhars.

References: 10,12,13,14,15

3A	3B	3C	3D	3E	3F	3G
CO1	Describe the guidelines to be followed by a good Siddha physician like full-fledged knowledge in Siddha medicine literatures, Treating patients with kindness, skills in examining patients, selecting medicines, curing diseases, and methods of purifying and	2	Lecture	CC	Knows-how	L&GD,C_ L

	preparing medicines.					
CO1	Interpret the knowledge and Qualities of good siddha physician defined by siddhars.	4	Practical Training 2.4	CE	Shows-how	DIS,TBL
CO1	Internalize the Attributes, Learning approach, Dress code to be followed by the siddha physician and the skills that helps to become a successful professional in Siddha medicine.	5	Experiential-Learning 2.4	AFT-CHR	Shows-how	C_L

Unit 5 Medical ethics in Siddha Medicine .

2.5.1. The principles of disciplines in Siddha Medical Ethics and the relationship between the physician and their adherence with the patient.

2.5.2. The Siddha Medical ethics from various Siddhars' scripts and Siddha medical ethics to be followed in the routine clinical practice.

2.5.3. The Medical Ethics of Siddha system and Medical Ethics of other systems , the theories of Siddha Medical Ethics and it's necessary for clinical practices.

References: 15,16,17

3A	3B	3C	3D	3E	3F	3G
CO1	Discuss the rules and regulations explained in Siddha Medical Ethics to be followed by a Siddha physician and their adherence with patients.	2	Lecture	CC	Knows-how	L&GD,L, L&PPT
CO1	Analyze the virtues of a Siddha physician and their adherence with Siddha Medical ethics from mentioned in various Siddhars' scripts.	4	Practical Training 2.5	CAN	Shows-how	DIS
CO1	Explore the siddha Medical ethics prescribed for good Siddha physician. The spiritual practice,such as meditation and yoga for the integration of mind, body and spirit for achieving harmony and health of the physician.	6	Experiential-Learning 2.5	CAN	Shows-how	C_L,LS

Practical Training Activity

Practical Training 2.1 : Gurugulam traditions of Siddha system.

- Total activity hours : 4 hrs .
- Activity -1: (Peer learning): Teachers create a team and arrange a Peer group discussion sessions to analyze the ancient Teaching learning methods of *Siddhar gurugula Kalvimuraikal* from various sources . (1 hr) .
- Activity-2 : (Creativity writing): Students collect the references and write a research paper in *Moolan marabu and Agathiyar marabu*. (1 hr).
- Activity-3: (Compilation): Discuss and compile the different treatment modalities in various *Gurukula marabugal* .Submit a detailed research project .(2hrs)

Practical Training 2.2 : Qualities of good disciple.

- Total activity hours : 4 hrs
- Activity -1 : Teacher guide the students to get knowledge through journal club , collect the source texts about good disciple and give the title to the students and asking them to refer in libraries (1hr)
- Activity-2: Students summarize what other Siddha texts have said about the qualities of a good disciple. Compile the documents relevant to qualities of good disciple(1 hr)
- Activity-3 : Students discuss the methods of descendants of tradition from ancient Guru to Diligent Disciple. Then creatively write about the qualities of diligent disciples according to Siddhar's view (2hrs).

Practical Training 2.3 : Glory of Proficient guru.

- Total activity hours: 4 hrs .
- Activity -1: (Discussion):Students Collect , discuss and compile the data about role of gurus in *Siddhar's Gurukula traditions* . Comprehend the *Agathiyar's gurukula marabu, Thirumoolar marabu, Baalan marabu* etc. Give an audio visual presentation. (2 hrs)
- Activity-2: (Compilation): Compile and submit an assignment about proficient *guru*.(1 hr).
- Activity -3:(Creativity writing): Students write creatively about *Gurukula* education system of Medical Varmology. (1hr)

Practical Training 2.4 : Qualities of good Siddha physician.

- Total activity hours : 4 hours
- Activity -1: (Compilation): Teacher guide the students to Collect and Compile the attributes to be follow and to be learn by a good siddha physician defined by siddhars .(1 hr)
- Activity -2: (Presentation):Students Conduct seminars about the discipline of the students explained by Siddhars .(2hrs)
- Activity-3: (Debate&Team based learning):Students Arrange a debate on qualities of good Siddha physician and their duties. Students could learn and adhere disciplined. (1hr)

Practical Training 2.5 : Professionalism for Siddha System of Medicine.

- Total activity hours :4 hrs .
- Activity -1 : (Debate):The teacher arrange a debate for Comparison of medical ethics of Siddha system with medical ethics of other systems.(2 hrs)
- Activity -2:(Compilation):Students Collect and compile the informations about Siddha medical ethics and virtues of Siddha physician in source texts .(1hr)
- Activity -3: (Discussion): Students Discuss and interpret about Siddha medical ethics through discussion sessions.Execute the rules prescribed by Siddhars as full-fledged knowledge in medical Literatures,treating patients with kindness,skills in examining patients, selecting medicines, curing diseases, and Must know about the purification methods of metals and minerals. Give presentations on this topic (1hr)

Experiential learning Activity

Experiential-Learning 2.1 : Genealogy of Siddhars.

- Total learning hours:6 Hours.
- Activity-1: (Peer group discussions): Students discuss and narrate the Teaching Learning Methods of different *Siddha maruthuva Gurugula* educational systems and its importance. (2hrs).
- Activity -2: (Compilation): Students collect and compile the details about *Gurugula Kalvimuraikal* to understand the genealogy of Siddhars through Siddhar's scripts.(2hrs)
- Activity-3: (Debate): Students conduct a debate about genealogy of Siddhars. (2 hrs)

Experiential-Learning 2.2 : Rules for good disciple.

- Total activity hours:4 Hrs
- Activity-1:(Creativity writing): Students refer *Nannool paayiram* and Siddha texts related with this topic . Then creatively write about the qualities of Diligent Disciple(2 hrs).
- Activity-2: (Peer group discussion)Students discuss with their peer groups and summarize all their findings related to good disciple. Teacher testing the students through peer group Assessment(2hrs).

Experiential-Learning 2.3 : Guru and disciple.

- Total activity hours: 5 hours.
- Activity -1: (Presentations): Students conduct a seminar on qualities of proficient guru and inexpert guru explained by *Thirumoolar*. (3 hrs)
- Activity -2: (Debate): Students arrange a debate with their peer groups to discuss this topic. .(2hrs).

Experiential-Learning 2.4 : Aptitudes for good Siddha physician.

- Total activity hours: 5 hours.
- Activity -1: (Class presentations) : Students give class presentations about the attributes of good Siddha physician defined by Siddhars in this topic with proper references with PPT (2 hrs)
- Activity-2: (Interaction & Co learning) : Students explain the traditional form of education in siddha medicine and residential school, where the students live with a *guru* to receive the education and give discourse to U.G students and also explain the skills that needs to be cultivated for a good siddha physician in Siddhars'

aspects. (3hrs) .

Experiential-Learning 2.5 : Medical ethics in Siddha Medicine.

- Total activity hours: 6 Hours.
- Activity-1 : (Audio-visual presentation): Students give PPT presentation on a good Siddha physician must know about the details of *marunthu saathiyam, gunam, nigandu, vatha, pitha, silethuma thontham, aaru suvai, ashtavidha kuri arithal etc.* (1hr)
- Activity-2: (Compilation): Students Summarize and compile the siddha Medical ethics for a good siddha physician .(1hr)
- Activity-3 :(Debate):Conduct a debate on A good Siddha physician defined by *Theraiyar* .(2hrs)
- Activity -4 : (Interaction):Students give a discourse in this topic to UG students.(2 hrs)

Modular Assessment

Assessment method

Hour

4

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

1. Presentations (20 marks)

Assessment structure

This presentation will elucidate lineage of Siddha maruththuva gurukulams, Concepts of Diligent Disciples and qualities of proficient Guru .Take references from cite credible sources and Siddha texts (M2U2 , M2U3 M2U4, M2U5). The presentation will be done by using PPT, AV aids, Video clips,etc. Prepare the oral presentation with main content, 3-5 key points, examples, relevant images, graphs, or charts and audience engagement.

Mark distribution:

- For resources (5 marks)

- Clarity, accuracy, body language (5marks)
- Content with more relevant information, emphasizes main topic (5marks)
- Interact with audience. (5 marks)

2. Compilations (20 marks)

Assessment structure

This refers to the process of gathering, synthesizing, and organizing various types of information and resources. Data of Characteristics of good Siddha physician mentioned in Siddha texts recommended by Siddhars and Siddha Medical Ethics will be compiled and analyzed. This encourages the integration of theoretical knowledge with clinical practice.

Mark distribution

- For relevant of the content (5 marks)
- Main subject information and quality with originality (10 marks)
- Coherence and organization in a logical structure, flow and consistency (4 marks)
- Interaction and engagement (1 mark)

3. Debate (10 marks)

Assessment structure

• Highlights the noteworthy of Siddha maruthuva gurukula kalvi muraikal. Discussion proceeds with Agathiyar's gurukula marabu, Thirumoolar marabu, Nandhi marabu and Balan marabu. A structured debate follows with clear rules, time limits, Affirmative team, Negative team, Moderator, Judges and Audience. It possesses Opening statements, Rebuttal round, Cross examination, Closing statements in addressing strongest points.

Mark distribution

- Opening and closing statements, cross examination (3 marks)
- Evaluation criteria includes content, logic, delivery with persuasiveness and clarity (5 marks)
- Confidence, time management (2 marks)

or

Any practical in converted form can be taken for assessment. (25 marks)

and

Any experiential, such as portfolios/ reflections/ Presentations can be taken as an assessment(25 marks)



Module 3 : Components of Dharkam (Alavai) in Siddha Literatures .

Module Learning Objectives

(At the end of the module, the students should be able to)

Describe the 32 *uththikal* (strategy) and *pramaanangal* (ten types of logics)
 Apply the Logic in Clinical interpretations and the Analysis of Siddha source texts (Ancient Literatures).
 Integrate *Alavai* in *Anga saasthiram* (the analysis of anthropometry) and *Thvani saasthiram* (phonetics) of the patients to diagnose the diseases.

Unit 1 Implementation of 32 analysing technics(uththikal) and 10 logics (Alavaikal)in Siddha Medicine.

3.1.1. Logic (*Alavai*) in all aspects of Siddha Medicine. The necessity of logics (*Pramaanangal*) to develop medical knowledge in new ways.
 3.1.2. Application of logic (*Alavai*) in Siddha clinical examination. Analysing *uththikal* (strategies) from Siddha literatures and apply in clinical diagnosis and treatment.
 3.1.3. The 32 *uththikal* with real life scenarios. Utility of analyzing *uththikal* in the assessment of the patients. Discuss about analyzing strategies and it's different approaches in clinical practice, higher studies and research.

References: 18,19,39

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the application of <i>Alavai</i> (logic) and <i>Uththikal</i> (32 analysing techniques) in all facets of Siddha medicine.	3	Lecture	CC	Knows-how	BS,D-M,DIS,JC
CO2	Analyse logic in Siddha clinical examination. Retrieve the <i>uththikal</i> and <i>Pramaanangal</i> from Siddha literatures and apply in clinical diagnosis and treatment.	5	Practical Training 3.1	CAN	Shows-how	CBL

CO2	?Analyse 32 <i>uthikal</i> (analysing techniques) and logics to apply in the Assessment of patients, real life scenarios scenarios , the role of logic in specialisation of Siddha medicine , Clinical research in higher studies, writing a book and Literary research by using Logic.	7	Experiential-Learning 3.1	AFT-VAL	Does	SY
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Unit 2 Significance of Dharka Gnanam in Siddha Medicine.

3.2.1. Indian philosophy explained in *Manimegalai*. The elements of the Indian philosophical tradition to shore up the Siddha medicine.

About Bootha Vatham, Saiva vaatham, Vedha vaatham, Aseevakam, Saankiyam, and Boutham. Siddha Medicine related Philosophical concepts like *Dhanmaathrai, Boothangal, Pancheekaranam, Anu, Uyir, Uyirathukkal, Iruvinai, Mooudal, Aadharams and Koshankal.*

3.2.2. The relationship between Indian Philosophical concepts with basic principles of Siddha Medicine.

3.2.3. Review of Siddha Literatures focused on *Bootha Vaatham, Saiva vaatham, Vedha vaatham, Aseevakam, Saankiyam, Samanam and Boutham.*

Detailed study on Siddha Medicine related Philosophical concepts like *Dhanmaathrai, Maha Boothangal, Pancheekaranam, Anu, Uyir, Uyirathukkal, Iruvinai, Moo udal, Aadharams and Koshankal.*

References: 11,22,71,74,91,96,118,126

3A	3B	3C	3D	3E	3F	3G
CO2	Explore the basics of Siddha Medicine with the concepts in Indian philosophy , <i>Bootha vaatham, Saiva vaatham, Vedha vaatham, Saankiyam, Samanam and Boutham with the help of Tharka Gnanam</i>	3	Lecture	CC	Knows-how	BL, PrBL, PER
CO2	Demonstrate the role of Indian Philosophical concepts in the basics of Siddha Medicine .	5	Practical Training 3.2	CAP	Shows-how	DIS
CO2	Compile and explain the Indigenous philosophical theories and it's relation with Siddha Medicine .	7	Experiential-Learning 3.2	CS	Shows-how	BL

Unit 3 Dharka saasthiram of siddhars .

- 3.3.1. *Agaththiar's tharka saasthiram* and *dharkam* in other Siddha Literatures. Siddha medicine related assertions stated in the *Siddhars' Tharka noolkal*.
- 3.3.2. Siddhars' logical texts and its necessity for Siddha system of Medicine.
- 3.3.3. Siddhars' *Tharka muraigal* (Reasoning methods) to learn Siddha medical texts.

References: 20,21,23,111

3A	3B	3C	3D	3E	3F	3G
CO2	Describe and Analyze the <i>Agaththiar's tharka saasthiram</i> .	2	Lecture	CAP	Knows-how	L&GD,L &PPT ,L
CO2	Interpret the <i>Siddhar's dharka muraikal</i> through <i>dharka noolkal</i> in Siddhar's perspectives .	5	Practical Training 3.3	CE	Shows-how	DIS,JC
CO2	Explore and apply the concepts in Tharkam Texts for learning Siddha medical texts.	6	Experiential-Learning 3.3	CAN	Does	PL,LS

Unit 4 Application of Alavai in Clinical interpretation.

- 3.4.1. Ten types of *Alavaikal* (logics). *Thvani* (tone) of the patient to diagnose the conditions of *mukkutram*s through logical thinking. Role of *Alavai* (Logic) in *Anga saasthiram* based diagnosis and *Envagai thervugal* .
- 3.4.2. The *Alavai* (logic) based diagnostic approach in Inspection, palpation, percussion and auscultation .
- 3.4.3. Diagnose the diseases through signs and symptoms of patients with logical reasoning.

References: 24,26,79

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the logic in the analysis of <i>mukkuurangal</i> , <i>anga Lakshanam</i> , <i>thvani</i> and symptoms and signs of the patient.	2	Lecture	CAP	Knows-how	IBL,L&PPT ,L&GD,L,BS

CO2	Analyze and demonstrate the characters of <i>thvani,anga Lakshanam</i> and explain its importance in diagnosis .	5	Practical Training 3.4	CAN	Shows-how	D-BED
CO2	Explore Alavai (logic) based diagnostic techniques .	6	Experiential-Learning 3.4	AFT-VAL	Does	SY

Practical Training Activity

Practical Training 3.1 : Implementation of Logic.

- Total activity hours : 5 hours.
- Activity -1: (Case based learning): Teacher explain how to execute the logic in clinical examination with sample videoclips,Clinically define *Alavai (logic)* in all dimensions of Siddha Medicine. Explain the necessity of logic to develop medical knowledge in new ways. (2 hrs)
- Activity -2:(Record Keeping and Clinical work samplings): (Students observe the findings in patients and execute the logic based siddha clinical examination. Record them in 10 casesheets in their clinical postings).(3 hrs)

Practical Training 3.2 : Siddha Philosophy with Indian philosophy

- Total activity hours: 5 hours .

- Activity -1: (Group Discussion): Teacher arrange group discussions to analyse the various components of Indian Philosophy which they related with Siddha medicine. (1 hr)
- Activity -2: (Presentations): Students conduct a seminar to Elaborate the Siddha philosophy and its link with Indian Philosophical concepts.(2 hrs)
- Activity -3: (Creativity writing): Students creatively write about interconnection between Indian Philosophy and basic principles of Siddha system. Submit your research as a small project with charts and posters . (2 hrs)

Practical Training 3.3 : *Tharkam* (Logic) in Siddha Maruthuvam.

- Total activity hours: 5hrs .
- Activity -1: (Group discussion): Teacher guide the students to utilize the journal club to learn the *siddhars tharka muraigal* (1hr)
- Activity -2: (Journal club): Teacher arrange a group discussion session and Discuss about *Tharkam in Siddha Literatures* with ppt presentation. (1hr)
- Activity -3: (Quiz): Teacher Organize a quiz programme in *Dharkasaasthiram*. (1 hr)
- Activity -4 : (Compilation): Students compile the medicine related assertions stated in the *Siddhars' Tharka noolkal*.(1 hr)
- Activity -5: (Creativity writing): Students Analyse and creatively write about available *Tharka muraigal* of Siddhars which contains medicine related datas. (1hr)

Practical Training 3.4 : Application of *Alavai* (Logic) for Diagnosis .

- Total activity hours: 5 Hours.
- Activity -1: (Demonstration Bed side): Teacher give Alavai based ideas through Demonstration of a patient. Guide the students to document the clinical findings in Alavai based case sheets. (1 Hr)

- Activity-2 : (Log book): Students Follow up the patients and identify the findings with the help of *Alavai*, Document your findings in a log book.(2hrs)
- Activity -3: (Record Keeping): observe the clinical findings in 10 patients. Record them in a Alavai based case Sheets. Submit the casesheets(.2 hrs)

Experiential learning Activity

Experiential-Learning 3.1 : Logic in Clinical interpretations.

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- Total activity hours: 7 hours.
- Activity-1:(Symposium): Students can arrange a symposium in this module for discuss about the utilization of 32 *uthikal* (anlysing techniques) in clinical practice . (3hrs)
- Activity-2 : (Presentations): Students apply logic in clinical presentation (1 hr)
- Activity -3 :(Debate): Students arrange a debate how to utilize logic to write a book and do the literary research .(2hrs)
- Activity -4:(Creativity writing): Students write a research article by using logic .(1hr)

Experiential-Learning 3.2 : Indian Philosophy and Siddha Medicine .

- Total activity hours: 7 hours.
- Activity -1:(Blended learning): The students learn through virtual and physical learning environment to interpret the link between Siddhar's concepts with philosophical concepts. .(2 Hrs)
- Activity -2: (Creativity writing): Students write creatively about interconnection between Indian philosophical tradition with Siddha basic principles. (2 hrs)
- Activity-3: (Compilation): Students compile and narrate *Dhanmaathrai, Boothangal, Pancheekaranam, Anu ,Uyir ,Aadharams and Koshankal* and interlink them with Indian Philosophical concepts(3 hrs)

Experiential-Learning 3.3 : Necessity of learning *Tharkam* .

- . Total activity hours : 6 hrs.
- Activity -1: (Library session): Students refer the Siddha source texts to understand about the components of *Siddha Maruthuva Tharka muraikal* . (2 hrs)
- Activity -2: (Creativity writing) : Students read and write a creative writing about the significance of *Tharkam* to learn Siddha Medicine. (2 hrs)
- Activity -3:(Peer groups interaction): Students interact with peer groups and compile the necessity of learning *Tharkam* to explain the different concepts of *Thathuvams* explained by Siddhars.(2 hrs)

Experiential-Learning 3.4 : Logic and it's clinical application.

- Total activity hours : 6 Hrs .
- Activity -1: (Symposium) : Students organize a Symposium with experts and discuss about logic based Clinical interpretations. (2hrs)
- Activith -2: (Log book): Students Observe the patients in the basis of Logic. Submit your clinical work samplings in a log book (2hrs)
- Activith -3 : (Record Keeping) : Students Apply Logic based diagnosis in clinical practice. Adapt Logic based diagnostic techniques in inspection, palpation, percussion and auscultation. Record your experiences in case sheets. (2hrs)

Modular Assessment

Assessment method

Hour

Instructions: Conduct a structured modular assessment. Assessment will be for 25 marks. Keep structured marking pattern. Use different assessment

4

methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

1. Mini CEX : (30 marks)

Assessment structure

The Mini CEX (Mini Clinical Evaluation Exercise) is a 10 to 20 minute direct observation assessment of a student during an interaction with a patient in a real clinical setting using Mini CEX Tool. Apply Alavai in all aspects of clinical examination (History taking, Physical examination, Inspection, Palpation, Percussion, Auscultation). Specify Thvani and Angasaasthiram based diagnosis. Record the assessment to track the progress over time and provide evidence for competency based evaluations.

Sample Mini CEX Tool

1. History taking

- Completeness, accuracy, and relevance of the history obtained.
- Ability to prioritize key information.

2. Physical Examination Skills

- Systemic approach and technique.
- Ability to detect abnormal findings.

3. Clinical Reasoning and Decision-Making.

- Interpretation of data and formulation of differential diagnosis.
- Justification of

Mark distribution: (30 marks)

- Observation of the trainee taking a history (5marks)
- Physical examination skills (10marks)
- Clinical reasoning and decision making (3marks)
- Communication and interpretation skills (3marks)
- Professionalism (3 marks)
- Organization and Efficiency(3 marks)
- Overall clinical competence (3 marks)

2. Theory open book test (10 Marks)

Assessment structure

Students are permitted to bring materials like text books, lecture notes, or reference guides,(but not all materials may be allowed e.g.,internet access or

unapproved notes). Questions are designed to test comprehension, critical thinking, and application of theoretical concepts. Time management is essential. Question types may include essay questions, case studies, problem-solving tasks, or open-ended prompts. Tharkam in *Manimegalai* and *Siddhar noolkal* from this module are used as materials for Theory open- book test assessment.

Mark distribution:

- Understanding structure, analysis and explanations (3 marks)
- Application of comprehension and theoretical concepts.(3 marks)
- Use of resources, critical thinking (2 marks)
- Time management (2 marks)

3. Interactions :(10 marks)

Assessment structures:

Encouraging interactions between teachers, students and peers.This focuses on monitoring student's learning progress and providing ongoing feedback. Teachers ask open ended questions encouraging critical thinking and checking comprehension. This assessment proves Siddha philosophy with scientific validation through *Pramaanangal* and *Uththigal*.

Mark distribution:

- Answering quizzes (5marks)
- Clarifying the concepts and correcting misunderstandings (3 marks)
- Use digital tools for interactive feedmark .(2 marks)

or

Any practical in converted form can be taken for assessment.(25marks)

and

Any experiential, such as portfolios/ reflections/
Presentations can be taken as an assessment.(25 marks)

Module 4 : Tamil language and Siddha Medical system

Module Learning Objectives

(At the end of the module, the students should be able to)

- Analyze *nigandugal* and *agaraathigal* in Siddha medicine and compare them with *Agaraathigal* and *Nigandugal* in Tamil literatures.
- Transcript and annotate the Siddhar's Source scripts (*moola noolkal*) and medical Palmleaf manuscripts.
- Interpret the meaning of the words, phrases, verses and title of the book written by Siddhars.
- Analyze the types of *Anigal in Siddhar Ilakkiyam* and types of lyrics (?? ??????).
- Comprehend the semantic meanings of Siddhar verses through Rhetoric approaches and language styles.

Unit 1 Significance of Tamil and Siddha Maruthuva Agraathigal and nigandugal

- 4.1.1. The *Tamil agaraadhikal ,Siddha maruthuva agaraathigal and nigandugal .(Thesaurus and dictionary) .*
- 4.1.2. Siddha Medical Terminologies in *nigandugal* and *?agaraathikal*.
- 4.1.3. Datas from *nigandugal* and *agaraathigal* which are related to Siddha Literary research . Purpose of *Thiravukol noolkal* .

References: 27,28,29,30,31,32,115

3A	3B	3C	3D	3E	3F	3G
CO1	Describe the contents within different types of <i>Agaraathigal</i> (dictionary) and <i>nigandugal</i> (Thesarus) in Siddha Medicine .	2	Lecture	CC	Knows-how	L,L&GD, L&PPT ,C_L
CO1	Analyze <i>Tamil and Siddha maruthuva agaraathigal and nigandugal</i> to identify the hidden meanings in Siddha medical terminologies.	5	Practical Training 4.1	CAN	Shows-how	D

CO1	Interpret the words in <i>agaraathigal, nigandugal and Thiravukolkal</i> .	5	Experiential-Learning 4.1	CE	Shows-how	LS
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Unit 2 Transcription of Tamil Medical palm leaf manuscripts, paper manuscripts and medical inscriptions .

4.2.1. *Maruthuva chuvadikal* . (Medical Palm leaf manuscripts), paper manuscripts and medical inscriptions. Transcription of the list of available unprinted *maruthuva chuvadikal* .

4.2.2. Digitalization of *maruthuvachuvadikal. Chuvadippathippu* (Execution of the transcription) techniques to prepare a book from *moolachuvadi*. Scanning, correction of errors and explanation of writing materials in a manuscript.

4.2.3. Siddha medicine related inscriptions , *Samanar caves* medical and medical palmleaf manuscripts .

References: 34,35,36,37,90,91,110

3A	3B	3C	3D	3E	3F	3G
CO 1	Analyze the transcription and annotation of medical palm leaf manuscripts , paper manuscripts and comprehend it's transcription.	2	Lecture	CAP	Knows-how	D,I&GD, LS,FV,DIS
CO1	Appraise and explain the transcription and preservation of <i>medical palm leaf manuscripts</i> .	4	Practical Training 4.2	CE	Shows-how	W,DIS,L_VC
CO1	Identify and verify the unprinted medical palmleaf manuscripts through literary references and internet archives.	5	Experiential-Learning 4.2	CE	Shows-how	IBL,FV

Unit 3 Prosodical study on Siddha verses .

4.3.1. Phonemic sounds, rhythmic structure and intonation of the Siddhar poetries. Prosodic features of Siddhar poetries. Significant role in accent patterns within words and phrases. prosody in Siddhar *paadalkal* (Siddhar verses) according to *Tholkaapiyam - marabiyal*.

- 4.3.2. Rhythm ,intonation, poetic meter and verification of Siddhar's poetries in ancient Siddha texts - *moola noolkal*.
 4 .3.3. Rhythmic structure, phonemic sounds, intonation, syntax, semantics, pragmatics and linguistics in Siddhars' verses.

References: 38,39,98

3A	3B	3C	3D	3E	3F	3G
CO1	Describe Phonemic sounds, rhythmic structure, prosodic features, stress patterns and intonation present in the words and phrases of Siddhar's poetries.	2	Lecture	CC	Knows-how	EDU,L&P PT ,L&G D,DIS
CO1	Analyse and narrate the prosodic structure, rhythmic structure ,intonation, poeticmeter and verification of Siddhar's poetries in moola noolkal.	4	Practical Training 4.3	CAN	Shows-how	REC
CO1	Identify the rhythmic structure and write undisclosed meanings in Siddha literatures.	5	Experiential-Learning 4.3	CS	Shows-how	LS

Unit 4 Anikal and porulkolal for revelation of Siddhar iIakkiangal .

- 4.4.1.Objectification of Siddhar verses. *Ani ilakkanam* and eight types of *Porulkol* to understand the hidden meanings of siddhar verses. *Anikkotpaadukal* in Siddhar's medical texts to understand the Siddhar's perspectives.
 4.4.2.Subtle meaning of Siddhar's poetries with the help of *Ani ilakkanam* and *Porulkolal*. Metaphors and similes to reveal the concealed informations in Siddhars' verses.
 4 .4 .3 .Varieties of *Anigal* in Siddhar texts. The hidden meanings of *siddhar paadalkal*. *Porulkolal and anigal* in Siddha Literatures.

References: 40,41,42,92,93,94

3A	3B	3C	3D	3E	3F	3G
CO1	Describe <i>Ani ilakkanam</i> , varieties of <i>Anigal</i> and eight types of <i>Porulkol</i> to Illustrate the hidden meanings of Siddhar poetries .	3	Lecture	CAP	Knows-how	DIS,L&G D,L,C_L
CO1	Analyse the <i>Anikkotpaadukal</i> in Siddhar's verses to know about the indepth meanings of Siddhar poetries.	4	Practical Training 4.4	CAN	Shows-how	D,SY
CO1	Explore the Rhetoric approaches of <i>Anigal</i> in Siddhar verses to analyze the hidden meanings in Siddhars poems.	5	Experiential-Learning 4.4	CAN	Shows-how	LS

Unit 5 Rhetoric approach and language styles in Siddha Literatures.

4 .5.1. *Pulappaattu neri and nadai iyal* (Rhetoric approach) of *Tamil ilakkiyangal* and Siddhar verses.

4.5.2. Rhetoric approach and language styles (narrative, descriptive, expository, persuasive and formal) of Siddhar's poetries.

4 .5.3 . Meanings of Siddhar verses through Rhetoric approach and language styles.

References: 43,44,45,100,101

3A	3B	3C	3D	3E	3F	3G
CO1	Elaborate <i>Pulappaattu neri and nadai iyal</i> (Rhetoric approaches) ,types of 'PAA ' (Types of Verses) and language styles in Siddha Literatures and <i>Tamil Ilakkiyangal</i> .	1	Lecture	CAP	Knows-how	L&PPT , C_L,L,DI S,L&GD
CO1	Determine the language styles and it's Rhetoric approaches in Siddha Literatures.	3	Practical Training 4.5	CAN	Shows-how	D
CO1	Analyze the structure of Siddhar poetries through Rhetoric approach and language styles.	6	Experiential-Learning 4.5	CAN	Shows-how	PL

Practical Training Activity

Practical Training 4.1 : Siddha Medical Terminologies.

- Total activity hours : 5 hrs
- Activity-1:(Demonstration): Teacher demonstrate, how to analyze *Siddha maruthuva agaraathi or nigandu* in anyone of the particular topic.(2hrs)
- Activity-2: (Creativity writing): Students submit an assignment in *Siddhar Kuzhuourikal* with the help of *agaraathigal and nigandugal*. (1 hr)
- Activity -3 : (Compilation): Students compile the contents in different types of *Nigandukal* in Siddha Medicine .(1 hr)
- Activity- 4 :(Class Presentation):Students give presentation on the values of *nigandugal and agaraathigal*.(1hr)

Practical Training 4.2 : Preservation and transcription of medical manuscripts.

- Total activity hours : 4 .
- Activity-1: (Workshop): Teacher conduct a workshop for manuscript transcription. Select one undisclosed chuvadi in manuscripts Library, to teach the transcription methods. (2hrs).
- Activity -2:(Record Keeping): Students Digitalise one unprinted chuvadi in Language Lab Environment. (2 hrs)

Practical Training 4.3 : Prosodic features of Siddha Medical Verses.

Total activity hours : 4 hrs .

- Activity -1: (Recitation): Teacher Select the poetries and asks the students to determine the prosody , Memorize and Recite the poems with exact prosodic features such as duration, pitch and stress for greater realism.(2 hrs)
- Activity -2: (Record Keeping): Students individually Select and Memorize 20 poems from Siddha scripts with different rhythmic structures. Recite the poems with exact prosodic features such as duration, pitch, stress and accent for greater realism. Analyze meanings of the poems and document them.(2 hrs)

Practical Training 4.4 : Tamil grammatical views of Subtle meanings in Siddhar verses.

- Total activity hours : 4 hours
- Activity -1: (Demonstration): Teacher Select few Siddha verses from *Siddhar noolkal* and demonstrate how to identify its *porul* and *ani* for the revelation of concealed matters in Siddhar poetries. (1 hr)
- Activity -2: (Symposium): Teacher conduct seminar about the significance of *Ani* and *porukol* to assess the subtle meaning of siddhar poems in Siddha Literatures. (1 hr)
- Activity -3: (Compilation): Students analyse subtle meanings with the help of *anigal* .Compile your observations and make a document relating to *maruthuvam*.(1 hr)
- Activity -4: (Record Keeping): Students select ten Siddhar poems from Siddha literatures, document the meanings, metaphors, and similes to reveal the concealed informations. Submit your findings. (1 hr)

Practical Training 4.5 : Rhetoric research on Siddhar verses .

- Total activity hours: 3 Hrs
- Activity -1:(Demonstration): Teacher Discourse and give persuasive talk and demonstrate the Siddha verses to know Rhetoric approaches of Siddhar's medical scripts. (1 hr)
- Activity -2: (Compilation) Students Compile about Siddha poetries of various Siddhars and Compare their language styles and Rhetoric approach.(1hr)
- Activity -3: (Creativity writing): Students Creatively write about language styles of Siddhar poetries. (1hr)

Experiential learning Activity

Experiential-Learning 4.1 : *Paripaashai* of Siddhars.

- Total activity hours : 5 hrs .
- Activity-1: (Audio visual presentation): Students should refer the siddha Medicine related nigandugal and agaraathigal with the help of teachers and give Audio-Visual presentation. (1hr)
- Activity-2-: (Compilation): Students compile the terminologies in *siddha maruthuva nikandukal and agaraathigal* to understand and decode the *siddhar moola noolkal and chuvadikal*. (2hrs)
- Activity-3 : (Critical reading papers): Students interpret particular areas of *nigandukal and agaraathigal* and give critical writings. (2 hrs)

Experiential-Learning 4.2 : Unprinted Siddha medical manuscripts.

- Total activity hours: 5 hrs .
- Activity -1: (Class Presentation):Students should visit to Samanar caves and Temples to read the inscriptions to understand the ancient Siddhasystem. Present your experiences with Audio visual aids (2.5 hrs)
- Activity-2:(Compilation): Students take steps to meet traditional practitioners and gather their traditional medical knowledge and get unprinted medical palmleaf manuscripts and paper manuscripts.Compile and discern your collections(2.5 hrs)

Experiential-Learning 4.3 : Phonemics in Siddhar Poetries.

- Total activity hours :5 hrs.
- Activity -1: (Library session & Compilation) : Students give Compilation on rhythmic structures phonetic sounds, intonation, syntax, semantics, pragmatics and linguistics in Siddhar poetries. (2hrs)
- Activity-2 : (Audio visual presentation): Students select the important poetries from Siddhar's scripts and design the phonetic transcription of the poems. Present your poetic analysis by audiovisual presentation. (3hrs)

Experiential-Learning 4.4 : Contextualization of Siddhar verses .

- Total activity hours: 5 hrs .
- Activity-1 : (Library session) : Students identify the anigal in Siddhar verses through Library session. (2hrs)
- Activity -2: (Compilation) : Students Classify the varieties of anigal in Siddhar verses. Compile your findings related to Anigal, metaphors ,hidden meanings, similem in Siddhar's poetries. (1hr)
- Activity -3: (Creativity writing) : Students illustrate the hidden meanings, similes,metaphors present in medicine related Siddhar poetries.Interpret the *Anigal and porulkol* in Siddhar scripts .Creatively write a assignment or give PPT presentation (2hrs)

Experiential-Learning 4.5 : Uniqueness and meanings of siddhar poems.

- Total activity hours : 6 hrs .
- Activity 1: (Peer learning): Students Identify the meanings of siddhar poems and discuss with peer groups. (2hrs)
- Activity -2: (Creativity writing): Students can select few Siddha verses from texts of different Siddhars and compare it's language styles, Rhetoric approach and write creatively. (2hrs)
- Activity-3 : (Class Presentation): Students Give class presentations on the uniqueness and meanings of the poems through it's Rhetoric approach and language styles.(2 hrs)

Modular Assessment

Assessment method

Hour

Instructions: Conduct a structured modular assessment. Assessment will be for 50marks. .Keep structured marking pattern.Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

4

1.Class presentation with the help of Language Lab.(20 Marks)

Assessment Structure:

This assessment includes collection , preservation, digitalisation, reading and editing of Siddha palm leaf manuscripts. Select one *moolachuvadi* from your language lab and it's available copies, create outline and do comparative study to eliminate the errors. Present through audio visual aids, animations, ppt etc .

Mark distribution:

- Collection of chuvadi (5 marks)
- Using aids, animations, ppt etc .(5 marks.)
- Presentation skills (5 marks)
- Create an outline with conclusion (5 marks).

2. Critical reading (10 Marks)

Assessment structure

• In this assessment the student may read about role of *agaraadhikal and nigandukal* in Siddha literary research. She/He should read Siddhar poetries with more logical and Rhetorical skills. The student may annotate and summarize in their own words to ensure comprehension. Highlights the deeper meanings of the siddhar poetries, sentence pattern and extempo is significant.

Mark distribution:

- Identify the purpose, understanding the main idea (2 marks)
- Annotate and summarize (2 marks)
- Consider the author 's perspective (2 marks)
- Look for errors in reasoning (2 marks)
- Understand the audience (2marks)

3 . Recite poems (10 marks)

Assessment structure.

This assessment includes selection of ten poems from same *Paavahai* in any one of the medicine related siddhar paadalkal. Recitation of poems loud with flow, accuracy, clarity in pronunciation, rhythm, expression and timing.

Mark structure

- Reciter's ability to remember and accurately deliver the words, phrases. (4 marks)
- Clear, understandable pronounciation, tone, correct use of accentuation and intonation. (2 marks)
- Expression, emotion, confidence (2 marks)
- Time management (2 marks)

4. Viva (10 marks)

Assessment Structure:

Two examiners may conduct the oral examination. During the viva, the students will be asked to give examples from Siddha verses for a particular Ani .

(or)

A Siddha verse will be told to the student by the teacher and the student must answer Ani used in that poem and explain the meaning of the poem. Prepare key points for the answer and assign marks to each step. The examiners assess the candidate's understanding of their content, ability to explain it clearly, and how well they engaged with critical questions.

Mark distribution:

- The depth of the candidate's knowledge (3 marks)

- Capacity to defend their conclusions and approach (3 marks)
- Clarity of explanation, fluency and pronunciation skill (2 marks)
- Time management (2 marks)

Or

Any practical in converted form can be taken for assessment.(25 marks)

and

Any experiential, such as portfolios/ reflections/ Presentations can be taken as an assessment.(25 marks)

Module 5 : Creation of universe in Siddhars' perspectives.

Module Learning Objectives

(At the end of the module, the students should be able to)

Analyze Siddhars' cosmogony theory .

Discuss the creation theory of *maaya*, *Buddha* and *aaseevakars*.

Explore Siddhar's *paraveli* theory with scientific concepts.

Identify the formation of *Panchabhoothams* and its *Pancheekaranam* in universe in the view of Siddhars.

Unit 1 Cosmogony of universe in Siddhars' perspectives .

5.1.1. Siddhar's *paraveli* theory in the cosmogony of universe from Siddha literatures, . The origin and evolution of *panchabhoothams* from *paraveli* in Siddhar's perspectives.

5.1.2.Siddhars ' *paraveli* ??concepts .

5.1.3. Comparison of the experience between broader theoretical concepts and frameworks about cosmogony of universe .

References: 51,52,53,54

3A	3B	3C	3D	3E	3F	3G
CO2	Elaborate <i>Siddhar's paraveli theory</i> in cosmogony of Universe and the evolution of <i>panchabhoothams</i> in Siddha aspects.	3	Lecture	CC	Know	L_VC,Mnt,L&GD,DIS,L&PPT
CO2	Analyze the cosmogony theory of universe and reveal the creation based on <i>Siddhar's</i>	4	Practical	CAN	Shows-	SY

	<i>Paraveli</i> concepts.		Training 5.1		how	
CO2	Compare and document the relativity of Siddhar's cosmogony theories with the recent evolution theory of human beings and universe.	6	Experiential-Learning 5.1	CE	Shows-how	DIS

Unit 2 Siddhars' Naadha bindhu concepts in cosmogony .

- 5 .2.1. Siddhars' *Naadha bindhu* (sound and light) theory in cosmogony. Emerging and Merging divine sounds of *Manthira beejangal*.
- 5.2.2. Role of *Naadham* (sound)and *Bindhu* (light) in the cosmogony of universe. Analytical study of voice production in human body and it's link with *Naadha prabanjam*. Recent concepts of sound and light.
- 5.2.3. Creation theories of Siddhars with recent cosmogony theories.

References: 55,56,57,58,59,60,61,62,63,105,109,110,124

3A	3B	3C	3D	3E	3F	3G
CO2	Describe about Siddhar's <i>Naatha bindhu kotpaadukal</i> in creation. Determine the Emerging and Merging divine sounds of <i>Manthira beeja</i> in creation aspects.	3	Lecture	CAN	Knows-how	LS,PAL, Mnt,DIS, L_VC
CO2	Analyse the role of <i>Naatham</i> (sound), <i>Bindhu</i> (light) in the cosmogony of universe and interpret the Significance of 'A' <i>kaaram</i> - (The letter '?') in creation theory .	4	Practical Training 5.2	CAN	Shows-how	DIS
CO2	Analyze and elaborate the functions of <i>Parama Sivam</i> , <i>Paraa shatthi</i> , <i>Paranaadham</i> , <i>Paravindhu</i> and <i>Sadhaa Sivam</i> (form of energies).	6	Experiential-Learning 5.2	CAN	Shows-how	DIS

Unit 3 Maaya theory of creation

- 5 .3.1. Maaya theory . Indepth information about the Maaya theory of Siddhandhis and vedhanthis.
- 5 .3.2. Suddha maayai, Asuddha maayai and Prakruthi maayai in Maaya theories . Comparisons of these maayai theories with Siddhar's concept.
- 5. 3.3. Maaya theory of cosmogony with proper references.

References: 64,65,66,67,104,117,119

3A	3B	3C	3D	3E	3F	3G
CO2	Describe Siddhar's <i>maaya</i> theory and explain the <i>Maaya</i> theory of <i>Siddhantham</i> and <i>Vethantham</i> on cosmogony.	2	Lecture	CC	Know	DSN,L& GD,L
CO2	Analyze the role of <i>maaya</i> in Cosmogony and explore <i>suddha Maayai</i> , <i>Asuddha maayai</i>	6	Practical	CAN	Shows-	DIS

	<i>and Prakruthi maayai.</i>		Training 5.3		how	
CO2	Evaluate the role of <i>Suddha maayai, Asuddha maayai, Prakruthi maayai</i> in Cosmogony .	7	Experiential-Learning 5.3	CE	Shows-how	SY,DIS

Unit 4 Formation of Panchaboothangal and its Pancheekaranam .

5 .4.1. Creation of *Sthoola Panchaboothams* from *Sookuma Panchaboothams*.

5.4.2.Developmental stages of *Dhanmaathrai, Mahaa boothangal, Sookuma boothangal and Sthoola boothagal and their Pancheekaranam.*

5.4.2. *Sthoola thega pancheekaranam, Sookuma thega pancheekaranam & Kaarana thega pancheekaranam.*

References: 8,68,69,70,122,123,124,125

3A	3B	3C	3D	3E	3F	3G
CO2	Elaborate the creation of <i>Sthoola Panchaboothams</i> from <i>Sookuma Panchabootham</i> and the developmental stages of <i>Dhanmaathirai, Mahaa boothangal, Sookuma boothangal and Sthoola boothangal and it's Pancheekaranam .</i>	2	Lecture	CC	Know	DIS,L_V C,LS,PAL ,PER
CO2	Analyze the Formation of <i>Panchaboothams and its Pancheekaranam.</i>	6	Practical Training 5.4	CAN	Knows-how	LS
CO2	Analyze the <i>Pancheekaranam</i> of five elements in formation and restraint of <i>Sthoola, sookuma, Kaarana thegangal .</i>	7	Experiential-Learning 5.4	CAN	Shows-how	SY

Practical Training Activity

Practical Training 5.1 : Siddhar's Paraveli theory in Cosmogony.

- Total activity hours:4 hrs
- Activity-1: (Symposium): Teacher Organize a symposium on the concepts of Siddhar's paraveli theory of Cosmogony with Literary references. (2hrs)
- Activity-2:(Compilation): Students analyze Paraveli theory with modern scientific concepts. Compile your research materials and Submit as a research paper .(2 hrs)

Practical Training 5.2 : Siddhars' *Naadha , Bindhu* ?theory in Cosmogony .

- Total activity hours : 4 hrs
- Activity -1: (Discussion): The teacher arrange a discussion on Siddhars' concepts on Sound and light in creation of universe and human body. (1hr)
- Activity-2: (Audio visual presentation): Students discourse with audio visual about Role of vaayus in sound production. (1 hr)
- Activity-3: (Compilation): Compile the Akaara,ukaara,makaara concepts of siddhars.Students illustrate their findings through research paper with audio visual aids . (1hr)
- Activity- 4: (Creativity writing): Students creatively write their Analytical study about voice production in human body and it's link with Naadha prabanjam. (1hr)

Practical Training 5.3 :

Cosmogony and *Suddha Maayai, Asuddha Maayai & Prakruthi Maayai* .

- Total activity hours: 6 hrs

- Activity-1: (Debate and Compilation): Teacher arrange a debate to analyse relation between Cosmogony and *Suddha maayai, Asuddha maayai and Prakruthi maayai* in Siddhar's aspect. Undergo brief discussion and document your findings .(3hrs)
- Activity- 2: (Creativity writing): Students analyze the components of *maaya theory* of Siddhars with *Siddhanthic view and vethanthic view*.Submit a research paper on this topic.(3hrs)

Practical Training 5.4 : Scientific validation of *Pancheekaranam*.

- Total activity hours : 6 Hrs.
- Activity-1: (Library session): Teacher guide the students to learn *Pancheekaranam* according to *Pancheekarana pinnal* . (2hrs)
- Activity -2 : (Compilation) : Compile and narrate your litteral research on *sthoola and sookuma Pancheekaranam*.(2 hrs)
- Activity-3: (Creativity writing): write creatively about the *panchabhootha Pancheekaranam in Bogars'* pharmacological view and the aspects of other Siddhars. (2 hrs)

Experiential learning Activity

Experiential-Learning 5.1 : Siddhar's Cosmogony theories with Bigbang theory.

- Total activity hours : 6 Hours.
- Activity-1: (Audio visual presentation): Students give audiovisual presentation about Siddhar's perspectives in Cosmogony with recent big bang theory .(2hrs)
- Activity-2: (Debate): Students can arrange a debate between modern concepts of evolution theory of universe with Siddhar 's paraveli theory. (2 hrs)
- Activity-3 : (Creativity writing): Students Creatively write about Siddhar's Cosmogony theories. (2 hrs)

Experiential-Learning 5.2 : Modern aspects of Sound and light .

- Total activity hours : 6 hrs .
- Activity -1:(Discussions): Students learn through discussions to elucidate the unrevealed theories in cosmogony and compare with modern concepts(2hrs)
- Activity-2:(Making of Charts): Students discuss about Siddhar's perspectives in *Naatha bindhu* concepts in Cosmogony . Explain your thoughts through making charts or posters(2hrs)
- Activity- 3: (Creativity writing): Students analyze the Siddhar's Cosmogony theory with recent creation theories. Then Creatively write your views and prepare a research paper on Energy based concepts in Cosmogony.(2 hrs)

Experiential-Learning 5.3 : Siddhar's *Maaya* theory in Creation .

- Total activity hours : 7 hrs .
- Activity -1: (Discussion): Students discuss and Identify the *maaya theory* in the view of Cosmogony. (1 hr)
- Activity-2: (Presentations): Students conduct Seminars to identify the different aspects of *maaya theory*. (1 hr)
- Activity-3:(Compilation): Students compile the *maaya theory* of creation in Indian philosophy and compare with *Siddhar Thaththuvangal* to conceptualize the creation theory. (2hrs)
- Activity-4: (Debate): Students should read and discuss about *Suddha maayai, Asuddha maayai, Prakruthi Maayai* and sequentially arrange a debate in the basis of Cosmogony.(3 hrs)

Experiential-Learning 5.4 : Rejuvenation and degeneration of five elements.

- Total activity hours : 7 hrs .
- Activity-1: (Symposium): Students organize a Symposium with proper references . Students should internalize the *Thotram* (Formation) and *Odukkam* (Restraint of human body) (3hrs)
- Activity-2 : (Creativity writings): Students perform a creative writings about the formation of *Sookuama*, *Sthoola*, *Kaarana thathuvangal* and analyze the Panchaboodha Pancheekaranam. .(2hrs)
- Activity -3: (Class Presentation): Students give a PPT presentation for revealing the *Pancheekaranam* in clinical aspects. (2hrs)

Modular Assessment

Assessment method

Hour

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

4

Assessment methods :

1. QUIZ (20 Marks)

Quiz structure

Format overview

- 20 questions total
- Mixed questions types
- 1 Mark per question
- Rapid fire questions
- Short answer questions

Questions will be asked from the creation theories of Universe (*Paraveli theory*, *Nadhabindhu theory* and *maaya theory*). It is an essential to ensure fairness, clarity, good understanding with learning objectives.

Mark structure

- Clearly define criteria, excellent, complete, correct answer is expected.

- Answering for rapid fire questions within time

2. Compilations (10 marks)

Assessment structure:

In this assessment student can compile and submit data from all available philosophical Text books, research papers, and other authoritative sources to create comprehensive resources. Creation of Panchabootham and it's *Sthoola, Sookkuma pancheekaranam* will be conceptualized and elaborated in an independent executable file.

Mark distribution:

- Gathering, synthesizing and organizing various types of information and resources (5 marks)
- Integrated, Comprehensive and up-to-date (3 marks)
- Applicable, adequacy and usefulness (2 marks)

3. Peer assessment (10 marks)

Assessment structure:

Students evaluate each other's assignments, presentations, or written work using predefined criteria. Advocate all theories of creations explained in Indian philosophy and compare them with modern creation theory. Students will be encouraged in active participation, creative, artistic written work, critical thinking to elicit constructive skills. This ensures the students' honesty.

Mark distribution:

- Critical and analytical thinking, deeper engagement with material, exploring key points (5 marks)
- Clarity, accuracy, effort (3 marks)
- Provides diverse perspectives (2 marks)

4. Class presentation (10 marks)

Assessment structure:

Student may present about the role of creation theory in Siddha medicine and its necessity to learn. Elaborate the application of creation theory in basic principles of Siddha medicine. Summarize key points with supported examples, relevant images, graphs or charts using audio-visual aids, ppt can be elucidated.

Mark distribution:

- Speaking clearly, body language (2 marks)
- Structure of presentation with high level of knowledge and interest stating main topic (5marks)
- Technical and logistical preparation (2marks)
- Interaction with audience (1 mark)

or

Any practical in converted form can be taken for assessment.(25marks)

and

Any experiential, such as portfolios/ reflections/ Presentations can be taken as an assessment.
(25marks)

Module 6 : Siddhars' Creation theory of Jeevan (Urpathi thathuvam)

Module Learning Objectives

(At the end of the module, the students should be able to)

Interpret the creation theory of *Jeevan* in Siddhars' perspectives.

Explore different concepts of *urpathi thathuvam* in Tamil literatures and Siddhars' scripts.

Comprehend the genetic diseases mentioned in Siddha medicine and Modern medicine.

Describe *Maaya karpam* and *malattu karpam*.

Determine the Role of *Vaayus in karpakiriyai*, Sex determination and Lifespan fixation theory of Siddhars.

Unit 1 Siddhars' Karpakiriyai and Jeeva urpathi thathuvangal

6.1.1. Thirumoolar's *karpakiriyai kotpaadukal*. *Urpathi thathuvam* in *Jeeva Urpathi Chinthamani*. (Foetal developmental theory)

6.1.2. Role of *vaayus in Karu urpathi*. Comparative analysis of Karpakiriyai with modern embryology.

6.1.3. Siddhars theory of Sex determination and Lifespan fixation.

References: 72,73,129,130,132

3A	3B	3C	3D	3E	3F	3G
CO2	Discuss about Siddhar's <i>karpakiriyai kotpaadukal</i> (foetal developmental theory) and <i>Jeeva urpathi thathuvangal</i> . (Fixation of Jeevan).	2	Lecture	CC	Knows-how	L,LS,DIS, L&PPT ,L&GD
CO2	Analyze the role of <i>Muthanmai Vaayus</i> in Foetal developmental theory in <i>Jeevorpathi Chintamani</i> and <i>Thiru moolar Thiru Manthiram</i> .	4	Practical Training 6.1	CE	Shows-how	SY

CO2	Identify and explain the Siddhar's theory of Foetal developmental disorders, sex determination, lifespan Fixation.	5	Experiential-Learning 6.1	CS	Shows-how	DIS,PL

Unit 2 Foetal developmental theory in various concepts of Siddhars .

6 .2.1. Foetal developmental theory in Siddha texts like *Jeevorpathi kaandam* and *Panchasoothiram*. Congenital diseases acquired in Foetal developmental stages according to Siddha medicine and Modern medicine texts.

6 .2.2. Diseases acquired in developmental stages of foetus in various Siddhars' concepts. Common antenatal and perinatal problems in India.

6 .2.3. Genetic diseases mentioned in Siddha Medicine with the genetic disorders described in Modern Medicine.

References: 74,75,76,132

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the causes for congenital defects that acquired in Foetal developmental stages according to Siddhar's view and modern embryological aspects.	2	Lecture	CC	Know	PAL,PL,L &PPT ,LS,PER
CO2	Analyze the causes for foetal developmental disorders and preventive measures in Siddha aspects.	4	Practical Training 6.2	CAN	Shows-how	DIS
CO2	Co - relate the <i>Siddhars Jeevorpathi</i> concepts mentioned in Siddha Literatures with	5	Experiential-	CAN	Shows-	DIS

modern obstetric concepts .

Learning 6.2

how

Unit 3 Formation of Sookuma thathuvangal and Fixation of Jeevan in Embryo .

6 .3.1.The formation of *SookumaThathuvangal* and Fixation of *Jeevan* (Foetal developmental theory) explained in *Thiruvalluvar Gnana Vettiyaan* and other Siddha texts.

6 .3.2.Foetal developmental theory described in *Thiruvalluvar Gnana Vettiyaan* with Modern Foetal developmental theory. The treatment protocol for Foetal diseases prescribed in Siddha medicine.

6.3.3.Siddhars' theory of *Sookuma Thathuvangal* in Foetal stages.(*vaayus, Naadis and other sookuma thathuvams*).

References: 76,78,79

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the formation of <i>SookumaThathuvangal</i> , and Fixation of <i>Jeevan</i> in embryo in the perspectives of Siddhars. Define the Foetal developmental theory in <i>Thiruvalluvar Gnana Vettiyaan</i> .	2	Lecture	CC	Knows-how	CBL,LS,L &PPT ,L &GD,L_V C
CO2	Analyze the Foetal developmental theory in <i>Thiruvalluvar Gnana vettiyan</i> with modern obstetric theory.	4	Practical Training 6.3	CAN	Shows-how	D-M,SY
CO2	Explore and Analyze the Formation of <i>sookuma thathuvagal</i> and Fixation of <i>Jeevan</i> .	5	Experiential-Learning 6.3	CS	Shows-how	PL,LS

Unit 4 Theory of Birth in Tamil Literatures and Indian Philosophy .

- 6.4.1. Foetal development concepts in *Thevaaram*, *Thiruvaasagam* and other Indian Philosophical texts.
- 6.4.2. Diseases acquired in foetus and the mother's antenatal problems described in *Thiruvagasam* and the analysis of the *uyir kotpaadukal* (life span) in the aspects of Indian philosophy and Siddhar's perspectives.
- 6.4.3. Doctrine of Birth theory in Siddhar texts and Tamil devotional literatures like *Thevaaram*, *Thiruvaasagam*, and *Naalaayira divya prabandham*

References: 80,81,82,83,84,121

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the theory of Birth in <i>Tamil ilakkiya Literatures</i> , <i>Thevaaram</i> and <i>Thiruvaasagam</i> .	2	Lecture	CC	Know	IBL,DIS, L,L&GD
CO2	Interpret the unrevealed references mentioned about theory of birth in Tamil Literatures, Devotional literatures, and <i>Siddhar gnana paadalkal</i> .	4	Practical Training 6.4	CE	Shows-how	LS,JC
CO2	Document Doctrine of Birth in Siddhar <i>Gnana noolkal</i> , Tamil devotional Literatures, and Tamil literatures.	6	Experiential-Learning 6.4	CAN	Shows-how	SY,LS,DIS

Unit 5 Protocols of Siddha medicine for natural birh and preemptive steps to secure baby and mother .

- 6.5.1. Preemptive measures mentioned in Siddha Literatures to secure mother . Siddha system based recommendations for physiological delivery and birth of a flawless child .
- 6.5.2. Precautionary measures for obstetric and gynecological disorders. Recommendations for the birth of a flawless child mentioned in Siddha literatures.
- 6.5.3. Siddha medicine based Medications, diet, lifestyle for pregnant women and foetus to motivating Natural birth and birth of a healthy child.

References: 84,107,108

3A	3B	3C	3D	3E	3F	3G
CO2	Elaborate Preemptive measures mentioned in Siddha Literatures to secure pregnant mother.	2	Lecture	CC	Knows-how	CBL,DIS, L&PPT
CO2	Collect and write the preemptive measures mentioned in Siddha Literatures to secure the pregnant women and the foetus.	4	Practical Training 6.5	CS	Shows-how	SY,CBL, DIS
CO2	Illustrate the Siddha system based recommendations for pregnant women and physiological birth of healthy children.	5	Experiential-Learning 6.5	CAN	Shows-how	DIS

Practical Training Activity

Practical Training 6.1 : Role of *Pancha Piraanan* ???in Foetal development.

- Total activity hours : 4 hours .
- Activity -1: (Symposium): Teacher arrange a Symposium with gynecologists and discuss the foetal developmental disorders.(2hrs)
- Activity -2: (Class Presentation): Students collect the USG sample reports with foetal developmental disorders and give a class presentations with video clippings about improper functions of muthanmai vaayus causing foetal developmental disorders. (1 hr)
- Activity -3 :(Compilation): Students compile the Foetal developmental theory in Identify sex determination and lifespan Fixation theory of Siddhar's hypothesis. Siddha Literatures. Enlist the Siddha texts related with gynaecology .(1hr)

Practical Training 6.2 : Siddha aspects of Antenatal and Perinatal problems.

- Total activity hours: 4 hrs .
- Activity -1: (Group Discussion): Teacher discuss the specific causes for the problems occurred in foetus and mother in Siddha and Modern aspects. (1 hr)
- Activity -2 : (Class Presentation): Students compare the Siddha concepts in Foetal developmental disorders with modern concepts and give presentations .(1hr)
- Activity-3 : (Log book):Survey the commonly seen antenatal and perinatal problems acquired in mother and foetus.Record your datas in a log book.(1hr)
- Activity- 4: (Creative writings): Creatively write about your literal research and clinical research in this topic. (1hr)

Practical Training 6.3 : Embryology and Fixation of Jeevan.

- Total activity hours: 4 hrs .
- Activity -1: (Demonstration on model): Teacher Demonstrate the this topic through embryology models.(1 hr)
- Activity-2: (Symposium): Teacher Conduct a Symposium along with modern obstetrician and gynecologist (2 hrs)
- Activity -3: (Audio visual Presentations): Students present a research paper on Fixationof Jeevan in Siddhar's perspectives and give audiovisual presentation which focuses on above topics.(1hr)

Practical Training 6.4 : Birth concepts in Tamil *Ilakkiangal*.

- Total activity hours: 4 hrs.
- Activity -1: (Journal club and Library session): Teacher give references to Students to learn through Journal club and Library session about this topic .(2hrs)
- Activity -2: (Audio visual presentation with discourse) : Students Perform Presentations with discourse , ppt and Audio - visual Presentation (2 hrs)

Practical Training 6.5 : Siddha based Preemptive measures for mother and foetus .

Total activity hours: 4 Hrs.

- Activity -1: (Case based learning): Teacher select few antenatal cases and explain about the significance of preemptive measures and non preemptive scheduling leading to obstetric problems in mother and foetus.(1hr)
- Activity -2: (Symposium and making of charts): Teacher arrange a Symposium for discuss about scheduling Siddha based preemptive measures, diet and medication for pregnant women.Create protocol charts for preemptive measures. (2 hrs)
- Activity-3 : (Record Keeping) : Students keep a case sheets for 5 patients and record the clinical findings observed in pregnant women after recommendations of Siddha based preemptive measures, diet and medication. (1hr)

Experiential learning Activity

Experiential-Learning 6.1 : Siddha based Foetal developmental disorders.

- Total activity hours: 5 hrs
- Activity -1: (Audio visual presentation): Students give audio-visual presentation which focused on analysis of the lifespan Fixation theory, Sex determination ,according to Siddhar's Perspectives. (2hrs)
- Activity -2: (Peer group discussion): Students discuss with peer groups to analyze the various causes for Foetal developmental disorders and Spina bifida like genetic disorders .(3 hrs)

Experiential-Learning 6.2 : Siddha aspects of genetic disorders.

- Total activity hours : 5 hours:
- Activity -1: (Discussion and Class presentations): Students discuss with audio visual presentation in the causes for genetic disorders in the aspects of Siddha medicine, modern medicine and other contemporary medical sciences. (1hr)
- Activity -2: (Debate): Students can conduct a debate and give references in the genetic disorders described in Siddha texts and Modern gynaecological texts.(2 hrs)
- Activity-3 : (Log book) : Students record your clinical work samplings in a log book. (2hrs)

Experiential-Learning 6.3 : Formation of *SookumaThathuvangal* (Subtle body).

- Total activity hours: 5 hrs .
- Activity-1:(Library session): Students learn this topic through proper references.(2hrs)
- Activity -2:(Interaction with peer groups and Creative writings): Students can interact with peer groups and creatively write about *SookumaThathuvangal*. (1hr)
- Activity -3: (Compilation): Student can collect and compile the above matters described in Siddha texts.(2hrs)

Experiential-Learning 6.4 : Doctrines of Birth.

- Total activity hours : 6hrs .
- Activity -1: (Presentations) : Students Conduct seminars about Doctrines of Birth theory in Tamil philosophical Literatures .(2 hrs)
- Activity - 2:(Library session): Students utilize Library hour with the guidance of teaching faculty. (1hr)
- Activity -3: (Discussion): Students discuss and get knowledge through guest lecture programmes(2 hrs)
- Activity -4 : (Creative writings) : Students illuminate the Theories through creative writings. (1hr)

Experiential-Learning 6.5 : Recommendations for physiological birth of healthy baby.

- Total activity hours:5 hrs
- Activity -1:(Early clinical exposures) : Students conduct medical camps for pregnant women and recommend Siddha based medications,diet ,and advice lifestyle. Follow-up the women upto their delivery.(2hrs)
- Activity-2: (Record Keeping): Students select ten antenatal cases , then record nowadays problems of pregnant women. Clinically interpret with modern obstetric investigations.(2hrs)
- Activity- 3:(Discussion) : Students can discuss about the necessity of Siddha based protocols for pregnant women (1hr)

Modular Assessment

Assessment method

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks. Keep structured marking pattern.Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6c.

1.Debate (20 marks)

Assessment structure:

In this assessment debate will be conducted by dividing students into two teams. Teams will take turns presenting their main arguments and evidence. Each side will have an their opponent's arguments. Both sides summarize their key points and reinforce their positions. Moderator/Judge maintains order, enforces

Hour

4

rules, and evaluates performance. Stages of foetal development and its problems mentioned in Siddha literature will be discussed. Similarity and differences between modern embryology and Siddhars' theory of foetal development will be debated.

Mark distribution:

- Relevant arguments to the topic, accurate and verifiable facts with evidence (5marks)
- Introduction of new arguments, put emphasis on affirmative and negative side arguments (5 marks)
- Clarity and coherence of arguments, effectiveness of rebuttals, delivery style, confidence and overall persuasiveness (3 marks)
- Avoid logical fallacies or misrepresentation of facts, personal attacks, following rules, maintains order (3 marks)
- Team conduct, respect turn-taking, cooperation among team mates, respectable behaviour toward opponents or judges (2 marks)
- Time management (2 marks)

2. Recite poems: (10 marks)

Assessment structure:

This assessment typically evaluates the student's ability to recite and deliver the verses accurately and effectively. The student shall memorize and recite the poems from *Thirumoolar's Karppa kiriyai kotpaadukal*. Assessment will be made on the reciter's ability to remember and accurately deliver the words, phrases, and any specific instructions related to the recitation, pronunciation, diction, expression, emotion, timing etc.,

Mark distribution:

- Ability to remember, deliver the words, phrases effectively, relevant to content (5 marks)
- Clear, understandable pronunciation, correct use of accentuation and intonation (2 marks)
- Expression and emotion, ability to maintain audience's attention, confidence in performance (2 marks)
- Pacing and timing (1 mark)

3. Question brainstorming (10 marks)

Assessment structure:

This is a method of practicing creative thinking and problem solving. Students should come up with as many questions about the life span fixation and sex determination theory of Siddhars as possible. They shall be divided into groups. Each group then takes 10-15 minutes to write about the topic flooded with questions, not answers. After 10-15 minutes, the group gets back together to share, group, and prioritize the questions. They shall go through the full list of questions and start answering each one to better understand the core topic or problem. If needed, assign a team leader to keep track of time limits and record. Questions may be knowledge-based, applied (to concept), analytical, creative and elicit the Siddhars' original ideas.

Mark distribution:

- Knowledge-based, applicable, analytical, creative, innovative questions (4 marks)
- Answers with clarity, Ideas with originality, No deviation against Siddhars' scripts (4 marks)
- Timing (2 marks)

4.Theory open book test.(10 marks)

Assessment structure:

In this assessment, students are permitted to read ,write and explain the *Karppa kiriyai kotpaadukal in Thiruvalluvar gnanavettiyaan and Jeevorpathi chinthaamani*. Questions are designed to test comprehension, critical thinking, and application of theoretical concepts. Time management is essential. Other materials include articles published in peer review journals related *karpakiriyai kotpaadukal*. Questions types will be modified essay questions, short answer questions, multiple choice questions and problem-solving tasks.This type of assessment emphasizes understanding, application, and critical thinking .

Mark structure:

- Understanding and organizing the resources, Higher-order thinking (2 marks)
- Applying concepts, Analysis, Exact answer from the reference book (4 marks)
- Avoid fact-based answers, minimal relevance, errors (2 marks)
- Balance time (2 marks)

or

Any practical in converted form can be taken for assessment.(25marks)

and

Any experiential, such as portfolios/ reflections/
Presentations can be taken as an assessment.
(25marks)

Module 7 : Elucidation of 96 Thathuvams.

Module Learning Objectives

(At the end of the module, the students should be able to)

- Describe Different school of thoughts of *96 Thathuvams*.
- Interpret the *96 Thathuvams* in clinical aspects in diagnosis and treatment.
- Evaluate the different concepts of *96 Thathuvams in Varma maruthuva noolkal*.
- Conclude *96 thathuvangal in Saathirangal of Saiva Siddhantham* with Siddha medicine.

Unit 1 Concepts of 96 thathuvangal in Siddhars' view .

- 7.1.1. Different concepts of *96 thathuvams* in Siddhar's perspectives.
- 7.1.2 Interconnection between ?? *Panchabhoothams & 96 thathuvams* .
- 7.1.3. Components of *96 thathuvangal*.

References: 85,86,95

3A	3B	3C	3D	3E	3F	3G
CO2	Explain different concepts of <i>96 Thathuvams</i> in Siddhar's perspectives.	3	Lecture	CAN	Knows-how	L&PPT ,L &GD,DIS ,L_VC,L
CO2	Establish the relationship between five elements in formation and restraint of <i>96 thathuvangal through Panchabootha Pancheekaranam</i> in human body .	5	Practical Training 7.1	CAN	Shows-how	SY,DIS,L S,REC

CO2	Document the components of 96 <i>thathuvams</i> in different theories described in Siddha Literatures .	6	Experiential-Learning 7.1	CAN	Shows-how	PL
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Unit 2 96 Thathuvangal in the aspect of Saiva Siddhantham .

7.2.1. The concepts of 96 *thathuvangal* in *Saaththirangal* (literatures)of Saiva Siddhantham.

7.2.2. 96 *Thathuvams* according to *Siddhantham* scripts. Comparative study on 96 *Thathuvams* between Siddhanthic view and Siddhar's view.

7.2.3. Clinical aspects of 96 *thaththuvangal* mentioned in *saiva Siddhantha Saaththirangal* .

References: 87,88

3A	3B	3C	3D	3E	3F	3G
CO2	Describe 96 <i>Thathuvams</i> mentioned in <i>Thathuva Dheepigai and Sivaprakasa Kattalai</i> . and other Siddhantha texts.	2	Lecture	CC	Know	L&GD,T BL,SY,L &PPT ,L_VC
CO2	Analyze and compare the 96 <i>Thathuvams</i> in Siddhar's perspectives and <i>Saivasidhantha</i> scripts.	5	Practical Training 7.2	CAN	Shows-how	D,CBL
CO2	Practice the concepts of 96 <i>Thathuvams</i> to diagnose and treat the patients.	6	Experiential-Learning 7.2	AFT-RES	Does	CBL

Unit 3 Composition of 96 thaththuvangal in Varma maruthuvam .

7.3.1. The composition of 96 thatthuvangal in the *Varma maruthuva* texts such as *Varma Kannaadi* and *Pancheekarana pinnal*.

7.3.2 Different school of thoughts about 96 thatthuvangal in *Varma maruthuva* texts . Interpretations of *varmam* based 96 *Thathuvams* in clinical application.

7.3.3. *Varmam based 96 thatthuvangal* in clinical aspects.

References: 73,75,122,123,139

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the composition of 96 <i>thatthuvangal</i> in <i>Varma Kannaadi</i> , <i>Pancheekarana pinnal</i> and other <i>Varmam literatures</i> .	3	Lecture	CC	Know	SY,L&PP T ,TBL,L S,L_VC
CO2	Explore and Analyze the 96 <i>Thathuvams on Varmology</i> based clinical aspects.	5	Practical Training 7.3	CAN	Shows- how	DIS
CO2	Interpret the Components of 96 <i>Thathuvams</i> and it's clinical application in <i>Medical Varmology</i> .	7	Experiential- Learning 7.3	CE	Shows- how	CBL

Unit 4 Sthoola thatthuvangal and its clinical application .

7.4.1. Functions of *Sthoola thatthuvangal* .

7.4.2. *Sthoola thatthuvangal* based diagnosis and treatment approach.

7.4.3. *Sthoola thatthuvangal* based diseases.

References: 141,142,143,144

3A	3B	3C	3D	3E	3F	3G
CO2	Elaborate <i>Sthoola thatthuvangal</i> and it's functions.	2	Lecture	CC	Knows- how	L&GD,C D,CBL,D- BED,L&P

						PT
CO2	Analyze the <i>Sthoola thathuvangal</i> based diagnostic approach.	5	Practical Training 7.4	CAN	Shows-how	D-BED,DIS
CO2	Explore and document the diseases of <i>Sthoola dhegam</i> .	7	Experiential-Learning 7.4	CAN	Shows-how	DIS

Practical Training Activity

Practical Training 7.1 : *Thotramum odukkamum* of human body .

- Total activity hours : 5 hrs .
- Activity -1 : (Symposium): Teacher conduct a Symposium with proper references on Formation and restraint of panchaboothangal in human body .(2hrs)
- Activity -2: (Discussion and Compilation): Students compile and discuss the concepts about composition of five elements in 96 *thathuvangal* in Siddhars view by using libraries.(2hrs)
- Activity- 3 : (Recitation): Students recite the poems and take class about 96 *Thathuvams* to UG students (1 hr)

Practical Training 7.2 : Optimization of 96 *Thathuvams* .

- Totl activity hours : 5 hrs
- Activity -1: (Case based learning): Teacher arrange clinics in a in-patient ward and teach how to integrate 96 *Thathuvams* in clinical aspects.(2hrs)
- Activity -2: (Record Keeping): Students execute 96 *thathuvams* in clinical observations and make casesheets. Submit 10 casesheets with your clinical examination on the basis of 96 *Thathuvams*. (3hrs)

Practical Training 7.3 : 96 *Thathuvams* and *Varmam energy*.

- Total activity hours : 5 hrs .
- Activity -1: (Group Discussions): Teacher arrange a group discussion with sample case for *Varmam* based diagnosis. (2hrs)
- Activity -2 : (Record Keeping) : Record all the observed findings in patients with deranged *kutrangal* caused by affected *varmam energy* . Submit 10 O.P. Case sheets in this topic. (3 hrs)

Practical Training 7.4 : Clinical interpretations of *Sthoola thathuvangal*.

- Total activity hours :5 hours.
- Activity -1: (Demonstration Bed side) : Teacher Select a case and demonstrate *Sthoola thegam* based clinical findings .(1hr)
- Activity-2: (Log book) : Students analyze *Sthoola thathuvangal* based clinical findings and record them in a log book.Prepare a *Sthoola thegam* based model case sheet (2hrs)
- Activity-3: (Discussion and Compilation) : Students discuss and compile the *Sthoola thegam* based diseases and it's treatment.(2hrs).

Experiential learning Activity

Experiential-Learning 7.1 : Components of 96 *thathuvangal* .

- Total activity hours: 6 hours .
- Activity -1:(Interaction with peer group): Students interact with peer groups for learning 96*Thathuvams* in different aspects(1hr)

- Activity -2:(Compilation): Students compile and analyse various concepts of *96 Thathuvams in panchabhoothic views* .(2hrs)
- Activity -3: (Debate) : Students conduct a debate in the literary references of *96 thathuvams* with peer groups.(2hrs)
- Activity -4: (Audio -Visual presentation) : Students explore the variations in different kinds of texts in *96Thathuvams* by Audio visual presentation. (1hr)

Experiential-Learning 7.2 : Clinical interpretations of *96 Thathuvams*.

- Total activity hours : 6 hrs
- Activity -1: (Case based learning) : Students observe the patients on the basis of *96 Thathuvams* in clinical examination (2hrs)
- Activity -2: (Compilation) : Students should conceptualize the *96 Thathuvams* in clinical aspects. Develop a thesis to flourish the clinical knowledge.(3 hrs)
- Activity - 3 :(Record Keeping) : Students observe and make casesheets on the basis of *96 Thathuvams* and record your findings. (3 Hrs)

Experiential-Learning 7.3 : Treatment aspects of *Varmam Energy*.

- Total activity hours : 7 hrs .
- Activity - 1: (Case based learning): Students clinically observe the patients with problems in the pathways of *Dhasanaadikal, vaayus and Varmam energy*. (1hr)
- Activity- 2: (Kinaesthetic learning): Students take training to apply the procedures of *varmam* therapy to correct *SookumaThathuvangal* .(1 hr)
- Activity - 3 : (Compilation):Students discover and compile protocol for diseases of *sookumaThathuvangal*. (2 Hrs)
- Activity- 4 : (Presentations with clinical work Samplings): Students can conduct seminars about the distinctiveness of *varmam* techniques and its functional connections with *naadis and Vaayus*.(3hrs)

Experiential-Learning 7.4 : Diseases of *Sthoola thathuvangal*.

- Total activity hours : 7 hrs .
- Activity -1:(Log book) : Students observe and document the diseases acquired in *Sthoola thathuvangal*. Assess the patients in the basis of *Sthoola thathuvams*. Document your findings in a logbook. (3 hrs)
- Activity -2:(Interaction) : Students can interact with peer groups for *Sthoola thathuvams* based diagnosis and treatment.(2hrs)
- Activity -3: (Clinical Presentations) : Students analyse and execute the *Sthoola thathuvangal* in clinical practice. Give clinical Presentations about patients with problems in *Sthoola thegam*.(2hrs) .

Modular Assessment

Assessment method

Hour

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

4

Assessment methods:

1. Case based assessment: (20 marks)

Assessment structure:

This includes students' ability to apply medical knowledge, make decisions in examining the patient. This consists of a detailed description of the patient's history, symptoms, vital signs, and other relevant clinical examination based on *96 Thathuvams* and confirmed diagnosis. Students may present their findings by examining *Iymporigal, Iympulangal, Kanmenthiriyangal, Kanmenthiriya vidayangal, 7 Udalkattugal, 5 Kosangal, 5 Aasayangal, Avaththaigal. Changes in Mukkutrangal, Naadi nilaigal, Akkini, and Naadi nilaigal* will be examined well in Siddhars' perspectives. Finally it will be easier to diagnose the condition.

Mark distribution:

- History taking (5 marks)
- Physical examination of *Iymporigal, Iympulangal, Kanmenthiriyangal, Kanmenthiriya vidayangal, 7 Udalkattugal, 5 Kosangal, 5 Aasayangal, Avaththaigal. (5 marks)*
- Changes in *Mukkutrangal, Naadi nilaigal, Akkini, and Naadi nilaigal (5 marks)*
- Diagnosis (5 marks)

2.Scenario based assessment:(20 marks)

Assessment structure.

This assessment is to evaluate medical knowledge and clinical skills by using a scenario.

Select a patient with problems in any one of the *seven udal thathukkal or Five Aasayams*.

Students will be tested on their ability to apply medical knowledge ,clinical skills, diagnose,treat and manage medical conditions based on patient's symptoms and history. Assessment focuses on communication skills, Professionalism, integrity, ethical decision -making .

Sample scenario:

- A 45 year old male patient with stomach pain, nausea, vomiting, belching, indigestion. History of taking coffee, alcohol present. What is the diagnosis, treatment, management?

3. Making charts/posters (10 marks)

Assessment structure:

Create the charts / posters using different tools and methods like BioRender, Canva or Adobe Express with precision and clarity. Evaluate similarities and differences of 96 Thaththuvams in Saiva Siddhantha Saaththirangal, Siddhars' scripts and Varmam texts. Correlate and analyze the different concepts of 96 Thaththuvangal. Align them and create the charts/ posters.

Or

Any practical in converted form can be taken for assessment.(25 marks)

and

Any experiential, such as portfolios/ reflections/ Presentations can be taken as an assessment.(25 marks)

Module 8 : Clinical aspects of Kaarana and Sookuma thathuvangal .

Module Learning Objectives

(At the end of the module, the students should be able to)

Analyze *Kaarana thathuvams* and *Sookuma thathuvams*

Interpret knowledge in Clinical applications of *Kaarana, Sookuma thathuvams*.

Diagnose and treat the diseases occurred in *Kaarana thegam* and *Sookuma thegam*

Interpret the locations and functions of *Aadhaarams, Vaasi, Saram, Vaayus, Kundalini, Avaththaikal* and pathways of *Naadis* and its clinical applications

Treat the patients with psychological problems through *Sookuma* and *Kaarana thaththuvams*

Unit 1 Components of kaarana thaththuvangal and it's clinical applications .

8 .1.1. Twenty five *Kaarana thaththuvangal* .

8 .1.2 .Clinical interpretations of the *Kaarana thaththuvangal* and the diseases acquired in *Kaarana thaththuvangal*.

8.1.3.The diseases of *Anthakaranangal, Sapthaathi, vasanaathi, pulan,gunam* and *koshams*.The specific treatment for *Kaarana thaththuvams* in the aspects of varmam therapy including internal and external therapies.(aga, pura maruthuva muraikal)

References: 88,143,144

3A	3B	3C	3D	3E	3F	3G
CO2	Discuss and Elaborate the components of <i>kaarana thathuvangal</i> and its clinical applications.	2	Lecture	CC	Know	D-BED,D IS,L&GD, TBL,CBL
CO2	Evaluate the diseases associated with <i>Kaarana Thathuvams</i> and interpret the treatment protocol for diseases acquired in <i>Kaarana thaththuvams</i> .	4	Practical Training 8.1	CE	Shows-how	D-BED

CO2	Identify and evaluate the diseases of <i>Kaarana thegam</i> , specify the <i>Varmam</i> treatment techniques and appraise the internal and external therapies.	5	Experiential-Learning 8.1	CE	Shows-how	D
<p>Unit 2 Clinical interpretation on Naadis,Vaayus and mukkuarangal.</p> <p>8.2.1.Pathways of naadis and their functions. .The functional relationship between <i>Naadis, mukkuaram and vaayus</i>.</p> <p>8.2.2. Clinical interpretations of <i>naadis, vaayu,mukkuarangal. Documentation of the complaints related to Naadis,vaayus and mukkuarangal.</i></p> <p>8.2.3. <i>Vaayus, Naadis and mukkuarangal</i> in clinical aspects.</p> <p>References: 137,138,139,140</p>						
3A	3B	3C	3D	3E	3F	3G
CO2	Describe the functional connections of <i>Naadis</i> with <i>Vaayus and Mukkuarams</i> .	2	Lecture	CAN	Knows-how	L,L&PPT ,L&GD,DIS
CO2	Identify the functions and connections of <i>Naadis,Vaayus</i> and <i>mukkuarangal</i> .	4	Practical Training 8.2	CAN	Shows-how	D-BED
CO2	Demonstrate and document the impact of dearranged <i>Naadis, Vaayus</i>	5	Experiential-	CAN	Shows-	D-

and *mukku* on Seven physical constituents .

Learning 8.2

how

BED,CBL

Unit 3 Clinical aspects of Anthakaranangal and panchakoshangal .

8.3.1.Functions of *Anthakaranangal* in detail and it's connections with *Avaththaigal*. Functions of *panchakoshangal* and the diseases occurred in *Panchakoshangal*

8.3.2.Dhiyanam with *Anthakaranangal*. Diseases associated with *Anthakaranangal* and *Avathaigal* . Diseases occurred in *Panchakoshams*.

Anthakaranangal based psychiatric diseases and treatment in *Agaththiar kirikai 64*.

8.3.3. Diseases of *Anthakaranangal* and *Panchakoshangal* .

References: 134,135,136

3A	3B	3C	3D	3E	3F	3G
CO2	Explain functions of <i>Anthakaranams</i> and it's interconnection with <i>Avaththaikal</i> in detail.	2	Lecture	CAN	Knows-how	SY,DIS,L S,TBL,L_ VC
CO2	Interpret the diseases related with <i>Anthakaranangal</i> and analyze <i>Agathiyar's Kirikai</i> classification with modern Psychiatric ddiseases.	4	Practical Training 8.3	CE	Shows-how	D- BED,DIS
CO2	Practice clinical interpret the <i>anthakaranangal</i> to treat the psychological problems.	4	Experiential-Learning 8.3	AFT-RES	Shows-how	CBL

Unit 4 Physical and Mental values of Avaththaikal .

8 .4.1. *Avaththaikal* and it's significance of Clinical and spiritual practice.

8.4.2. The physical values and Spiritual values of *Avaththaikal* in Siddhar's view. Clinically apply the *Avaththaikal* related problems in Cognitive functions, dreams ,and sleep pattern. *Avaithaigal* related problems to conclude a diagnosis and treatment.

8.4.3. *Melaal avathai, keezhaal avathai, mathiyaal Avaththaikal*. The role of *Avaththaikal* in life of *Jeevan* in Siddhar's view.

References: 127,128,131,133

3A	3B	3C	3D	3E	3F	3G
CO2	Elaborate <i>Avaththaikal</i> and it's clinical applications and explain the significance of <i>Avaththaikal</i> in spiritual practice.	2	Lecture	CC	Knows-how	CBL,DIS
CO2	Evaluate Diseases acquired in disruption of <i>Avaththaikal</i> .	4	Practical Training 8.4	CE	Shows-how	D-BED,CBL
CO2	Practice clinical and spiritual interpretations of <i>avathaikal</i> .	6	Experiential-Learning 8.4	AFT-RES	Shows-how	DIS

Unit 5 Energy based insights in Siddha Medicine.

8.5.1. *Naadi,Saram, Vaasi, Aadharams and mukku-trangal.*

8.5.2. Interconnection between *Naadi,Vaasi,Saram,kundalini,Aadhaarams, mukku-trangal and varmam energy* .

Correlation of five elements with above concepts.

8.5.3 The functions of *Naadis, Vaayus, Vaasi ,Saram and Aadhaarams in the basis of Varma pullikal.*

References: 112,116,120

3A	3B	3C	3D	3E	3F	3G
CO2	Describe <i>Naadi, Saram, Vaasi, Aadharams and mukku-trangal.</i> Identify the energy pathways and functions of <i>naadis, functions of vaayu, vaasi, saram and Kundalini.</i>	2	Lecture	CC	Knows-how	SIM,L&G D,L,L&P PT
CO2	Analyze <i>Kundalini</i> regarding to <i>Aadharams, vaasi, saram and Naadis.</i>	4	Practical	CAN	Shows-	SY

			Training 8.5		how	
CO2	Interpret the functions of <i>naadis, vaayus, Aadhaarangal, Vaasi, Saram</i> in the basis of <i>Varmam</i> Energy.	6	Experiential-Learning 8.5	CE	Shows-how	W

Practical Training Activity

Practical Training 8.1 : Clinical interpretations of *kaarana thathuvangal*.

- Total activity hours: 4 Hrs.
- Activity -1: (Demonstration bed side) : Teacher give clinics with demonstrate a patient have a problems in *Kaaranathegam* .(2hrs)
- Activity - 2 : (Class Presentation) : Students clinically intepet the *Kaarana thathuvangal* and the treatment protocol for diseases acquired in *Kaarana thaththuvams*. Give class presentations with cases .(2hrs)

Practical Training 8.2 : Clinical interpretations of *Vaayus, Naadis, Mukkutrangal*.

- Total activity hours : 4 hrs

- Activity-1: (Demonstration Bed side) : Teacher demonstrate the diagnostic approach of *Naadi Nadai* and it's relation with *mukkuurangal* and *Vaayus* in a patient. (1hr)
- Activity - 2: (Practical Case taking) : Students Observe the Signs and symptoms acquired due to deranged *Vaayus* , *Naadis* and *Mukkuutrams*. Observe 10 patients in OPD record your clinical findings in casesheets. (3hrs).

Practical Training 8.3 : *Avaththaikal* and *Andhakaranangal*.

- Total activity hours :4 hrs .
- Activity -1: (Demonstration Bed side) : Teacher give clinics for case based learning to diagnose the diseases related with *Anthakaranangal* and *Avathaikal* .(2 Hrs)
- Activity-2: (Interaction) : Students apply the scientific concepts of *Dhiyanam* to in patients have a problems in *Anthakaranangal* .(2 hrs)

Practical Training 8.4 : Diseases of *Avaththaikal*.

- Total activity hours: 4 hrs .
- Activity-1: (Case based learning): Teacher demonstrate the *Avaithaigal* based diseases through clinical presentation . (1hr)
- Activity -2: (Compilation) : Students compile and discuss about Attention Deficit disorders due to problems in *Nanavu*. Nightmare Disorders due to improper functions in *Kanavu nilaikal* and Sleep Disorders .(1hr)
- Activity -3 : (Making of Charts) : Students prepare a treatment protocol chart for the above-mentioned diseases.(2hrs)

Practical Training 8.5 : Kundalini in human body.

- Total activity hours:4 hrs .
- Activity-1: (Symposium) : Teacher arrange a Symposium with experts for this topic .(2hrs)
- Activity -2: (Compilation) : Students analyze the interconnection between *Panchabhoothams and Naadi,Vaasi,Saram,kundalini Aadhaarams, mukkutrangal and varmam energy*.,Compile the concepts . (2hrs)

Experiential learning Activity

Experiential-Learning 8.1 : Varmam therapy for *Kaarana thegam*.

- Total activity hours: 5 hours.
- Activity -1: (Demonstration) : Students Demonstrate the *varmam* massage for patients with problems in *Kaaranathegam*. Document the progress of the patient and give audiovisual presentation. (3hrs)
- Activity-2: (Clinical work Sampling) : Students correct distorted *mukkutram* and *varmam* energy in *kaaranathegam* through the manipulation of *varma pullikal*. Document the progress in a log book and prepare a research paper.(2hrs)

Experiential-Learning 8.2 : *Mukkutrangal* and Seven *Udalthathus* .

- Total activity hours: 5 hrs .
- Activity -1: (Case based learning) : Students give clinical Presentations about the influences of *mukku* on seven physical constituents. (1hr)
- Activity -2: (Documentation) : Students should interact and follow up the patients with the problems in *Naadis* and *Vaayus*. Document your findings about *naadi nadai* in a log book. (2 hrs)
- Activity -3: (Clinical Presentations): Students present your clinical findings in the aspects of *Naadis*, *mukku* and *Vaayus* with Video clippings . (2 hrs)

Experiential-Learning 8.3 : Internal and external therapies for *Anthakaranangal*.

- Total activity hours: 4 hours.
- Activity -1: (Case based learning): Students should Clinically observe the patients with Problems in *anthakaranangal*. Students can develop a *Dhyanam*, *Yoga* and *Pranayamam* protocol for Psychiatric diseases. *Teaching Yoga*, *Pranayamam* and advise Siddha based dietetics in O.P.D (2hrs)
- Activity -2: (Interaction) : Students conduct medical camps for above-mentioned diseases.(2hrs)

Experiential-Learning 8.4 : Revolutionization of *Avaththaikal*.

- Total activity hours: 6 hours .
- Activity -1:(Record Keeping) Students Diagnose and analyse the *avathaigal* related diseases . Observe and record in 10 case sheets .(2hrs)
- Activity -2: (Discussion) : Students discuss about the *Avaththaikal* related diseases and summarize it. (2hrs)
- Activity -3: (Class presentations): Students internalize *Avaththaikal* concepts in spiritual aspects and give presentations (2hrs)

Experiential-Learning 8.5 : Dogmas of *Varmam Energy*.

- Total activity hours: 6 hrs .
- Activity - 1 : (Workshop) : Students arrange a workshop about disrupted *Varmam* energy derange the *mukkutram*. (3hrs)
- Activity -2: (Practical Performance and log book) : Students should apply *varmam* techniques to Manipulate the distorted *varmam* energy, *mukkutram and naadis*. Record in a log book.(2 hrs)
- Activity -3: (Presentation) : Students give your experiences in seminars about precepts of *kundalini, Vaasi and saram* to analyse the philosophies of *Varmam* Therapy. (1 Hr)

Modular Assessment

Assessment method

Hour

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks. .Keep structured marking pattern.Use different assessment methods in each Module for the semester. Keep record of the structured pattern used for assessment. Calculate the modular grade point as per 6C.

Assessment methods:

1.OSCE : 30 marks.

This clinical examination consist of six stations.Each designed to test specific clinical skills. Stations are time limited usually lasting 5 to 10 minutes. Each station carries 5 marks.

Examination of the patient :

Diagnose the problems in *sookuma thathuvams through Naadi nadai and symptoms*.

Station:

1.History-Taking :

2.Physical examination :

3.Clinical procedures.

Perform correct steps in *varma pinnal and thadaval muraikal* in the basis of naadi,saram and vaasi.

4.Examine and mention the affected *vaayu* in that particular clinical condition.

5. Explain the pathways of affected *naadi* and find out the problem in naadi.

6.Display pathways of *naadi,varma pullikal, functions of vaayus*.

Display your clinical findings through charts/posters/models .???

Scoring components :

4

- Clinical knowledge.
- Communication.
- Practical skills .
- Professionalism .

2. Peer assessment /self assessment.(20 marks)

Activities include grouping the students , allot judges and receive feedbacks.

Assess through Evaluation tools like rubrics and check lists.

Students divide into groups and discuss about Avaiithaikal related diseases and its treatment.

Both the assessor and the person being assessed benefit from the process by gaining new perspectives.(50marks)

Or

Any practical in converted form can be taken for assessment.(25marks)

and

Any experiential such as portfolios/ reflections/

Presentations can be taken as an assessment.(25marks)

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)		
Practical No*	Practical name	Hours
1.1	Antiquity of Siddha Medicine.	4
1.2	Identity and Virtuosity of Siddhars.	4
1.3	Enigmatics in Siddha Literatures.	4
1.4	Supernatural attainments of Siddhars.	4
1.5	Siddha Medicine and other Traditional Medicine.	4
2.1	Gurugulam traditions of Siddha system.	4
2.2	Qualities of good disciple.	4
2.3	Glory of Proficient guru.	4
2.4	Qualities of good Siddha physician.	4
2.5	Professionalism for Siddha System of Medicine.	4
3.1	Implementation of Logic.	5
3.2	Siddha Philosophy with Indian philosophy	5
3.3	Tharkam (Logic) in Siddha Maruthuvam.	5
3.4	Application of Alavai (Logic) for Diagnosis .	5

4.1	Siddha Medical Terminologies.	5
4.2	Preservation and transcription of medical manuscripts.	4
4.3	Prosodic features of Siddha Medical Verses.	4
4.4	Tamil grammatical views of Subtle meanings in Siddhar verses.	4
4.5	Rhetoric research on Siddhar verses .	3
5.1	Siddhar's Paraveli theory in Cosmogony.	4
5.2	Siddhars' Naadha , Bindhu ?theory in Cosmogony .	4
5.3	Cosmogony and Suddha Maayai, Asuddha Maayai & Prakruthi Maayai .	6
5.4	Scientific validation of Pancheekaranam.	6
6.1	Role of Pancha Piraanan ???in Foetal development.	4
6.2	Siddha aspects of Antenatal and Perinatal problems.	4
6.3	Embryology and Fixation of Jeevan.	4
6.4	Birth concepts in Tamil Ilakkiangal.	4
6.5	Siddha based Preemptive measures for mother and foetus .	4
7.1	Thotramum odukkamum of human body .	5
7.2	Optimization of 96 Thathuvams .	5
7.3	96 Thathuvams and Varmam energy.	5
7.4	Clinical interpretations of Sthoola thathuvangal.	5
8.1	Clinical interpretations of kaarana thathuvangal.	4
8.2	Clinical interpretations of Vaayus, Naadis, Mukkutrangal.	4

8.3	Avaththaikal and Andhakaranangal.	4
8.4	Diseases of Avaththaikal.	4
8.5	Kundalini in human body.	4

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)		
Experiential learning No*	Experiential name	Hours
1.1	History of Siddhars and Siddha Medicine.	4
1.2	Historical events of Siddhars	6
1.3	Concealed secrets of Siddhar Poetries.	5
1.4	Siddhis of Siddhars.	5
1.5	Uniqueness and Globalization of Siddha Medicine.	6
2.1	Genealogy of Siddhars.	6
2.2	Rules for good disciple.	4
2.3	Guru and disciple.	5
2.4	Aptitudes for good Siddha physician.	5
2.5	Medical ethics in Siddha Medicine.	6
3.1	Logic in Clinical interpretations. ?	7
3.2	Indian Philosophy and Siddha Medicine .	7
3.3	Necessity of learning Tharkam .	6
3.4	Logic and it's clinical application.	6
4.1	Paripaashai of Siddhars.	5
4.2	Unprinted Siddha medical manuscripts.	5
4.3	Phonemics in Siddhar Poetries.	5

4.4	Contextualization of Siddhar verses .	5
4.5	Uniqueness and meanings of siddhar poems.	6
5.1	Siddhar's Cosmogony theories with Bigbang theory.	6
5.2	Modern aspects of Sound and light .	6
5.3	Siddhar's Maaya theory in Creation .	7
5.4	Rejuvenation and degeneration of five elements.	7
6.1	Siddha based Foetal developmental disorders.	5
6.2	Siddha aspects of genetic disorders.	5
6.3	Formation of SookumaThathuvangal (Subtle body).	5
6.4	Doctrines of Birth.	6
6.5	Recommendations for physiological birth of healthy baby.	5
7.1	Components of 96 thathuvangal .	6
7.2	Clinical interpretations of 96 Thathuvams.	6
7.3	Treatment aspects of Varmam Energy.	7
7.4	Diseases of Sthoola thathuvangal.	7
8.1	Varmam therapy for Kaarana thegam.	5
8.2	Mukkutrangal and Seven Udalthathus .	5
8.3	Internal and external therapies for Anthakaranangal.	4
8.4	Revolutionization of Avaththaikal.	6

Table 6 : Assessment Summary: Assessment is subdivided in A to H points**6 A : Number of Papers and Marks Distribution**

Subject Code	Paper	Theory	Practical	Total
SIDPG-AB-SMAA	1	100	200	300

6 B : Scheme of Assessment (Formative and Summative Assessment)**Credit frame work**

SIDPG-AB-SMAA consists of 8 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment :Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment:Summative Assessment (University examination) will be carried out at the end of Semester II.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d* f/c*e*100
M1. History of Siddhars and siddha medicine.	2	60		50		
M2. Gurukula Tradition of Siddha system.	2	60		50		
M3. Components of Dharkam (Alavai) in Siddha Literatures .	2	60		50		
M4. Tamil language and Siddha Medical system	2	60		50		
M5. Creation of universe in Siddhars' perspectives.	2	60		50		
M6. Siddhars' Creation theory of Jeevan (Urpathi thathuvam)	2	60		50		
M7. Elucidation of 96 Thathuvams.	2	60		50		
M8. Clinical aspects of Kaarana and Sookuma thathuvangal .	2	60		50		

$$\text{MGP} = \frac{(\text{Number of Notional learning hours attended in a module}) \times (\text{Marks obtained in the modular assessment})}{(\text{Total number of Notional learning hours in the module}) \times (\text{Maximum marks of the module})} \times 100$$

6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPs of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA

SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester
Evaluation Methods for Modular Assessment

A S.No	B Module number and Name	C MGP
1	M1.History of Siddhars and siddha medicine.	C1
2	M2.Gurukula Tradition of Siddha system.	C2
3	M3.Components of Dharkam (Alavai) in Siddha Literatures .	C3
4	M4.Tamil language and Siddha Medical system	C4
5	M5.Creation of universe in Siddhars' perspectives.	C5
6	M6.Siddhars' Creation theory of Jeevan (Urpathi thathuvam)	C6
7	M7.Elucidation of 96 Thathuvams.	C7
8	M8.Clinical aspects of Kaarana and Sookuma thathuvangal .	C8
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

6 E : Question Paper Pattern

MD/MS SIDDHA Examination

SIDPG-AB-SMAA

Sem II

Time: 3 Hours ,Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per Question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
(M-1)History of Siddhars and siddha medicine. (Marks: Range 5-15)				
1	(U-1) History of Siddha System.	No	Yes	Yes
2	(U-2) Virtuosity of Siddhars' Vaithyam and gnanam.	No	Yes	Yes
3	(U-3) Analysis of ancient scripts of Siddha system (moola noolkal).	No	Yes	Yes
4	(U-4) Decoding spiritual and supernatural attainment of Siddhars (Siddhi muraikal)	No	Yes	Yes
5	(U-5) Comparative analysis on Siddha system with other Traditional systems	No	Yes	Yes
(M-2)Gurukula Tradition of Siddha system. (Marks: Range 5-15)				
1	(U-1) Siddhar's gurukula Kalvimuraikal.	No	Yes	Yes
2	(U-2) Qualities of Diligent Disciple	No	Yes	Yes
3	(U-3) Qualities of Proficient guru	No	Yes	Yes
4	(U-4) Attributes for good siddha physician.	No	Yes	Yes
5	(U-5) Medical ethics in Siddha Medicine .	No	Yes	No
(M-3)Components of Dharkam (Alavai) in Siddha Literatures . (Marks: Range 5-20)				
1	(U-1) Implementation of 32 analysing technics(uththikal) and 10 logics (Alavaikal)in Siddha Medicine.	Yes	Yes	No
2	(U-2) Significane of of Dharka Gnanam in Siddha Medicine.	No	Yes	Yes
3	(U-3) Dharka saasthiram of siddhars .	No	Yes	No
4	(U-4) Application of Alavai in Clinical interpretation.	No	Yes	No
(M-4)Tamil language and Siddha Medical system (Marks: Range 5-15)				
1	(U-1) Significance of Tamil and Siddha Maruthuva Agraathigal and nigandugal	No	Yes	Yes
2	(U-2) Transcription of Tamil Medical palm leaf manuscripts, paper manuscripts and medical inscriptions .	No	Yes	Yes
3	(U-3) Prosodical study on Siddha verses .	No	Yes	No
4	(U-4) Anikal and porulkolal for revelation of Siddhar iIakkiangal .	No	Yes	Yes
5	(U-5) Rhetoric approach and language styles in Siddha Literatures.	No	Yes	Yes
(M-5)Creation of universe in Siddhars' perspectives. (Marks: Range 5-20)				
1	(U-1) Cosmogony of universe in Siddhars' perspectives .	No	Yes	Yes
2	(U-2) Siddhars' Naadha bindhu concepts in cosmogony .	No	Yes	Yes

3	(U-3) Maaya theory of creation	No	Yes	No
4	(U-4) Formation of Panchaboothangal and its Pancheekaranam .	Yes	Yes	Yes
(M-6)Siddhars' Creation theory of Jeevan (Urpathi thathuvam) (Marks: Range 5-15)				
1	(U-1) Siddhars' Karpakiriyai and Jeeva urpathi thathuvangal	No	Yes	Yes
2	(U-2) Foetal developmental theory in various concepts of Siddhars .	No	Yes	No
3	(U-3) Formation of Sookuma thathuvangal and Fixation of Jeevan in Embryo .	No	Yes	Yes
4	(U-4) Theory of Birth in Tamil Literatures and Indian Philosophy .	No	Yes	Yes
5	(U-5) Protocols of Siddha medicine for natural birh and preemptive steps to secure baby and mother .	No	Yes	No
(M-7)Elucidation of 96 Thathuvams. (Marks: Range 5-20)				
1	(U-1) Concepts of 96 thathuvangal in Siddhars' view .	Yes	Yes	No
2	(U-2) 96 Thathuvangal in the aspect of Saiva Siddhantham .	Yes	Yes	Yes
3	(U-3) Composition of 96 thaththuvangal in Varma maruthuvam .	No	Yes	No
4	(U-4) Sthoola thaththuvangal and its clinical application .	Yes	Yes	Yes
(M-8)Clinical aspects of Kaarana and Sookuma thathuvangal . (Marks: Range 5-20)				
1	(U-1) Components of kaarana thaththuvangal and it's clinical applications .	No	Yes	Yes
2	(U-2) Clinical interpretation on Naadis, Vaayus and mukkuurangal.	Yes	Yes	Yes
3	(U-3) Clinical aspects of Andhakaranangal and panchakoshangal .	Yes	Yes	No
4	(U-4) Physical and Mental values of Avaththaikal .	No	Yes	Yes
5	(U-5) Energy based insights in Siddha Medicine.	Yes	Yes	No

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. 100 marks question paper shall contain:-

- Application Based Question: 1 No (carries 20 marks)
- Short Answer Questions: 8 Nos (each question carries 05 marks)
- Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Use the Blueprint provided in 6G or similar Blueprint created based on instructions 1 to 7

Blueprint		
Question No	Type of Question	Question Paper Format
Q1	Application based Questions 1 Question 20 marks All compulsory	M3.U1 Or M5.U4 Or M7.U1 Or M7.U2 Or M7.U4 Or M8.U2 Or M8.U3 Or M8.U5
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory	1. M2.U2 Or . M1.U5 Or . M5.U3 Or . M7.U3 Or . M8.U2 2. M3.U1 Or . M8.U5 Or . M7.U2 Or . M8.U3 3. M1.U2 Or . M4.U3 Or . M6.U5 Or . M1.U1 4. M6.U3 Or . M8.U1 Or . M5.U4 5. M7.U4 Or . M3.U2 Or . M5.U1 6. M5.U2 Or . M4.U5 Or . M2.U3 Or . M4.U2 7. M1.U4 Or . M6.U1 8. M3.U4 Or . M4.U4 Or . M4.U1 Or . M2.U4
Q3	Analytical Based Structured Long answer Questions Four Questions 10 marks each All compulsory	1. M1.U5 Or . M2.U1 Or . M3.U2 Or . M4.U1 Or . M5.U1 Or . M6.U1 Or . M7.U2 Or . M8.U1 Or . M2.U3 Or . M3.U2 Or . M6.U1 2. M1.U2 Or . M2.U2 Or . M4.U2 Or . M5.U2 Or . M6.U3 Or . M7.U4 Or . M8.U2 Or . M7.U4 Or . M8.U2 Or . M5.U1 3. M1.U3 Or . M2.U3 Or . M4.U4 Or . M5.U4 Or . M6.U4 Or . M8.U4 Or . M5.U1 Or . M4.U2 4. M1.U4 Or . M2.U4 Or . M4.U5 Or . M2.U1 Or . M3.U2

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	<p>practical - Long case - one practical . 1x 80 = 80 marks. Duration: 1 Hr 30 minutes.</p> <p>1. Clinical examination of the patient based on Iymbootham, Arusuvai, mukkutram of Sthoola, sookuma, kaarana sareerangal.</p> <p>A. Diagnose the patient through Naadi nadai.</p> <p>Distinguish the naadi nadai based on Suvai, mukkutram, pozhuthukal and diseases. (20 marks)</p> <p>B. Demonstrate the treatable findings in seven physical constituents (udalkattukai) of the patient (10 marks)</p> <p>C. Evaluate the Agni of the patient (10 marks)</p> <p>D. Identify and write about all clinical findings in the view of Envaithervugal . (10 marks)</p> <p>E. Prescription for Internal medicine (10 marks).</p> <p>F. Prescription for external therapies. (10 marks)</p> <p>G. Advise for Diet , Pathiyam and lifestyle modification. (10 marks)</p>	80
2	<p>2 Short practicals (2 short cases) - 30 minutes.</p> <p>Short case -1 - Clinically examine and diagnose the patient on the basis of Alavai . (30 marks)</p> <p>Short case - 2- Clinically examine the patient in the aspect of functions of Vaayus and Naadis .</p> <p>and demonstrate Varmam therapy based treatment to correct the distorted vaayus and naadis. (30 marks)</p>	60
3	Viva : 40 marks - 2 examiners . (20 marks /each examiner)	40
4	Log book. (Activity records)	10
5	<p>Practical and clinical record :</p> <p>1. Comprehend and edit one unprinted moola chuvadi / submit it's critical edition (sempathippu) of moola chuvadi.</p> <p>2. Submit a casesheets according to modules three and seven.</p>	10
Total Marks		200

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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		
		LRI	Lab Report Interpretation		

		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		
		DSN	Dissection		
		PSN	Prosection		