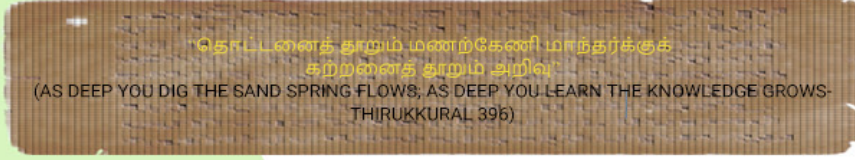


Course curriculum for Second Professional (B.S.M.S)

(PRESCRIBED BY NCISM)



Bachelor of Siddha Medicine and Surgery (B.S.M.S)

(SUBJECT CODE : SIDUG – NAVO)

Noi Anugavidhi Ozhukkam (Principles and Disciplines of Disease Prevention and Public Health)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)



॥ आयुषे सर्वलोकानाम् ॥



**BOARD OF UNANI, SIDDHA AND SOWA-RIGPA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058**

II Professional Siddha Maruthuva Arignar (B.S.M.S)

Subject Code : SIDUG – NAVO

Summary

Total number of Teaching hours: 220			
Lecture hours(LH)-Theory		120	120(LH)
Paper I	120		
Non Lecture hours(NLH)-Theory		100	100(NLH)
Paper I	100		
Non Lecture hours(NLH)-Practical			
	Not Applicable		

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	0	30	-----	20
Sub-Total	100	50			
Total marks	150				

Important Note:-The User Manual II B.S.M.S 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 II 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 curriculum write to cur.imp@ncismindia.org

PREFACE

Maruppathu ini noi vaarathiruppa"- is a third-century Clarion call in *Thirumanthiram*, aligned with contemporary public health principles. Similar to this thought-provoking concept, another tall statement is "*paguththundu palluyir Ombuvoam*", which is the bottom line thought of the current day Slogan "One Health." Siddha, the offshoot of Tamils' deep wisdom, had strong opinions about the importance of preventive, promotive healthcare, and social health.

From the oldest available Tamil literature, the Sangam classics, or Couplets of Kural, to post-medieval Tamil literature, many texts strongly emphasize the concepts of preventive health care in many areas. From bathing to breaking the fast, from the living spaces to serving plates, from the adherence of ethics to the avoidance of pollutants, Siddha medicine compiled many healthy lifestyle disciplines drawn from various age-old experiences.

"Functional food" is a term coined in the 1980s by Japanese food scientists. But the concept of functional food was well understood by Siddhars of yore. They laid strong emphasis on what to eat, what not to eat, where to eat, how to eat, and whom to eat with, and had their rationale. Comprehending the need for Sustainability and diversified needs, Siddha tradition served a platter of recipes and formulations for healthy living, which should be the great arm to combat NCDs and CDs.

An undergrad in any medical system is like a trainee warrior in a base camp. In front of him is the glacier-coated mountain, which he has to scale and rescue the silent victims at the top. He must be adequately trained in climbing, reaching the top, adapting to the climate, and finally, in rescue operations. Rescuing is the final part, which is medical intervention. Yet, to reach the site, he should know the nuances of public health and understand the various clutches of health challenges. Especially in the post covid era, with the reemergence of zoonotic microbes, health is never going to be a flat bridge connecting the diseased and drugs.

With these understandings, the *Noi Anuga Vidhi Ozhukkam* subject, which is the fulcrum of the second BSMS degree, is framed as a hybrid format with Traditional Siddha Concepts and modern public health understandings. Structured with eleven Chapters, the Siddha aspirant will learn about the traditional understandings and their philosophy behind, the preventive science, which is still unexploited, the heights of daily disciplines and functional foods, and the fundamentals of the modern public health system. It's a paradigm shift, which is highly warranted for a NexGen Siddha graduate. The bottom-line aspiration is that the undergrad who is coming out of college should change the health-seeking behaviour of victims and make them susceptible to Siddha gadgets of preventive medicine. He should be able to participate in Global and National initiatives in Public health programs and thereby give his constant effort to achieve Sustainable development goals.

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Course Code and Name of Course

Course code	Name of Course
SIDUG-NAVO	Noi Anugavidhi Ozhukkam (Principles and Disciplines of Disease Prevention and Public Health)

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) SIDUG – NAVO At the end of the course SIDUG – NAVO, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Apply the principles and fundamentals of preventive and promotional aspects of health and well being in Siddha system of medicine.	PO1,PO8,PO10
CO2	Interpret the impact of Mutharporul, Karuporul and Uriporul and its influences on health and well being of individual and community	PO3,PO4,PO7,PO8, PO10,PO12
CO3	Evaluate and justify the Habitation (Ooramaippu) and Sanitation (Oorthooimai) principles in Siddha system of Medicine and contemporary.	PO1,PO4,PO7,PO8, PO10,PO11,PO12
CO4	Assess the Environmental and Occupational factors and its impacts on health and well being.	PO3,PO4,PO7,PO8, PO11,PO12
CO5	Demonstrate Healthy Life style principles and practices of Naal ozhukkam and Kaala ozhukkam in Siddha system.	PO4,PO6,PO7,PO8, PO10,PO12
CO6	Advocate the principles and practices of Siddha system in improving the Maternal and Child health, Geriatric health and Mental health.	PO4,PO6,PO7,PO8
CO7	Apply the principles and practices of Ethics and Human values of life.	PO1,PO7,PO11
CO8	Practice the principles of Siddha system in managing Communicable diseases, Non-Communicable diseases, Emerging and Re-emerging diseases.	PO4,PO7,PO8,PO11
CO9	Assess the Food safety and security and the concept of Siddha, Ethnic Functional foods and Nutraceuticals.	PO4,PO6,PO7,PO8, PO9,PO10,PO11,PO 12
CO10	Participate in Public health system and National programs, and conduct Advocacy Communication and Social Mobilization(ACSM) for Sustainable developmental goals(SDG)	PO7,PO8,PO9,PO11 ,PO12

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Table 2 : Contents of Course

Paper 1					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	<p>1.Preventive and promotional aspects of health and well being in Siddha system of medicine.</p> <ul style="list-style-type: none"> • 1.1. Definition of Health and well being according to Siddha. • 1.2. Concept of health and well being in Sangam and ancient tamil literature. • 1.3. Concept of health and well being in medieval literature. • 1.4. Concept of health and well being in post medieval Siddha literature. • 1.5. School of thoughts on health and well being by Thiruvalluvar, Thirumoolar and Theraiyar. • 1.6. Definition of health and well being in modern context. 	1	7	4	2
2	<p>2.Mutharporul, Karuporul and Uriporul and its influences on health.</p> <ul style="list-style-type: none"> • 2.1.Description of Muthar/Karu/Uriporul. • 2.2.Life style of Five landscape (Thinai) and its association with the occurrence of ailments. • 2.3.The association of Communicable and Non communicable diseases with the five landscape. • 2.4.Prevention and control of Respiratory infection, Intestinal infection, Arthropod-borne infection and Surface infection. • 2.5.Description of different types of Kaalam (Seasons) and its influences on health. • 2.6.Definition of Epidemic, Endemic & Pandemic. • 2.7.Seasonal changes El Nino and la Nina and its impact on health. • 2.8.Public health impact due to Climate change • 2.9.Description of Zoonosis. 	1	25	16	10
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3	<p>3.Ooramaippu and Oorthooimai.</p> <ul style="list-style-type: none"> • 3.1. Ancient and modern town planning • 3.2. Effects of urbanization • 3.3. Various types of waste and its health impacts. • 3.4. Waste management. • 3.5. Culture and practices associated with disposal of human corpses 	1		8	10
4	<p>4. House and Industries.</p> <ul style="list-style-type: none"> • 4.1. Vaasthupoorushan, vaayil nidhanam, house plan according to vaasthu, house layout and Cleanliness of house. • 4.2. Social goals, housing standards, criteria for healthy housing and Rural housing. • 4.3. Poor housing and diseases, home gardening, Terrace gardening and Organic farming. • 4.4. Indian traditional home construction methods (Laurie baker methods, Vernacular architecture) • 4.5. Industries – Occupational health hazards, prevention and control including industrial effluence and health impacts. • 4.7. Specifications of Siddha hospital according to Theraiyar Thailavarga Surukkam • 4.8. Policy on clinical establishment act, NABH accreditation for Siddha hospitals. 	1	6	8	8
5	<p>5. Environmental health impacts.</p> <ul style="list-style-type: none"> • 5.1. Neer (Water) • 5.1.1. Quality of safe potable water and various water treatment methods.(traditional and modern methods) • 5.1.2. Sources & characters of water and it's therapeutic uses • 5.1.3. Water distribution methods • 5.1.4. Water pollution • 5.1.5. Water-related / water-borne diseases and its prevention and control 	2	25	20	20

	<ul style="list-style-type: none"> • 5.1.6. Water testing methods • 5.1.7. Rainwater harvesting • • 5.2. Thee (Fire, Heat, and Light) • 5.2.1. Heat and its types • 5.2.2. Vinn thee (cosmic rays, lightning) • 5.2.3. Mann thee (uses of leaves in ottradam) • 5.2.4. Udal thee (body temperature) • 5.2.5. Atmospheric temperature, effects of heat, cold stress and heat stroke. • 5.2.6. Global warming and its effects and Prevention • • 5.3. Vaayu (Air) • 5.3.1. Quality of air (Air quality index) • 5.3.2. Types of ventilation and its effects (Traditional and modern) • 5.3.3. Preventive aspect of traditional fumigation methods • 5.3.4. Air pollution, smog, and its effects, prevention and control • • 5.4. Vinn (Space). • 5.4.1. Sound and its benefits • 5.4.2. Noise pollution and its adverse effects, prevention, and control • 5.4.3. Evolution of ecosystem - terrestrial ecosystems and aquatic ecosystems 			
6	<p>6. Healthy Life style practice (Introduction of discipline)</p> <ul style="list-style-type: none"> • 6.1. Aymporigalin kaappu- care and preventive practices of eyes, ears, nose, mouth and skin • 6.2. Naal ozhukkam (Daily health discipline) • 6.3. Kaalai ezhuthalum kaalai kadankalum • 6.4. Circadian rhythm - methods and care on its protection • 6.5. Exercise and Yogasana • 6.6. Bathing and its types. • 6.7. Aadai and Aabaranangal (Apparels) • 6.8. Rest and sleep • 6.9. Lifestyle medicine intervention and Lifestyle counseling. • 6.10. Sexual health and Sexually transmitted diseases. 	3	12	10

7	<p>7. Ethics and life.</p> <ul style="list-style-type: none"> • 7.1. Concept of Aram (Ethics) • 7.2. Human values and patient centric care. • 7.3. Mana nalam (Mental health), Atta raagangal, its reformation and its impacts. 	2	3	4	5
8	<p>8. Unavu (Diet)</p> <ul style="list-style-type: none"> • 8.1. Definition of food according to Siddha and ancient texts. • 8.2. Importance of six tastes of food. • 8.3. Three disciplines (Sathuva, Raso, Thamo gunam) of food consumption and impacts of its changes • 8.4. Diet for three types of Temperaments. • 8.5. Unnum vidhigalum unavaal varum kuttrangalum (Eating principles and its effects) • 8.6. Thirithoda sama porutgal. • 8.7. Paathirangal, samaithal, parimarum muraigal. (Types of utensils, cooking, and serving methods) • 8.8. Pathiyam, abathiyam, including disease occurred by lifestyle changes, i.e., Non-communicable diseases and its management. • 8.9. Thamboolam (Rules and uses of beetle leaf and nut) 	2	25	24	15
9	<p>9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)</p> <ul style="list-style-type: none"> • 9.1. Definition of balanced diet. • 9.2. Definition of food safety and food security. • 9.3. Description of functional foods and Nutraceuticals in Siddha and contemporary. • 9.4. Importance of Kayakarpam. Immune enhancement through diet/ functional food practices. Nutraceuticals vs kayakarpam. • 9.5. Varieties of traditional rice and millets. Role of fibers, cereals, vegetables – Greens – fruits – 	3		13	5

	<p>animal proteins – fish – birds – pickles, etc., (endangered and protected species of plants and animals excluded).</p> <ul style="list-style-type: none"> • 9.6. Functional beverages for daily intake. • 9.7. Foodborne diseases – Prevention and control. • 9.8. Nutritional problems in public health. 				
10	<p>10. Maternal and Child health ,Geriatric health</p> <ul style="list-style-type: none"> • 10.1 Maternal and child health according to Siddha system • 10.2 Nutritional importance of First 1000 days of a child • 10.3 Vulnerability of anemia, stunting, wasting • 10.4 Geriatric health in public health perspectives 	3	9	3	2
11	<p>11. Public Health</p> <ul style="list-style-type: none"> • 11.1. Fundamentals of Public health • 11.2. National Health Promotion Policies, Programs and Approaches • 11.3. Public health laws and Ethics • 11.4. Health management, principles and practices • 11.5. Social and behavior determinants of health and health communication • 11.6. Disease outbreak preparedness and response, Drug resistance • 11.7. Definition and concept of Quality of life and Disease Adjusted Life Years (QALY & DALY) 	3		8	13
Total Marks			100	120 hr	100 hr

Table 3: Learning objectives (Theory) of Course

Paper 1									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Dom ain/s ub	D3 Must to know / desirable to know / Nice to know	E3 Level Does/ Show s how/ Kno ws how/ Kno w	F3 T-L meth od	G3 Assessment (Refer abbr eviations)	H3 Form ative/ sum mative	I3 Term	J3 Integ ratio n
Topic 1									
1.Preventive and promotional aspects of health and well being in Siddha system of medicine.									
(Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO8,CO 10	Describe the definition of Health according to Sid dha system.	CK	MK	K	L&PP T,L& GD		F&S	I	
CO1,CO8,CO 10	Describe the concept of health and well being in Sangam and ancient tamil literature.	CC	MK	K	L_VC ,ML		F&S	I	
CO1,CO8,CO	Describe the concept of health and well being in medieval	CK	DK	K	L&PP		F&S	I	

10	literature.				T,L& GD,L S				
CO1,CO8,CO 10	Describe the concept of health and well being in post medieval Siddha literature.	CK	DK	K	L&G D,L_ VC		F&S	I	
CO1,CO8,CO 10	Describe the different School of thoughts on health and well being by Thiruvalluvar, Thirumoolar and Theraiyar.	CC	MK	K	L&PP T,DIS	QZ	F&S	I	
CO1,CO8,CO 10	Describe the definition of health according to WHO and concept of One health	CK	MK	K	L&PP T,RP		F&S	I	
CO1,CO8,CO 10	Understand UN initiatives on SDGs	CK	MK	K	L&PP T,L& GD,D IS,ML	QZ ,WP	F&S	I	

Topic 2

2.Mutharporul, Karuporul and Uriporul and its influences on health.

(Lecture :16 hours, Non lecture: 10 hours)

CO2,CO3	Describe the nuances and importances of Mutharporul, Karu	CC	MK	KH	L&PP		F&S	I	
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	porul and Uriporul				T,FC				
CO2,CO8	Connect and correlating the landscape and ailments.	CAN	MK	KH	L&G D,BS, LS,PL ,REC		F&S	I	
CO2	Describe the geographical aspect of health and diseases in India.	CK	DK	K	L&PP T,DIS	CL-PR	F	I	
CO2	Describe Kollainoigal, Thotrunoigal mentioned in Siddha system and its prevention.	CC	MK	KH	L&PP T,DIS		F&S	I	
CO2	Describe the disciplines pursued in every seasons (Sirupozhuthu, Perumpozhuthu, Uthrayanam, Dhatchinayanam, Athaanakalam, Visarkakalam, Summer and Winter Solstices, Equinox) and its health impacts.	CC	MK	KH	L&PP T,DIS	QZ	F&S	I	
CO2	Discuss Seasonal outbreaks (Dengue, influenza, measles etc)	CC	MK	KH	L&G D,L_ VC		F&S	I	
CO2	Discuss Epidemic, Endemic and Pandemic.	CC	MK	KH	L&G D,L_ VC	WP	F&S	I	
CO2,CO8	Explain the causative organism, mode of transmission, and prevention and control of Air borne/ Respiratory infection - Chicken pox – Measles – Mumps – Influenza – Diphtheria – Whooping cough – Tuberculosis – Rubella. SARS and COVID	CC	MK	K	L&PP T,L& GD,C BL,P ER		F&S	I	V-NU

CO2,CO8	Explain the causative organism, mode of transmission, and prevention and control of Intestinal infection - Viral hepatitis – Cholera – Acute Gastro Enteritis – Typhoid – Food poisoning – Amoebiasis – Ascariasis – Hook worm infestation	CC	MK	KH	L&PP T,CB L,ML	T-OBT,WP	F&S	I	V-NU
CO2,CO8	Explain the causative organism, mode of transmission, and prevention and control of Arthropod borne infection - Dengue – Malaria – Filariasis – Chikungunya-Leptospirosis.	CC	MK	K	L&PP T,L& GD,C BL,P ER		F&S	I	V-NU
CO2,CO8	Explain the causative organism, mode of transmission and prevention and control of Surface infection - Trachoma – Tetanus - Leprosy.	CC	MK	K	L&PP T,L& GD,C BL,P ER		F&S	I	V-NU
CO2,CO5	Discuss the Seasonal changes el Nino and la Nina and its impact on human and environmental health.	CC	MK	KH	L&G D,L_ VC,M L	WP	F&S	I	
CO2,CO7	Analyse the impact of public health on Climate change-increasing incidence of Epidemics, NCDs, Anemia and malnutrition and Emotional stress and anxiety.	CAN	MK	KH	L&G D,PB L,RL E,SY		F&S	I	
CO2,CO8	Infer the impact of Zoonotic diseases/pandemics.	CC	MK	K	L&PP T,L& GD,F C,BL		F&S	I	
CO2	Recognize the Siddha preparedness to combat zoonoses (Ethnic	CAP	MK	KH	L&G		F&S	I	

	siddha practises)				D,L_ VC,P ER				
Topic 3									
3.Ooramaippu and Oorthooimai.									
(Lecture :8 hours, Non lecture: 10 hours)									
CO3	Describe the concepts ,aim, principles and objectives of ancient town planning(Nagaramaippu), Harappa, Mohanjadaro and Keeladi and modern cities like Madurai, Chandigarh, etc.,.	CK	MK	K	L&G D,L_ VC,A CT	M-MOD,M- POS,CR-W	F&S	I	
CO3	Describe the concepts, aim, principles, objectives and necessity of modern town planning/smart cities - United Nations-SDG concept	CK	DK	K	L&PP T,AC T	DEB,M-CHT	F&S	I	
CO3	Evaluatate the effects of urbanization	CAN	MK	KH	L&G D,ML ,SDL	P-VIVA	F&S	I	
CO3	Define waste and its types	CK	MK	K	L&G D,L_ VC		F&S	I	
CO3	Explain the disposal of Waste management(solid waste management and sewage treatment)	PSY- SET	MK	SH	L&PP T,FV		F&S	I	
CO3	Evaluate E-waste and its effects	CAP	DK	KH	L&PP T,ML,	CL-PR,INT	F&S	I	

					SDL				
CO3	Explain pollution and its impact from solid waste, plastic waste, and incineration plants	CK	MK	K	L&PP T	M-POS	F&S	I	
CO3	Apply "My waste is my responsibility" - theme. National /State Waste management policy	AFT- VAL	MK	KH	L&PP T,FC, FV	P-SUR	F	I	
CO3	Describe Culture and practices associated with burial and cremation (including electric crematorium).	CK	MK	K	L&PP T,L& GD		F&S	I	
Topic 4									
4. House and Industries.									
(Lecture :8 hours, Non lecture: 8 hours)									
CO3	Describe Vasthupurusan ,Vaayil nithanam, house plan according to Siddha	CK	MK	K	L&PP T,DIS	M-MOD,M- CHT,M-POS	F&S	I	
CO3,CO4	Describe ancient and modern housing plans	CK	MK	K	L&G D,FC	M-MOD,M- CHT,M-POS	F&S	I	
CO3,CO4	List the materials used to construct the house	CK	NK	K	L&PP T	INT	F&S	I	
CO3	Define social goals ,housing standards, criteria for healthy housing and rural housing	CK	MK	K	L&PP T	PRN	F&S	I	
CO3,CO4	Describe cleanliness of house, poor housing and its health	CK	MK	K	L&PP		F&S	I	

	impacts.				T,DIS				
CO3,CO4	Establish home gardening,terrace gardening and organic farming	PSY-SET	NK	SH	DIS,D G,FV	M-MOD,M- CHT,M-POS	F	I	
CO3,CO4	Describe Indian traditional home construction methods, state Laurie baker methods and define vernacular architecture	CK	NK	K	L&PP T,AC T	M-MOD,M- CHT,M-POS	F	I	
CO3,CO4	Describe occupational hazards, occupational disease and its prevention and control	CC	MK	KH	L&PP T,L& GD	PRN	F&S	I	
CO3,CO4	Define Ergonomics	CK	NK	K	L&PP T,DIS	INT	F	I	
CO3,CO4	Enumerate Industrial effluents and health impacts	CK	DK	KH	L&PP T,L& GD,F V		F	I	
CO3,CO4	Describe the specification of Siddha Hospital according to Theraiyar thaila varga surukkam	CK	MK	K	L&PP T	M-MOD,M- CHT,M-POS	F&S	I	
CO3,CO4	Explain NABH (AYUSH) Accrediation for Siddha Hospital and Bio medical waste management and policy on Clinical Establishment Act	CK	NK	K	L&PP T,DIS	O-QZ,INT	F	I	

Topic 5

5. Environmental health impacts.

(Lecture :20 hours, Non lecture: 20 hours)

CO1,CO5	Define quality of water and potable water	CK	MK	K	L&PP T,DIS		F&S	II	
CO5	Describe the common characters of the nila iyallathathu neer(rain water,snow water, hail water)and its therapeutic uses	CK	MK	K	L&PP T,L& GD,R EC	CL-PR	F&S	II	
CO1,CO5	Describe the characters of nila iyallathathu neer (River water,Water falls,Pond water,Lake water,Stream water,Spring water,and Well water)	CK	MK	K	L&PP T,L& GD,R EC	CR-W	F&S	II	
CO4,CO10	Determine Water Pollution and its treatment - Traditional and Modern methods	CC	MK	KH	L&PP T,FV		F&S	II	
CO4,CO10	Describe water distribution methods	CK	DK	K	L,L& PPT		F&S	II	
CO4,CO10	Cite example of Water related /Water borne diseases and its prevention & control	CC	MK	KH	L&PP T,DIS ,FC	WP	F&S	II	
CO4	Identify water standards -BIS standards	CK	NK	K	L&PP T,L_ VC	CL-PR	F	II	
CO4	Adopt Rain Water harvesting	AFT- VAL	DK	K	L&PP T,L_ VC	INT	F	II	
CO4	Enumerate the types of thee(fire and light)	CK	NK	K	L&PP	INT	F&S	II	

					T				
CO4	Describe Vinn Thee and its sources	CK	MK	K	L&PP T,L_ VC,R EC		F&S	II	
CO4	State the effects of Cosmic rays and Lightning	CK	DK	K	L&PP T,L& GD		F&S	II	H-SS M-&- NM
CO4	Define mann thee and explain the way of therapeutic uses of mann thee (uses of woods and leaves in ottradam)	CC	MK	KH	L&G D,EC E,D		F&S	II	V- VPS
CO4,CO10	Define atmospheric temperature and enumerate effects of heat and cold stress	CC	MK	KH	L&PP T,L& GD	M-CHT,INT	F	II	
CO4	Describe importance of air and its quality(air quality index)	CK	MK	K	L&PP T,L& GD		F&S	II	
CO4	Describe types of ventilation and its effects, making Palm leaf viciri	CC	MK	KH	L,L& GD,E DU,A CT	M-MOD	F&S	II	
CO4	Describe preventive aspect of traditional fumigation methods viz...(Agil, santhanam,Devadaru,Sambirani,Karpooram etc..) and velvi pugai	CC	MK	KH	L,L& GD,K L		F&S	II	V- VPS
CO4,CO10	Explain air pollution,smog and its effects,prevention and control	CK	MK	K	L&PP T,FV		F&S	II	

CO4	Describe Vinn(Space), sound, music and its benefits	CC	MK	KH	L,L&GD		F&S	II	
CO4,CO10	Explain noise pollution and its adverse effects, prevention and control	CC	MK	KH	L&PP T,DIS ,FC	M-POS	F&S	II	
CO4,CO10	Discuss the Evolution of Eco system - Terrestrial Ecosystems, Aquatic Ecosystems and the shift of Eco-centric living from Anthropocentric living.	CC	NK	KH	L&G D,L_ VC,C BL,L S	QZ	F&S	II	
Topic 6									
6. Healthy Life style practice (Introduction of discipline)									
(Lecture :12 hours, Non lecture: 10 hours)									
CO5	Describe Aymporigalin kappu- care and preventive practices of Eyes, Ears,Nose,Mouth and Skin	CC	MK	KH	L&PP T,DIS ,BS,R LE,R EC		F&S	III	
CO5	Define Daily health discipline (Naal ozhukkam)	CK	MK	K	L&PP T,L_ VC,D IS		F&S	III	
CO5	Follow daily rituals (Kaalai ezhuthalum kaalai kadankalum)-time and its effect on wake up	AFT-RES	MK	SH	L&G D,RL E,RE C		F&S	III	

CO5	Describe Circadian rhythm and methods and care on its protection	CK	MK	K	L&PP T,ML		F&S	III	
CO5	Summarize exercise, practice time, place, duration and food	CC	MK	KH	L&G D,L_ VC		F&S	III	
CO5	Enumerate types of exercise (aerobic and anaerobic)	CK	MK	K	L&PP T	P-VIVA	F	III	
CO5	Summarize Yoga, practice time, place, duration and food	CC	MK	K	L_VC ,PL		F&S	III	
CO5	Differentiate Exercise and Yogasana	CAN	MK	KH	L&G D	DEB	F	III	
CO5	Recognize the importance of Yogasana in both Physical and Mental health	AFT- REC	MK	K	L&G D,LS, RLE	CL-PR	F	III	
CO5	Explain bathing, its types and rules.	CK	MK	K	L,FC, REC	INT	F&S	III	
CO5	Prepare manjalkaappu, panchakarpam, nalunguma and state its effects in preventive aspect.	PSY- GUD	MK	SH	KL,R EC,A CT		F&S	III	H- GMK
CO5	Differentiate Appiyanganam and Oil Bath and its benefits.	CAN	MK	KH	L&G D,BS, RLE, REC		F&S	III	
CO5	Describe Aadai and Aabaranangal (Apparels)	CK	DK	K	L&PP T,FC,		F&S	III	

					SDL				
CO5	Generalize the essentials of Rest and Sleep.	CC	MK	K	L&PP T,FC, RLE, REC	CR-RED	F&S	III	
CO5	Describe LGBTQ+, importance of sexual health, and safe sex.	CK	MK	K	L,L& GD,S DL,L S	INT	F	III	H-SS M-&- NM
CO5	Review sexually transmitted diseases.	CC	MK	K	L&PP T,ML	INT	F	III	V-A M,V- SMM
Topic 7									
7. Ethics and life.									
(Lecture :4 hours, Non lecture: 5 hours)									
CO7	Adopt the concept of Aram according to Thirukural, Aathichudi and Kondrai vendhan.	AFT- VAL	MK	SH	L&PP T,L& GD,R EC		F&S	II	
CO7	Appreciate the Human values and patient centric care	AFT- RES	DK	K	L&G D,BS		F&S	II	
CO7	Appraise and reformation of Atta Raagangal and its influences.	CAN	MK	KH	L,DIS ,RLE, REC	P-VIVA	F	II	V- SATV
CO7	Adopt Thirumoolar Attanga Yogam	AFT-	MK	SH	L&PP	SA	F	II	

		VAL			T,RL E,D,A CT				
CO7	Appreciate traditional Indian philosophies and Human Ethics.	AFT- VAL	NK	K	L,SD L	INT	F	II	V- SATV
Topic 8									
8. Unavu (Diet)									
(Lecture :24 hours, Non lecture: 15 hours)									
CO9	Define Food according to Siddha and ancient texts	CK	MK	K	L,DIS	INT	F&S	II	
CO9	Explain the importance of six taste of Food	CK	MK	K	L&G D,DIS	PA	F&S	II	
CO9	Enumerate three disciplines (Sathva,Raso,Thamo Gunam) of food consumption and impacts of its changes	CK	MK	K	L&PP T,L& GD,R EC		F&S	II	V-UT
CO9	Describe the diet for the three types of Temperament	CK	MK	K	L&PP T,IBL ,FC		F&S	II	
CO9	Describe Unnum Vidhikalum Unaval varum Kuttrangalum (Eating principles and its effects)	CK	MK	K	L&PP T,L& GD	DEB	F&S	II	
CO9	Describe about Thrithoda samaporutkal	CC	MK	KH	L&PP T,IBL ,FC		F&S	II	

CO9	Explain Pathirangal, Samaithal, Parimarum muraigal(Types of utensils, cooking and serving method)	CK	MK	K	L&PP T,L_ VC,D IS,GB L	CL-PR	F&S	II	
CO9	Explain Apathiyam and Pathiyam for daily rituals.	CC	MK	KH	L&G D,FC		F&S	II	
CO9	Describe Rules and uses of Beetle leaf and Nut(Thamboolam)	CK	MK	K	L&G D,ED U		F&S	II	
CO9	State the varieties of Vegetables, Greens, Fruits and its benefits.	CK	MK	K	L_VC ,GBL, ACT	QZ ,WP,M- CHT	F&S	II	
CO9	Demonstrate the preparation of Pancha Mutti Kanji	PSY- SET	MK	SH	RLE, ACT	P-PRF	F	II	H- GMK
CO9	Explain the varieties of Vattral, Oorugai(Pickles) and its benefits	CK	DK	K	L&PP T		F&S	II	
CO9	Explain the varieties of Fish and its benefits	CK	DK	K	L&PP T	CL-PR,WP	F&S	II	
CO9	Enumerate Pathiyathirku agum Paravai(Birds) and Animal meat varieties	CK	DK	K	L,L& PPT		F&S	II	
CO8,CO9	Summarize Functional Food in Siddha and Contemporary to combat Non-Communicable diseases.	CC	MK	KH	L&PP T,L& GD		F&S	II	

Topic 9

9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)

(Lecture :13 hours, Non lecture: 5 hours)

CO5,CO6,CO8,CO9	Define nutraceuticals in Siddha and contemporary	CK	MK	K	L&PPT		F&S	III	
CO6,CO8,CO9	Explain balanced diet/micro macro nutrients and eat right food	CC	MK	KH	L,L&PPT, DIS, EDU, W	CL-PR, DEB, INT	F&S	III	
CO8,CO9	Describe food safety, security and standards	CC	MK	K	L&PPT, FC, BL, ML	PRN, DEB	F&S	III	
CO9	Describe the Good Storage practices of perishable and non perishable food	CK	NK	K	L&PPT, BS, BL, FV		F&S	III	
CO9	Describe food adulterants and contamination of food	CK	DK	K	L&PPT, BS, W		F&S	III	
CO9	Describe permitted colourants, preservatives, excipients and probable adverse health effects	CK	DK	K	L&PPT, L&GD, DIS, ML		F&S	III	
CO6,CO8,CO9	Describe Nutraceuticals vs Kayakarpam	CC	MK	KH	L&PPT, BS, FC, W		F&S	III	

					,PER				
CO6,CO8,CO9	Identify the importance of Kayakarpam, immune enhancement through diet/functional food practices.	CK	MK	KH	L&PP T,DIS ,PrBL ,BL, W,RE C		F&S	III	V- SMM
CO6,CO8,CO9	Explain the common traditional rice varieties and its health benefits	CK	DK	K	L&PP T,DIS ,BL,D- M,SY	PRN,M-POS	F&S	III	
CO6,CO8,CO9	Describe varieties of minor millets and its nutritive and therapeutic values	CK	MK	K	L&PP T,L_ VC,D IS,GB L,PE R,D		F&S	III	
CO9,CO10	Explain the propagation of minor millets and the impact on ONE HEALTH agenda	CK	DK	K	BS,F C,ED U,GB L,LS, FV	PRN,CR-W	F	III	
CO6,CO8,CO9,CO10	Describe the importance of mother milk and bovine milk in the public health perspective.	CK	MK	K	L&PP T,DIS ,FC	T- EW,M- POS	F	III	H- GMM
CO9	Explain pasteurization, perspectives on consumption of Milk and its derivatives	CK	DK	K	L,DIS ,BS,B L	PRN	F	III	

CO9	Describe the drinking water quality (linked with utensils), traditional functional beverages and ethnic foods (Neeragaram, musumusukkai-karisalai kudineer, aavarai kudineer, Sukku mallee kudineer, Panagam, ela neer, buttermilk, Sotru kothi neer, etc.,)	CK	MK	K	L&PP T,DIS ,W,R EC,S Y		F&S	III	
CO6,CO8,CO9	Evaluating the values of Kanji (Porridges) and Pazhanchoru (Fermented rice).	CAP	MK	K	L&PP T,DIS ,PER	CL-PR	F	III	
Topic 10									
10. Maternal and Child health ,Geriatric health									
(Lecture :3 hours, Non lecture: 2 hours)									
CO6,CO9	Realize the optimal Maternal and Child health according to Siddha	CC	MK	KH	L&PP T,DIS ,BL,S DL	T- EW,CL- PR,DEB	F&S	III	
CO6,CO9,CO10	Describe the importance of "The first 1000 days".	CK	MK	K	L&G D,BS, FV	PRN,P-SUR	F	III	
CO6,CO9,CO10	Comprehend the vulnerability of Anemia, Stunting and Wasting in our society with National Family Health Survey	CC	DK	KH	DIS,B S,IBL ,LS,S Y	PRN	F&S	III	
CO8,CO9	Describe the importance of Geriatric health in public health perspectives(Safety in mobility, quality of life to reduce the Disability-Adjusted life years-DALY)	CK	DK	K	L&PP T	PRN,CL- PR,DEB	F&S	III	

Topic 11									
11.Public Health									
(Lecture :8 hours, Non lecture: 13 hours)									
CO10	Describe the concepts of public health and diseases, the epidemiology triad of infective diseases and risk factors.	CK	MK	K	L,L&PPT	INT	F	III	
CO10	Describe the public health structures and health promotion policies.	CK	MK	K	L_VC,DIS	T-OBT	F&S	III	
CO10	Categorize Community and Social health problems and concepts of Sociology, Anthropology and Psychology.	CAP	MK	KH	L,L_VC,FV,ACT	P-SUR	F&S	III	
CO10	Recognize about Health Literacy, Social and Behavioural determinants of Health	CK	MK	K	L&PPT,FV		F&S	III	
CO10	Enumerate basic principles of Ethics and Law, effective communication skills, disease surveillance system management principles and model in health care delivery.	CK	MK	K	L,L&PPT,DIS,PBL,FV		F&S	III	
CO10	Apprehend Antimicrobial Resistance and the role of Siddha in combating Antimicrobial resistance.	CK	MK	K	L,L&GD		F&S	III	

CO10	Apply the concept of QALY and DALY, and its measurement tools.	CAP	MK	KH	L&PP T,PrB L,FV, ACT		F&S	III	
CO10	Describe National Health policies and Siddha concepts on Immunity - Urai mathirai and Kayakarpam	CC	MK	KH	L,L& GD		F&S	III	

List of Practicals (Term and Hours)

PRACTICALS			
S.No	List of Topics	Term	Hours

Not Applicable

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Dom ain/s ub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show s how/ Kno ws how/ Kno w	F4 T-L meth od	G4 Assessment (Refer abbr eviations)	H4 Form ative/ sum mativ e	I4 Term	K4 Integ ratio n
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Not Applicable

Table 4a: List of Practical

Not Applicable

S.No	Name of practical	Term	Activity	Practical hrs
Total Hr				0

Activity

CO	Topic name	Activity Details	Hours#
CO9	Diet	Demonstrate the preparation of Pancha Mutti Kanji Ask the students to prepare the Pancha Mutti Kanji as per the preparation method given in Pathartha Guna Chinthamani	2
CO9	Diet	Explain the varieties of Vegetables, Greens, Fruits and its benefits Ask the students to do cooking without fire	2
CO10	Public health	Participatory Co-creation activity to promote siddha way of health and wellbeing, bio-diversity conservation and one health interventions in the community Co-creation process definition: It's a participatory process in which students collaborate with teachers, patient and community in designing their own learning experience and also apply their knowledge and skills for the health and wellbeing of the community.	6

Rational for using co-creation

Co-creation is a student friendly, acceptable and creative learning module which could be used as an

effective Advocacy, Communication and Social Mobilization(ACSM) activity, to promote siddha way of

health and wellbeing, bio-diversity conservation and one health interventions in the community .This co-

creation guide will be used for adopting a participatory co-creation method for inculcating community centric

ACSM intervention in AYUSH public and private health facilities catering to patients and in the adjoining

communities.

Steps for conducting co-creation process:

This co-creation activity will take place in a community set up in a single day and will be repeated if needed

for two more times and will involve the following steps.

Step 1: Random students group creation

Students will be randomly shuffled into groups to distort their group preferences. Ice breaking will involve

games and participatory activities and which will

set an environment free for conversation, overlooking

hesitation's and exchange of ideas to undertake community engagement works

Step2: Setting a broader aim for co-creation for students

Multiple students groups of (6-8 members each groups) would be asked to think and choose of a problem in

the community which they want to address in the context of public Health and well being. The problem could be

any thing and must be confined to the specified geography near their campus and must be relevant to Siddha

way of health and wellbeing, bio-diversity conservation and one health in the community.

Step 3: Seeding of context by moderators (teachers) to the students groups,

Facilitator (teachers) will explain to the student groups about the background and broad objective of the co-

creation activity which is to “conceptualize and evolve effective Advocacy, Communication and Social

Mobilization(ACSM) activities to resolve issues and promote siddha way of health and wellbeing, bio-

diversity conservation and one health in the community” . Students will be introduced and

discussed

upon the aspects of the problem by teacher from a patient centric and community centric perspective. Further

the process of co-creation will be explained which will emphasize the students central role and ownership in the

process and it outcomes

.

Step 4: Community participation by students to narrow down specific public health issues in the

community

Students groups will be taken to the grass roots of community (a village or urban block) where they will

participate in a meeting with different group of community members, to discuss and know about their

important public health , environmental and bio-diversity issues which they have experienced or perceived

recently. Student groups would be encouraged to have open discussion and asked to collect community

responses to arrive at a common set of public health , environmental and bio-diversity issues in their

community.

Student groups will be provided with a pen, color paper slips and will be facilitated to brainstorm with the

community members on the potential issues they face. Community members will be encouraged to

free list

their views in the slip given to them in their own language. Students would support the community members in

listing oral responses. Motivations will be provided by the facilitator (teachers) to encourage students and

community members to come out with a list of public health problems even if they are trivial, uncommon.

Each student groups will be provided 45-60 minutes of time to come up with a list of issues from the

community in the relevant contexts.

Further the facilitators would compile all the list of inputs and suggestions from all groups and will develop a

master list of community issues . Duplications of inputs /suggestions will be removed at this stage listed by

different and items which are considered irrelevant or distal to the context of intervention will be excluded

based on in- group discussion and consensus. Compiled issues will be were iteratively prioritized based on the

local context of community.

Step 5 : Co-creating inputs and suggestions for the public health identified by students and community

members

The students groups will be again provided with a pen, color paper slips and will be facilitated to

brainstorm

on the potential solutions and intervention methods which could be used to address the public health issues

identified at the Step 3 level. Community participants will be encouraged and facilitated to brainstorm about

the possible interventions and which could be used to address the issues identified and promote siddha way of

health and wellbeing, bio-diversity conservation and One health in the community . Each group members will

be provided 45 minutes of time to come up with a list of inputs and suggestions. Further the facilitators would

compile all the list of inputs and suggestions about possible and a master list. Suggestions/Inputs will be

iteratively prioritized based on the local context of community services in which the participants were working.

Step 6 : Ranking of inputs and creating community centric solutions for public health issues

Further a final between group(of all participants) brainstorming will be facilitated to rank the final list of

inputs and suggestions about the interventions collected by student groups from community. Three different

criteria's will be used by the facilitator to sensitize the participants on the importance of the listed inputs and

		<p>session specific contents. (1) Community friendliness, (2)Feasibility of implementing the public health solutions and the (3) Resource requirement for it. Based on this, a ranking (low medium and high priority respectively as 1, 2 & 3) will be given for all the co-created solutions /inputs derived from all groups. An open and free discussion will be undertaken to iteratively rank the listed interventions based on consensus. Consensus will be defined as at least two or more groups providing the same ranking for any inputs and suggestions in relations to the public health issues and solutions identified. The highly ranked itmes which are less resource intensive and more feasible and being community friendly will be prioritized as final co-created solutions which could be recommended as incremental solutions for improving to promote siddha way of health and wellbeing, bio-diversity conservation and one health in the community and will disseminated to local community, stakeholders and health authorities.</p>	
CO10	Public health	<p>Survey activity for measuring Quality of Life from Siddha Perspective.</p> <p>Quality of life definition:</p>	6

WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture

and value systems in which they live and in relation to their goals, expectations, standards and concerns.

Measurement of QoL:

QoL is measured by a self-report questionnaire which assesses the 4 domains of quality of life (QOL) in an

individual which includes his domains of physical health, psychological well being ,quality of social

relationships, and environmental wellness. QoL also includes domains of spiritual health.

Training of students for QoL measure:

Students will be trained on the items of a QoL questionnaire which will be developed based on the Siddha

principles of QoL

Steps for measuring quality of Life by the students

1. QoL could be measured by the student from a patient who visits his/her health facility for any treatment

purpose.

2. The student should contact the patients with the prior permission of the health care provider and during the

time when the patient is free to communicate.

3. Student must ensure utmost respect throughout the entirety of their QoL data collection process and with

privacy

4. The student will start the QoL data collection process by giving the participant 5 minutes to read/talk

about a common information form to collect Quality of Life information form for them which will have

details about the purpose of the QoL and its uses for the patient in measuring it.

5. After the patient's consents to participate to provide his QoL information, the student will begin the QoL

assessment based on the questionnaire given to them. (To be provided)

6. Initially the patient ID will be collected and entered in the hard copy form of the questionnaire

7. The student will read out the items of the questions in the given sequence in the language of the tool. The

questions will be read out loud clearly and any clarifications sought by the patients will be explained . No

subjective interpretations would be provided by the student.

8. The student will mark the responses of the patients in the hard copy questionnaire clearly and overwriting's

and corrections needs to be avoided

		<p>9. The process will take a maximum of 10-15 minutes and all items needs to asked and entered in the</p> <p>hardcopy questionnaire. If the patient feels that any question to be skipped , it should not be compelled.</p> <p>10. The student will further use an visual scale to measure the QoL information in an visual manner.</p> <p>11. After the QoL information has been collected the student thanks the participants and finishes the interview.</p> <p>12. Further the hardcopy questionnaire is closed and submitted to the supervisor in a immediately.</p> <p>Annexure 1: Siddha QoL questionnaire items</p> <p>Annexure 2: QoL visual scale</p>	
CO4	Environmental Health Impacts	<p>Making Palm leaf Vciri</p> <p>Objectives: The students to be educated and entertained by make a useful handmade fan</p> <p>Step 1: Collect Palm Leaves</p> <p>Step 2: With guidance from video clips try to make Palm leaf Viciri</p>	1
CO1	Preventive and Promotional Aspects of Health and Wellbeing in Siddha System of Medicine and contemporary	<p>One Health</p> <p>Objective;; Drama</p> <p>step :1</p> <p>Three groups formed</p> <p>one group - People (greedy and development motivated)</p> <p>second gruoup - Animals</p> <p>Third group - Trees and greens</p> <p>First group</p> <p>Greed of the human - ruin the nature for his all unnecessary requirements</p> <p>Second group</p> <p>Sufferers- trees, greens and nature is getting spoiled - mosquitoes,bats and dogs</p>	2

		become virulent Third group Domestic animals - become wild. So far normal microbes hosted by animals become virulent killing humans First group to be evacuated from earth Moral - We have all the things for our need and not for our greed	
CO3	Ooramaippu and Oorthoimai	Ask the students to make Posters or Models or Charts or creative writing about ancient and modern town planning	2
CO3	Ooramaippu and Oorthoimai	Ask the students to make charts about UN SDGs	1
CO3,CO4	House and Industries	Instruct the students to make models or charts or posters about home construction methods	2
CO7	Ethics and Life	Ask the students to follow Thirumoolar Attanga Yogam by doing by their own	2

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	17
2	Lecture with Power point presentation	82
3	Lecture & Group Discussion	49
4	Lecture with Video clips	20
5	Discussions	32
6	Brainstorming	11
7	Inquiry-Based Learning	3
8	PBL	2
9	CBL	5
10	Project-Based Learning	2

11	Flipped classroom	16
12	Blended Learning	7
13	Edutainment	4
14	Mobile learning	10
15	ECE	1
16	Role plays	1
17	Self-directed learning	6
18	Kinesthetic Learning	2
19	Workshops	5
20	Game-Based Learning	4
21	Demo on Model	1
22	Library Session	7
23	Peer learning	2
24	Real life experience	9
25	Recitation	15
26	Symposium	4
27	Presentations	7
28	Demonstration	3
29	Demonstration Garden	1
30	Field visit	13
31	Activity	10

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment				Sub Total	Grand Total
			Practical	Viva	Elective	IA		
SIDUG – NAVO	1	100	0	30	-----	20	50	150

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; **TT:** Term Test; **UE**:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT
	A	B	C	D	E	F	G
	1 (20)	2 (20)	3 (20)	Average (A+B+C/3) (20)	Term Test (MCQ+SAQ+LAQ and Practical) (Converted to 20)	Sub Total	Term Assessment
FIRST						D+E	(D+E)/2
SECOND						D+E	(D+E)/2
THIRD					NIL		D
Final IA	Average of Three Term Assessment Marks as Shown in 'G' Column.						
	<p>* Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D. Convert it to 20 marks.</p> <p>** Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 20 Marks.</p>						

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Practical / Clinical Performance
2	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3	Open Book Test (Problem Based)
4	Summary Writing (Research Papers/ Samhitas)
5	Class Presentations; Work Book Maintenance
6	Problem Based Assignment
7	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).

9	Small Project
10	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

6 E Question Paper Pattern

II PROFESSIONAL B.S.M.S EXAMINATIONS

SIDUG – NAVO

PAPER-1

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	1.Preventive and promotional aspects of health and well being in Siddha system of medicine.	1	7	Yes	Yes	No
2	2.Mutharporul, Karuporul and Uriporul and its influences on health.	1	25	Yes	Yes	Yes
3	3.Ooramaippu and Oorthooimai.	1		Yes	Yes	Yes
4	4. House and Industries.	1	6	Yes	Yes	No
5	5. Environmental health impacts.	2	25	Yes	Yes	Yes
6	6. Healthy Life style practice (Introduction of discipline)	3		Yes	Yes	Yes
7	7. Ethics and life.	2	3	Yes	No	No

8	8. Unavu (Diet)	2	25	Yes	Yes	Yes
9	9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)	3		Yes	Yes	Yes
10	10. Maternal and Child health ,Geriatric health	3	9	Yes	Yes	No
11	11.Public Health	3		Yes	Yes	No
Total Marks			100			

6 G Blue print of paper I

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions 20 Questions 1 mark each All compulsory</p> <p>Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ</p>	<ol style="list-style-type: none"> 1. 1.Preventive and promotional aspects of health and well being in Siddha system of medicine. 2. 1.Preventive and promotional aspects of health and well being in Siddha system of medicine. 3. 2.Mutharporul, Karuporul and Uriporul and its influences on health. 4. 2.Mutharporul, Karuporul and Uriporul and its influences on health. 5. 3.Ooramaippu and Oorthooimai. 6. 3.Ooramaippu and Oorthooimai. 7. 4. House and Industries. 8. 5. Environmental health impacts. 9. 5. Environmental health impacts. 10. 6. Healthy Life style practice (Introduction of discipline) 11. 6. Healthy Life style practice (Introduction of discipline) 12. 7. Ethics and life. 13. 7. Ethics and life. 14. 7. Ethics and life. 15. 8. Unavu (Diet) 16. 8. Unavu (Diet) 17. 9. Unavu muraigalum Baanangalum (Functional foods and Bevarages) 18. 9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)

		<p>19. 10. Maternal and Child health ,Geriatric health</p> <p>20. 11.Public Health</p>
Q2	<p>Short answer Questions Eight Questions 5 Marks Each All compulsory</p> <p>Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Nice to know</p>	<p>1. 1.Preventive and promotional aspects of health and well being in Siddha system of medicine.</p> <p>2. 2.Mutharporul, Karuporul and Uriporul and its influences on health.</p> <p>/</p> <p>3.Ooramaippu and Oorthooimai.</p> <p>3. 4. House and Industries.</p> <p>4. 5. Environmental health impacts.</p> <p>5. 6. Healthy Life style practice (Introduction of discipline)</p> <p>6. 8. Unavu (Diet)</p> <p>7. 9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)</p> <p>8. 11.Public Health</p> <p>/</p> <p>10. Maternal and Child health ,Geriatric health</p>
Q3	<p>Long answer Questions Four Questions 10 marks each All compulsory</p> <p>All questions on must know. No Questions on Nice to know and Desirable to know</p>	<p>1. 2.Mutharporul, Karuporul and Uriporul and its influences on health.</p> <p>2. 5. Environmental health impacts.</p> <p>/</p> <p>3.Ooramaippu and Oorthooimai.</p> <p>3. 6. Healthy Life style practice (Introduction of</p>

		discipline) 4. 8. Unavu (Diet) / 9. Unavu muraigalum Baanangalum (Functional foods and Bevarages)
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6 H Distribution of Practical Exam

S.No	Heads	Marks
Total Marks		0

Not Applicable

References Books/ Resources

S.No	Book	Resources
1	Elakkiyathil maruthuva karuthukkal	Written by Kalanithi E.Balasantharam, Nattaar Vazhakkatriyal Kazhagam, Yaazhpaanam, Srilanka
2	Avvaiyin Needhi Noolgal	by Kasthuri, Anandham Nilayam
3	Sanga Tamilzhar Vazhviyal	By Mu. Shanmug Pillai, Ulagath Tamil AARAICHI NILAYAM
4	Sanga Ilakkiyam	Thanjai Tamil Palgalaikazhagam
5	El Nina La Nina "Climate Change &its impacts"	By Dr Anand kumar Verma Shri krishna publication
6	Health and diseases	www..ncert.in./iehp101pdf
7	Air pollution	By A.M.N.Rao, McGraw hill education Pvt Ltd
8	Text book of preventive and social medicine Fourth edition	Jaypee brothers medical publishers Pv Ltd
9	Modern nutrition in health and disease	By M.SuvaminathanThe Bangalore publications
10	Environmental Science & Engineering	Dr A Ravikrishnan, Sri Krishna Publishing Company Pvt Ltd
11	Park Text Book of Preventive & Social Medicine,26th Edn.,	Jabalpur,Banarasidas Bhanot Publishers,
12	Pathartha Guna Chinthamani	Published by Ratna nayakar & sons, Chennai 1932
13	Siddha Maruthuvanga Surukkam	Dr.C.S.Uthamarayan - H.P.I.M, Department of Indian Medicine & Homeopathy,Chennai,Govt. of Tamil Nadu
14	Agathiyar Gunavagadam	Tamil University Thanjur. publication no 349

15	A Treatise on Hygiene and Public Health	By Birendra Nath Ghosh, Scientific Publishing Company 1953
16	One Health-Integrated Approach to 21st Century Challenges to Health-1st Edition - April 27, 2022	eBook ISBN: 9780128227954
17	Gunapadam Mooligai	Murugesu mudhaliyar, Directorate of Indian Medicine and Homeopathy, Chennai
18	Parambariya Nala vazhvu	Dr. V. Ganapathy, Vellicham Foundation.
19	KEELADI – TRACING THE ROOTS OF TAMIL CULTURE.- Department of Archaeology	Govt. of TamilNadu, Chennai -600 006.
20	The 2030 Agenda for Sustainable Development's 17 Sustainable Development Goals (SDGs)	Government of Tamil Nadu State Development Policy Council, Chennai 600 005.
21	E-waste - Sewage disposal and Air pollution Engineering.	S.K.Garg, Khana Publishers.
22	Zero Waste – A No-Nonsense Guide to Living Sustainably in India. Srin & Subhashree	Hachette India ISBN - 109391028446
23	Laurie baker – life works and writing	By Gowtham Bhatia, Penguin India,(14- Oct 2000.)
24	A guide to human factors and ergonomics	Martin Helander, Second edition
25	www.nabh.co	online material
26	Environmental science & engineering'	By Dr. A. Ravikrishnan, Publication : sri krishna publishing company Pvt Ltd.
27	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3562741/	online material

28	Functional Food and nutraceuticals	Shivani Bansai Moghe, Sona Jain, Varsha Srivastava, Alagappa University Publication
29	A hand book on diet and diseases	Food safety and standards authority of India 1 st Edition Dec-2019.
30	Handbook of Food Preservation – 2 nd Edition.	By. M. Shafiur Rahman. https://researchgate.net/publication/345063737 , online material
31	Food additives. – 2 nd Edition	A. Larry Branen, P. Michael Davidson.
32	Journey of the first 1000 days Foundation for a brighter future.	Rashtriya Bal Swasthya Karyakaram, Ministry of Health & Family Welfare, Govt. of India April 2018.
33	Mapping foods for community based Management of Children with severe acute malnutrition in India	NIN
34	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6454610/	online material
35	Reddy KS, Patel V, Jha P, Paul VK, Kumar AK, Dandona L; Lancet India Group for Universal Healthcare. Towards achievement of universal health care in India by 2020	Lancet. 2011 Feb 26; 377(9767):760-8, doi: 10.1016/S0140-6736(10)61960-5
36	Principles of Health Care Ethics. -Second Edition	Richard Ashcroft, Angus Dawson, Heather Draper, John McMillan., John Wiley and Sons, 2007
37	Epidemic and Pandemic Preparedness and Response	International Red cross, 2015, online material
38	WHO Strategic Priorities on Antimicrobial Resistance. https://www.who.int/publications/i/item/9789240041387	online material
39	The quality of life.	Oxford: Clarendon Press. Rapley, M. (2003). Quality of life research. A critical introduction. London:, Sage Skevington, S. M., Lofty, M., & O'Connell, K. A. (2004).

40	Principles of Terrestrial Ecosystem Ecology - second edition	F.Stuart Chaplin,Pamela.A.Matson,Peter M Vitousek
41	Water and Waste water engineering	Mc Graw hill publishers
42	Water reuse issues,Technologies and Applications	Metcalf & Eddy/AECOM, The Mc Graw- Hill companies

Abbreviations

Domain

S.No	Short form	Descriptions
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Descriptions
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	ACT	Activity
44	PRA	Practical

Assessment

S.No	Short form	Descriptions
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	NFE	Not for exam