

**CENTRAL COUNCIL OF INDIAN MEDICINE**  
**NEW DELHI**

**SYLLABUS FOR SIDDHA MARUTHUVA ARIGNAR (BSMS) COURSE**  
(as per the Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine)  
amendment Regulations, 2016)

**SECOND PROFESSIONAL BSMS**

**GUNAPADAM-MARUNTHIYAL (PHARMACOLOGY)**  
**PAPER I –MOOLIGAI (MATERIAMEDICA - PLANT KINGDOM)**

**Detailed study about the following herbs which includes**

1. Description, 2. Verupeyarkal (Synonyms), 3. Scientific name, 4. Various names in regional languages, 5. Identification, 6. Distribution 7. Pothu Gunam (General properties) 9. Suvai (Taste), Veeryam (Potency), Pirivu (Division), Specific action, 10. Organoleptic characters, 11. Therapeutic actions, 12. Doses, 13. Uses 14. Name of different formulations pertaining to this herb. 15. Chemical constituents, 16. Nanju (Toxicity if any) and Nanju murivu (Antidote) 17. Suddhi (Purification)

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>		<b><u>Botanical Name</u></b>
1	Agatti	-	Sesbania grandiflora
2	Akkarakaram	-	Anacylus pyrethrum DC
3	Asogu	-	Saraca asoca
4	Athimathuram	-	Glycyrrhiza glabra
5	Atti	-	Ficus recemosa
6	Abini -Kasa Kasa	-	Papaver somniferum
7	Amukkurakkizhangu	-	Withania somnifera
8	Amman pachcharisi	-	Euphorbia pilurifera
9	Arasu	-	Ficus religiosa
10	Arathai	-	Alpinia galanga
11	Arunelli	-	Phyllanthus acidus
12	Avarai	-	Lablab purpureus
13	Avuri	-	Indigofera tinctoria
14	Azhavanam	-	Lawsonia inermis
15	Azhinjil	-	Alangium salvifolium
16	Arugu	-	Cynodon dactylon
17	Akasagarudan	-	Corallocarpus epigaeus
18	Adathodai	-	Justicia adatoda
19	Adutheendapalai	-	Aristolochia bracteolata
20	Amanakku	-	Ricinus communis
21	Chitramanakku	-	
22	Peramanakku	-	Ricinus inermis
23	Chevamanakku	-	Ricinus tanarius
24	Alamaram	-	Ficus benghalensis
25	Aavarai	-	Cassia auriculata
26	Attuthumatti	-	Citrullus colocynthis

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
27	Iruvi	- Dryopteris felixmas
28	Isangu	- Clerodendrum inerme
29	Isappukolvidhai	- Plantago ovata
30	Inji	- Zingiber officinale
31	Indu	- Mimosa rubicaulis
32	Impural	- Oldenlandia umbellata
33	Lavangam	- Syzygium aromaticum
34	Lavangappattai	- Cinnamomum verum
35	Iluppai	- Madhuca longifolia
36	Ilaikalli	- Euphorbia ligularia
37	Eechu (Sitrechu)	- Phoenix sylvestris
38	Pereechu	- Phonex dactilifera
39	Echchura mooli	- Aristolochia indica
40	Usilamaram	- Albizia odoratissima
41	Uttamani	- Pergularia daemia
42	Uppilangodi	- Mimosa paniculata
43	Rudra jadai	- Ocimum basilicum
44	Rudraksham	- Elacocarpus sphacsis
45	Uzhundu	- Vigna mungo
46	Umaththai	- Datura metal
47	Karu umaththai	-
48	Etti	- Strychnos nux-vomica
49	Erukku	- Calotropis gigantea
50	Elumichai	- Citrus lemon
51	Ellu	- Sesamsum indicum
52	Elam	- Elettaria cardamomum
53	Chitre lam	- Elettaria regains
54	Kattu – elakkay	- Amomum subulatum
55	Malayelam	-
56	Udimaram	- Lannea coromandelica
57	Omam	- Carum copticum
58	Kurosani omam	- Hyoscyamus niger
59	Oritazhtamarai	- Ionidium suffrufiocosum
60	Orilai tamarai	- Nervilia aragoana
61	Kanja	- Cannabis sativa
62	Kadalazhinjil	- Salacia reticulata
63	Kadalai	- Cicer arietinum
64	Chengadugu	- Brassica juncea
65	Vengadugu	- Brassica alba
66	Kadugu rokani	- Picrorhiza scrophulariflora
67	Kadukkai pinchu	- Terminalia chebula
68	Kandangkattari	- Solanum surattense
69	Kanduparangi	- Clerodendron serratum
70	Kasthuri manjal	- Curcuma aromatica
71	Kamuku -Kalippakku	- Areca catechu
72	Kottaikaranthai	- Spaeranthus indicus
73	Karisalankanni	- Eclipta prostrata
74	Karungali	- Acacia catechu

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
75	Karunai thandu	- Amarphophallus paeonic folius
76	Karpuravalli	- Aniso chilus carnosus
77	Karumbu	- Saccharum officinarum
78	Karkadaga singhi	- Rhus succedanea
79	Kallapai kizhangu	- Glorius superba
80	Kaliyana pushnikay	- Benincasa hispida
81	Kaliyana murukku	- Erythrina variegata
82	Kazharchi kodi	- Caesalpinia bonduc
83	Kala	- Carissa carandar
84	Kalli	- Euphorbia ligularia
85	Kodikalli	- Sarcosemma brevistigma
86	Shadhurakalli	- Euphorpia antiquorum
87	Kalli-mulayan	- Stapelia virgata
88	Kari-vembu	- Murraya koenigi
89	Katrzhai	- Aloe barbadensis
90	Kariabolam	- Aloe littoralis
91	Kakkanam	- Clitoria ternatea
92	Kakkai kolli	- Anamirta cocculus
93	Kanchori	- Tragiainvolucrata
94	Kattatti	- Bauhinia tomentosa
95	Karai	- Catunaregum spinora
96	Karpokarisi	- Psoralea corylifolia
97	Kitchilikizhangu	- Curcuma zeodaria
98	Kiraikal	- Greens
99	Puthina	- Mentha arvensis
100	Puliyarai	- Oxalis corniculata
101	Manali kirai	- Gisekia pharnaceoides
102	Kiraithandu	- Amaranthus gangeticus
103	Kizhanelli	- Phylanthus amarus
104	Kungiliam	- Shorea robusta
105	Kungumappoo	- Crocus sativus
106	Kudasapalai	- Holarrhena pubescens
107	Kudiyottupoond	- Argemone mexicana
108	Kunthrikkam	- Boswellia serrata
109	Kuppeimeni	- Acalypha indica
110	Kuruver	- Vetiveria zizanoides
111	Kurinjan	- Gymnema sylvestre
112	Kuntri	- Abrus precatorius
113	Kodiveli	- Glycosmis arborea
114	Chenkodiveli	- Plumbago rosea
115	Koththumalli	- Coriandrum sativum
116	Konrai-Sarak-Konrai	- Cassia fistula
117	Sirukonrai	- Cassia arborescens
118	Senkonrai	- Cassia margiuata
119	Kottam	- Costus speciosus
120	Korai	- Cyperus rotandus
121	Kovai	- Coccinia grandis
122	Jadamanji	- Nardostachys grandiflora

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
123	Sembagam	- Michelia champaca
124	Chathakuppai	- Anethum graveolens
125	Charanai	- Trianthea decandra
126	Chandanam	- Santalum album
127	Nattu jadhikai	- Myristica fragrans
128	Chathipaththiri	- Myristica fragrans
129	Shambrani	- Styrax benzoin
130	Salamisri	- Orchis latifolia
131	Sivathai	- Operculina turpethum
132	Shivanar vembu	- Indigofera aspalathoides
133	Chirunagapu	- Mesua nagassarium
134	Chitramutti	- Pavonia zeylanica
135	Peramutti	- Pavonia odorata
136	Cheekai	- Acacia sinuata
137	Sindil	- Tinospora cordifolia
138	Porsindil	-
139	Shimai atti	- Ficus carica
140	Chirakam	- Cuminum cyminum
141	Karunchirakam	- Nigella sativa
142	Perunchirakam	- Pimpinella anisum
143	Kattu chirakam	- Vernonia antihelminthica
144	Chukku	- Zingiber officinale
145	Chundai	- Solanum torvum
146	Chemparuthi	- Hibiscus rosa-sinensis
147	Chemparathai	- Gossypium arboreum
148	Chembai	- Sesbania sesban
149	Cheruppadi	- Mollugo lotoides
150	Cheviyam	- Piper nigrum
151	Cherankottai	- Semecarpus anacardium
152	Manathathakkali	- Solanum nigrum
153	Thannirvittan kizhangu	- Asparagus racemosus
154	Thavasurungai	- Rungia parviflora
155	Thazhuthazhai	- Clerodendrum phlomoidis
156	Thamarai	- Nelumbo nucifera
157	Thazhai	- Pandanus odoratissimus
158	Thalisa-paththiri	- Abies spectabilis
159	Thantri	- Terminalia bellirica
160	Thippili	- Piper longum
161	Thippiliver	- Piper longum
162	Thirakshai	- Vitis vinifera
163	Thutthi	- Abutilon indicum
164	Thumbai	- Leucas aspera
165	Thulasi	- Ocimum sanctum
166	Thuthuvalai	- Solanum trilobatum
167	Tengumaram	- Cocos nucifera
168	Devadaru	- Cedrus deodara
169	Thettran	- Strychnos potatorum
170	Nancharuppan	- Tylophora indica

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
171	Naththaichuri	- Spermacoce hispida
172	Nanthiavattam	- Tabernaemontana divaricata
173	Nannari	- Hemidesmus indicus
174	Nabi	- Aconitum napellus
175	Nayuruvi	- Achyranthes aspera
176	Naval	- Syzygium cumini
177	Nilavembu	- Andrographis paniculata
178	Nila varai	- Cassia senna
179	Neeradimuthu	- Hydnocarpus laurifolia
180	Nirmulli	- Hygrophila auriculata
181	Nuna	- Mosinda tinctoria
182	Neichatti	- Vernonia cinerea
183	Nerunjil	- Tribulus terrestris
184	Nel	- Oryza sativa
185	Nelli	- Phyllanthus emblica
186	Nervalam	- Croton tiglium
187	Notchi	- Vitex negundo
188	Pachillai	- Garcinia xanthochymus
189	Pala	- Artocarpus heterophyllus
190	Palasu	- Butea monosperma
191	Parangippattai	- Smilax china
192	Parppatakam	- Hedyotis coryambose
193	Panai	- Horastrus flbellifer
194	Vetpalai	- Wrightia tinctoria
195	Pitharoghani	- Coptis teeta
196	Pidangunasi	- Premma tomentosa
197	Pirandai	- Cissus quadrangularis
198	Chirupelai	- Aerva lanata
199	Pugaiyilai	- Nicotiana tobacum
200	Pungu	- Pongamia pinnata
201	Puli	- Tamarindus indicus
202	Puvarasu	- Thespesia populnea
203	Poonaikali	- Mucuna pruriens
204	Perungayam	- Ferula asafetida
205	Poduthalai	- Phyta nodiflora
206	Ponnanganni	- Alternanthera sessils
207	Magizh	- Mimusops elengi
208	Mangusthan	- Garcinia mangostana
209	Manjal	- Curcuma longa
210	Mara manjal	- Coscinium fenestratum
211	Manjitti	- Rubia cordifolia
212	Madanakamappu	- Cycus circinalis
213	Malli	- Jasminum grandiflorum
214	Marakkarai	- Catunaregum spinosa
215	Maruthu	- Terminalia arjuna
216	Maa	- Mangifera indica
217	Masikkai	- Quercus infectoria
218	Masipathiri	- Artemisia nilagisica

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
219	Mathulai	- Punica granatum
220	Milagu	- Piper nigrum
221	Val milagu	- Piper cubeba
222	Milakaranai	- Todalia asiatica
223	Musumusukkai	- Mukia madraspatana
224	Mudakkattan	- Cardiospermum helicacabum
225	Murungai	- Moringa oleifera
226	Mukkirattai	- Boerhavia diffusa
227	Mungil	- Bambusa arundinacea
228	Vasambu	- Acorus calamus
229	Vandukolli	- Cassia alata
230	Valampurikkai	- Helicteres isora
231	Vallarai	- Centella asiatica
232	Vadhanarayan	- Delonix elata
233	Vaividangum	- Embelia ribes
234	Valuzhuvai	- Celestrus paniculatus
235	Vazhai	- Musa paradisiaca
236	Vidathari	- Dichrostachys cinerea
237	Virali	- Dodonaea viscosa
238	Vilvam	- Aegle marmeoles
239	Vilamichamver	- Plectranthus vettiveroides
240	Vilamaram	- Limonia acidissima
241	Vishnukiranthi	- Evolvulus alsinoides
242	Vengayam	- Allium cepa
243	Vendayam	- Trigonella foenum
244	Vellarikai	- Cucumis sativus
245	Vellarugu	- Enicostemma axillare
246	Vellilothram	- Symplocos racemosa
247	Vellulli	- Allium sativum
248	Vettilai	- Piper betle
249	Vembu	- Azadirachta indica
250	Vel	- Acacia nilotica
251	Velvel	- Acacia leucophloea
252	Kudaivel	- Acacia latronum
253	Pikkaruvel	- Acacia farnesiana
254	Velai	- Cleome viscosa
255	Thaivelai	- Gynandropsis gynandra

**Note:** Questions for 80% of marks shall be taken from the aforesaid list of plants and the questions for rest 20% of marks shall be from the below list of plants *which can be studied by the students themselves with the guidance of the teacher.*

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
1	Akrottu	- Juglans regia lin.
2	Alisi virai	- Linum usitatissimum
3	Arukirai	- Amaranthus tristis
4	Annasipazham	- Ananas comosus
5	Araikirai	- Marsilea quadrifolia

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
6	Alpagoda pazham	- Prunus domestica
7	Al-vallikizhangu	- Manihot esculenta
8	Attunetti	- Neptunia oleracea
9	Anai-katrazhai	- Agave americana
10	Anai kunri	- Adenantha pavonina
11	Anaippuliamaram	- Adansonia digitata
12	Rattai – peimarutti	- Anisomeles malabarica
13	Rattabolam	- Aloe barbadensis
14	Ezhathalari	- Plumeria rubra
15	Uka	- Salvadora persica
16	Uzhalathi	-
17	Usilam	-
18	Erisalai	-
19	Elumichan thulasi	- Ocimum gratissimum
20	Ezhilapalai	- Alstonia scholaris
21	Odukkam	- Cleistanthus collinus
22	Kakkarikkay	- Cucumis sativus
23	Kasa-kasa	- Papaver somniferum
24	Kadarpalai	- Argyreia nervosa
25	Kadar tengay	- Lodoicea maldivica
26	Kadara naraththai	- Citrus medica
27	Kalumichchamkai	-
28	Kavizh thumbai	- Trichodesma indicum
29	Kazhu-nir	- Nymphaea alba
30	Kalarva	- Salvadora persica
31	Chirukalarva	- Salvadora persica
32	Karkovai	- Melothria heterophylla
33	Kartamarai	- Smilax zeylanica
34	Kasa	- Memecylon umbellatum
35	Kasi rathnam	- Quamoclit pennata
36	Kattu elumichchai	- Atalantia malabarica
37	Kattu ellu	- Sesamum prostratum
38	Kattu kadugu	- Cleome viscosa
39	Kattu karuvappattai	- Cinnamomum iners
40	Kattu thumbai	-
41	Kattu pagal	- Momordica dioica
42	Kattu peipudal	- Trichosanthes lobata
43	Kattu mullangi	- Blumea lacera
44	Kattu Vengayam	- Urginea indica
45	Kai-vallikkodi	- Dioscorea alata
46	Karamani	- Vigna unguiculata
47	Kavatambul	- Cymbopogon martinic
48	Kiranthinayagam	-
49	Kumizhmaram	- Gmelina arborea
50	Kumkkaththi	- Hiptage benghalensis
51	Kuruvich-chi	- Ehretia microphylla
52	Kuthambai	- Cantana indica
53	Kunthanpanai	- Caryota urens

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
54	Kuvai kizhangu	- Maranta arundinacea
55	Koththavarai	- Cyamopsis tetragonoloba
56	Kodaga salai	- Rungia repens
57	Gopuram tangi	- Andrographis echiodes
58	Chanappu	- Crotalaria juncea
59	Saninayagam	-
60	Chavukkumaram	- Casuarina equisetifolia
61	Samanthipoo	- Chrysanthemum coronarium
62	Chayamaram	- Caesalpinia sappan
63	Chavarisimaram	-
64	Charaiparuppu	- Buchanania lanzan
65	Chinnikizhangu	-
66	Chukkankai	-
67	Chukkan kirai	- Rumex vesicarius
68	Chulukku nayagam	-
69	Suriyakanthi	- Helianthus annuus
70	Cheppu – nerunjil	- Indigofera enneaphylla
71	Chevaganar kizhangu	- Gloriosa superba
72	Peyavarai	- Cassia occidentalis
73	Thakkolam	-
74	Tamaraththam	- Avarrhoa carambola
75	Thara	- Fumaria parviflora
76	Thalippanai	- Corypha umbraculifera
77	Thillai	- Excoecaria agallocha
78	Thumbilkkai	- Diospyros peregrina
79	Thurinjibin	- Alhagi maurorum
80	Thekku	- Tectona grandis
81	Naruvili	- Cordia dichotoma
82	Naganam	-
83	Nagathali	- Opuntia dillenii
84	Nanal	- Saccharum spontaneum
85	Nilakkadambu	- Asarum europaeum
86	Nilakumizh	- Gmelina asiatica
87	Nilappanai	- Curculigo orchioides
88	Nilavamanakku	-
89	Ninral chinungi	-
90	Niralasi	- Polygorum barbatum
91	Nirbrahmi	- Bacopa monnieri
92	Nirpula	- Phyllanthus reticulatus
93	Nirmel neruppu	- Ammania baccifera
94	Nettilingam	- Polyalthia longifolia
95	Neithar kizhangu	- Nymphaea pubescens
96	Pannimonthan kizhangu	- Trapa natans
97	Paruththi	- Gossypium herbaceum
98	Motchai	- Lablab purpureus
99	Chemparuththi	- Gossypium arboretum
100	Parangikai	- Cucurbita maxima
101	Panirpoo	- Rosa centifolia



<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
102	Pakal	- Momorchica charantia
103	Palai	- Manikara hexandra
104	Piramiya vazhukkai	- Bacopa monniesi
105	Piray	- Streblus asper
106	Pilimbi	- Averrhoa bilimbi
107	Pilavai kolli	-
108	Pudal	- Trichosanthes cucumesina
109	Punnai	- Calophyllum inophyllum
110	Ponmusuttai	- Sida acuta
111	Manipungu	- Sapindus lausifolia
112	Musarkathilai	- Ipomea pes-caprae
113	Mavilangu	- Crateava magna
114	Munthiri	- Anacardium occidentale
115	Mullangi	- Raphanus sativus
116	Modagavalli	- Sterculia foetida
117	Valli	- Dioscorea esculenta
118	Chevalli	- Dioscorea purpurea
119	Vagai	- Albizia lebbeck
120	Karuvagai	- Albizia odoratissima
121	Vadhuniai	- Prunus dulcis
122	Vizhalarisi	- Seed of red grass
123	Peru-lavangappattai	- Cinnamomum macrocarpum
124	Peyatti	- Ficus hispida
125	Vengai	- Pterocarpus marsupium
126	Aruvada	- Ruta chalepensis
127	Ezhuttani poondu	- Launaea pinnatifida
128	Karimulli	- Solanum anguini
129	Kanam vazhai	- Commelina benghalensis
130	Siththa	- Anona squamosa
131	Pallipundu	- striga lutea
132	Valendrabolam	- Commiphora myrrh
133	Ayil	- Chukrasia tabularis
134	Aththi	- Ficus microcarpa
135	Alivirai	- Lepidium sativum
136	Ireval chinni	- Rheum emodi
137	Ilanda maram	- Ziziphus mauritania
138	Ilavamaram	- Bombax ceiba
139	Mulilavu	- Bombax malabaricum
140	Urulai kizhangu	- Solanum tuberosum
141	Elikkadilai	- Merremia emarginata
142	Eliyamanakku	- Jatropha curcas
143	Iyviri	- Diplocyclos palmatus
144	Kadambu	- Anthocephalus cadamba
145	Kadarpasi	- Gracilaria lichenoides
146	Kattukodi	- Cocculus hirsutus
147	Kanap-pundu	- Exacum pedunculatum
148	Kathakambu	- Uncaria gambir
149	Kambu	- Pennisetum typoideum

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
150	Kaththari	- Solanum melongena
151	Karpasi	- Parmelia perlata
152	Kattamanakku	- Jatropha curcas
153	Kappikottai	- Coffea arabica
154	Kalen	- Agaricus campestris
155	Kitchilipazham	- Citrus aurantium
156	Kirauthitakaram	- Tabernaemontana divaricata
157	Kiliyural	-
158	Kilukiluppai	- Crotalaria retusa
159	Keeripundu	- Ophiorrhiza mungos
160	Kurattai	- Trichosanthes tricuspidata
161	Kezhvaragu	- Eleusine coracana
162	Kottikizhangu	- Aponogeton monostachyon
163	Kollu	- Macrotyloma uniflorum
164	Kollukkaivelai	- Tephrosia purpurea
165	Korukkaip-puli	- Pithecellobium duke
166	Kothumai	- Triticum aestivum
167	Gowrivalpul	-
168	Samai	- Panicum sumatrense
169	Chirupeyathi	- Ficus hispida
170	Chini	- Acalypha fruticosa
171	Churai	- Lagenaria siceraria
172	Sembu	- Colocasia esculenta
173	Cholam	- Sorghum vulgare
174	Thakarai (Usithakarai)	- Cassia tora
175	Thakkali	- Physalis minima
176	Tharuppai	- Desmostachya bipinnata
177	Thinai	- Setaria italica
178	Thuvarai	- Cajanus cajan
179	Telkodukku	- Heliotropium indicum
180	Thottar Chinungi	- Mimosa pudica
181	Naralai	- Cayratia pedata
182	Nagamalli	- Rhinacanthus nasuta
183	Payaru	- Vigna mungo
184	Pappali	- Casica papaya
185	Badampisin	-
186	Pathiri	- Stereospermum colais
187	Barely	- Hordeum vulgare
188	Pirappan kizhangu	- Calanus rotang
189	Pinasimaram	- Sterculia foetida
190	Pavattai	- Pavetta indica
191	Pulluruvi	- Dendrophthoe falcata
192	Pulladi	- Desmodium gangeticum
193	Mantharai (red)	- Bauhinia purpurea
194	Mulam	- Citrullus vulgaris
195	Munnai	- Premna corymbosa
196	Varagu	- Paspalum scrobiculatum
197	Vallikodi	- Convolvulus repens

<b>Sl. No.</b>	<b><u>Tamil Name</u></b>	<b><u>Botanical Name</u></b>
198	Vizhuthi	- Cadaba trifoliata
199	Vishamunkil	- Crinum asiaticum
200	Vetchi	- Ixora coccia
201	Vendakai	- Abelmoschus esculantus
202	Verkadalai	- Arachis hypogea
203	Akasathamarai	- Pistia stratiotes
204	Anthimalli	- Mirabilis jalapa

**Reference Books:**

- 1) Gunapadam – Mooligai Vaguppu – by Dr. Murugesamudaliar
- 2) Materia Medica – Vol I & II – by Dr. Nadkarani.
- 3) Mooligai Iyal – By – Dr.V.Arunachalam M.D.Siddha.

# **CENTRAL COUNCIL OF INDIAN MEDICINE**

## **NEW DELHI**

**SYLLABUS FOR SIDDHA MARUTHUVA ARIGNAR (BSMS) COURSE**  
(as per the Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) amendment Regulations, 2016)

### **SECOND PROFESSIONAL BSMS** **GUNAPADAM –MARUNTHIYAL (PHARMACOLOGY)**

#### **PAPER II -THATHU & JEEVAM (MATERIAMEDICA –METALS, MINERALS & ANIMAL KINGDOM)**

- **Introduction to General Pharmacology with reference to Siddha drugs and principles.**  
Introduction -Routes of drug administration- Absorption and distribution - Biotransformation - Pharmacokinetics - Drug excretion- Pharmacodynamics - Adverse drug reactions
- Detailed study about the following raw drugs which includes  
1.Description, 2.Verupeyarkal ( Synonyms), 3. Scientific name, 4. various names in regional languages, 5. Identification, 6. Availability, 7. Pothu gunam (General properties) 9. Suvai (Taste), Veeryam (Potency), Pirivu (Division), Specific action, 10. Organoleptic characters, 11. Therapeutic actions,12. Alavu (doses), 13. uses 14.Name of different formulations pertaining to this drug. 15. Chemical constituents, 16. Nanju (Toxicity) if any and Nanju murivu (Antidote) 17. Suddhi (Purification)
- Classification of metals & minerals
- Study of Natpu charakku (Synergetic) and Pagai charakku (antagonistic drugs).
- Classification of drugs based on five elements
- Herbs containing Iron, Copper, Gold, Lead, Silver

#### **Ulogangal –( Metals)**

<b>Sl. No</b>	<b>Tamil Name</b>	<b>English Name / Scientific Name</b>
1	Ayam	Iron
2	Ekkhu	Steel
3	Kareyam	Lead
4	Kandham	Magnetic Oxide of Iron
5	Thambram	Copper
6	Nagam	Zinc
7	Thankam	Gold
8	Mandooram	Ferrous Ferric Oxide
9	Velleyam	Tin
10	Velli	

#### **II. Pancha Sootham –(Mercurial Compounds)**

<b>Sl. No</b>	<b>Tamil Name</b>	<b>English Name / Scientific Name</b>
1	Rasam	Mercury
2	Rasa Sindooram	Red Sulphide of mercury
3	Lingam	Cinnabar – Natural
4	Rasa Karpooram	Calomel - Hydragryum subchloride
5	Veeram	Corrosive sublimate - Hydrogyrum per chloride

### III. Pashanagal - (Metal / Mineral Salts)

Sl. No	Tamil Name	English Name / Scientific Name
1	Anjanakal	Antimony Sulphide
2	Kanthakam	Sulphur
3	Gowri pashanam	Yellow Oxide of arsenic (Synthetic)
4	Thalagam	Yellow Arsenic Trisulphide
5	Nava pashanagal	Nine kinds of metal salts
6	Pancha pashanagal	Five kinds of metal salts
7	Manosilai	Red Arsenic Disulphide (Realger)
8	Mirudhar sinki	Galena Sulphide (Lead ore)
9	Vellaippashanam	Arsenum Acidum (White Arsenic)

### IV. Karasaram - (Salts and Alkalies)

Sl. No	Tamil Name	English Name / Scientific Name
1	Applakkaram	Sodium Carbonate impure
2	Induppu	Sodium Chloride Impure (RockSalt)
3	Evatcharam	Potassium Carbonate impure
4	Kanavai odu	OS SEPIAE (Cuttle fish bone)
5	Gandhiuppu	Salts of Sulphur
6	Kalluppu	Salt found in lumps deposited on beds of rocks at the bottom of the sea
7	Kariuppu	Sodium chloride (Common salt)
8	Cheenakkaram	Alum (Aluminous Sulphate)
9	Soodan	Camphor
10	Navachcharam	Ammonium chloridum (Sal ammoniac)
11	Pachai karpooram	Borneo camphor (Crude camphor)
12	Panchalavanam	Mixture of five salts
13	Pidalavanam	Black salt
14	Pooneeru	Fuller's earth
15	Ambar	Ambra arasea
16	Valaiyaluppu	Extracted salt from fuller's earth (Glass gall)
17	Vengaram	Sodium biborate (Borax)
18	Vediuppu	Potassium nitrate (Salt petre)
19	Attuppu	A boiled salt obtained from salt petre

### V. Navamanigal – Gems

Sl. No	Tamil Name	English Name / Scientific Name
1	Pavazham	Coral
2	Muthu	Pearl

### VI. Uparasam - Minerals (Natural Substances)

Sl. No	Tamil Name	English Name / Scientific Name
1	Appiragam	Mica
2	Annabedhi	Ferri Sulphas (Green vitriol)
3	Karpoorasilasathu	Crystallised foliated Gypsum
4	Kalnar	Asbestos

5	Karchunnam	Lime stone
6	Kadikkaram	Nitrate of silver
7	Kavikkal	Red ochre
8	Gomuthra silasathu	Asphaltum (Asphalt mineral piteh)
9	Thurusu	Cupric sulphate (Blue vitriol)
10	Nandukkal	Fossil stone crab
11	Palthutham	Sulphate of zinc

#### VII.JEEVAM -MATERIA MEDICA (ANIMAL KINGDOM)

Sl. No	Tamil Name	English Name / Scientific Name
1)	Attai	Hirudo Medicinalis (Speckled leech)
2)	Aamai	Chelonia Turtle (Tortoise)
3)	Indrakopa poochi	Mutilla Occidentalis
4)	Iragukal	Feathers
5)	Eri vandu	Mylabris Sps.
6)	Elumbugal	Bones
7)	Onan	Calotis (Common Agemaid Lizard)
8)	Kasthuri	Moschus moschiferus musk
9)	Kzhingial	Ostrea edults linn (Common oyster shell)
10)	Kulambugal	Hoofs
11)	Kulavikkoondu	Wasps nest
12)	Kombarakku	Carteria Lacca (Lac)
13)	Kombugal	Horns
14)	Korochanam	Fel Borinum purifactum (Oxbile)
15)	Kozhi	Gallus domes (Domestic cock & hen)
16)	Sangu	Turbinella rapa (Conch Shell)
17)	Chanam	Dung
18)	Siruneer	Urine
19)	Thantham	Teeth
20)	Thean	Honey
21)	Nandu	Crab
22)	Nathai	Fresh Water Snail
23)	Palagarai	Cypraea moneta Linn (Cowry)
24)	Pantri	Sus indicushog (Pig)
25)	Pambu chattai	Snake's slough
26)	Palum pal porutkalum	Milk and milk products
27)	Pitchi	Bile
28)	Punugu	Viverra Civetta (Civet cat)
29)	Poo nagam	Earth Worm
30)	Min mini poochi	Fire fly
31)	Muttai oodugal	Egg shells
32)	Musiru muttai	Egg of Formica Smaragdina
33)	Muthuchippi	Mytilus margariferus (Pearl Oyster Shell)
34)	Mezhugu	Wax

**Note: Questions for 80% of marks shall be taken from the aforesaid list and the questions for the rest 20% of marks shall be from the below list *which can be studied by the students themselves with the guidance of the teacher.***

Sl.No	Tamil Name	English Name/Scientific Name
1.	Thottippashanam	A pharmaceutical preparation of Arsenic combined with mercury & sulphur.

2.	Ekambacharam	A Prepared Salt (an efflorescentsalt)
3.	Kadal nurai	Sea froth engendered by submarine fire
4.	Kaichulavanam	Salt produced from the earth impregnated with soda
5.	Thilalavanam	A salt derived from sessamum
6.	Komedagam	Onyx (Berly)
7.	Neelamani	Sapphire
8.	Pushparagam	Topaz, Yellow Topaz
9.	Maragadham	Emerald
10.	Manickam	Ruby (Carbuncle)
11.	Vaidooriyam	Cats eye (Chryso prase)
12.	Vairam	Diamond
13.	Kal-matham	
14.	Nimilai	Bismuth
15.	Sathirabedhi	
16.	Alkattipatchi	
17.	Udumbu	Varanus Sps (Monitor)
18.	Kaandamiruga kombu	Rhinoceros unicornis
19.	Sura	Squalus carcharius (Shark)
20.	Nariecham	Jackal's excreta
21.	Puli	Tiger
22.	Mayil	Pavo Cristatus Linn (Pea Cock)
23.	Maan	Deer
24.	Mudhalai	Crocodills porosus (Crocodile)
25.	Yanai	Elephas indicas (Elephant)

#### Reference books:

- 1) Text of Gunapadam – Thatthu Jeeva Vaguppu – Vol. II & III – by Dr.R.Thiagarajan
- 2) Pathartha Guna Chindamani
- 3) Pathartha Guna Vilakkam – Kannusamy
- 4) Materia Medica - Vol. I & II – by Dr. Natkarni
- 5) Siddha Vaidhya Thirattu – by Dr. C.S. Uthamarayan
- 6) Pharmacology & Phamacotherapeutics - by R.S Satoskar
- 7) Drug testing protocol for ASU Drugs – Published by PLIM

**MARKS DISTRIBUTION FOR PRACTICAL FOR GUNAPADAM-MARUNTHIYAL PAPER I & II**

**MAXIMUM MARKS : 100**

1. PURIFICATION METHODS **30 MARKS**
2. RAW MATERIALS IDENTIFICATION- (5 SPOTTERS) **20 MARKS**
3. QUALITATIVE ANALYSIS OF INORGANIC & PHYTOCHEMICALS CONSTITUENTS – LABORATORY TESTS-**20 MARKS**

TO DETECT THE PRESENCE OF -Aluminium, calcium, copper,iron, Magnesium, Mercury, Pottasium,Sodium, Carbonates and Bicarbonates, Sulphates, Chlorides

TO DETECT THE PRESENCE OF -Acids, Alkaloids, Aminoacids and proteins, carbohydrates, Fats and oils, flavanoids, Glycosides, Lignans,Phenols, Quinones,Resins, Saponins, Steroids, Tannins, Terpenoids.

4. PRACTICAL ASPECT VIVA VOCE **30 MARKS**