DEPARTMENT OF BOTANY CMS COLLEGE KOTTAYAM (AUTONOMOUS)



MEDICINAL AND AND ORNAMENTAL PLANTS

VALUE ADDED COURSE For the academic year 2019-20

COURSE OUTCOME

- Help to promote the need of cultivation and conservation of Medicinal and Ornamental plants.
- Help to provide basic training in medicinal and ornamental plants in tune with the Ayurvedic and floriculture practices.
- Help to aware the students about the quality of Ayurvedic products and to generate Ayurveda-based self employment opportunities.

Academic year: 2019-2020.

CAREER ORIENTED PROGRAMMES (ADD-ON COURSES) PROFORMA

1.	Name of the Course.	Certificate Course				
2.	Name of the Co-ordinator With Mobile Number & E-mail ID.	Dr. Hari N. Mob. No: 8547591199. e-Mail ID: hari@cmscollege.ac.in				
3.	UGC Sanction order & Date.	F.No.4-500/2013 (COC) Dated. 31 st December-2014.				
4.	Amount Sanctioned (Rs.).	Rs. 9, 00,000/- (Nine Lakh Only).				
5.	Number of Students enrolled In 2015-2016.	-35-				
	a). Certificate Course.	-35-				
	b). Diploma Course.	-NA-				
	c). Advanced Diploma Course.	-NA-				
	Total Number of enrolment	a). Certificate : -35-				
6.	from the Commencement to till	b). Diploma : -NA-				
	date.	c). Advanced Diploma : -NA-				
7.	Percentage of Students who Successfully completed the course.	-31-				
8.	Number of Students who achieved a career on the basis of this course.	10%				
9.	Other details, if any	-NA-				

Category wise Students Profile (who successfully completed the course):

Ger (Male/	nder Female)	General	OBC	OEC	SC/ST	Rural	Urban
-04-	-27-	-11-	-05-	-08-	-07-	-29-	-02-



Place: Kottayam-01.

Date:

NB: Separate Performa may be used for each Course.

Principal

Principal, C.M.S College, Kottayam

Page 24 of 55

Academic year: 2019-2020.

CAREER ORIENTED PROGRAMMES (ADD-ON COURSES) PROFORMA

1.	Name of the Course.	Advanced Diploma Course				
2.	Name of the Co-ordinator With Mobile Number & E-mail ID.	Dr. Hari N. Mob. No: 8547591199. e-Mail ID: hari@cmscollege.ac.in				
3.	UGC Sanction order & Date.	F.No.4-500/2013 (COC) Dated. 31 st December-2014.				
4.	Amount Sanctioned (Rs.).	Rs. 9, 00,000/- (Nine Lakh Only).				
5.	Number of Students enrolled In 2015-2016.	-46-				
	a). Certificate Course.	-NA-				
	b). Diploma Course.	-NA-				
	c). Advanced Diploma Course.	-46-				
	Total Number of enrolment	a). Certificate : -NA-				
6.	from the Commencement to till	b). Diploma : -NA-				
	date.	c). Advanced Diploma : -46-				
7.	Percentage of Students who Successfully completed the course.	-46-				
8.	Number of Students who achieved a career on the basis of this course.	10%				
9.	Other details, if any	-NA-				

Category wise Students Profile (who successfully completed the course):

Ger (Male/	nder Female)	General	OBC	OEC	SC/ST	Rural	Urban
-06-	-40-	-19-	-13-	-06-	-08-	-30-	-16-



Principal

NB: Separate Performa may be used for each Course.

Place: Kottayam-01.

Date:

Principal, C.M.S College, Kottayam

Page 22 of 55

ADD-ON COURSE IN BOTANY (Career Oriented Programme)

Floriculture [Fresh-flower arrangements]







Page 27 of 55

UNIVERSITY GRANTS COMMISSION NEW DELHI

Career Oriented Programme

Syllabus for Certificate/ Diploma/ Advanced Diploma Course in

DEPARTMENT OF BOTANY CMS COLLEGE KOTTAYAM KERALA- 686001

.....

MAHATMA GANGHI UNIVERSITY PRIYADARSHINI HILLS, KOTTAYAM KERALA-686560

<u>Certificate/ Diploma/ Advanced Diploma Course in</u> Medicinal and Ornamental Plants.

(The career oriented programme is framed for 20 Credits for each course. Classes will be conducted on Saturdays) Fees: Rs- 1000/Year

Objectives of the Career oriented programme

This programme was designed with the following objectives:

1. To promote cultivation and conservation of medicinal and ornamental plants.

2. To provide basic training in medicinal and ornamental plants in tune with the flourishing Ayurvedic and floriculture industries in Kerala.

3. To meet the increasing demands of trained personals in Ayurvedic and Floriculture industries.

4. To improve the quality of ayurvedic products and to generate Ayurveda based self employment opportunities

5. To generate a new generation of medicinal plant specialists who can translate Traditional knowledge in the light of advancement in modern medicine.

Pre-requisites:

Candidate should have passed higher secondary or its equal in science stream and should have an aptitude for medicinal and floriculture.

CERTIFICATE COURSE- FIRST YEAR									
Distribution of papers	Hours	Credits							
Theory: Paper 1- Medicinal and Aromatic Plants- 1	90 Hrs	06							
Theory: Paper 2-Floriculture -1	90 Hrs	06							
Paper 3. Practical and Field Work	120 Hrs	08							
Total	300 Hrs	20							
DIPLOMA COURSE- SECOND YEAR									
Distribution of papers	Hours	Credits							
Theory: Paper 1- Medicinal and Aromatic Plants- 2	90 Hrs	06							
Theory: Paper 2-Floriculture- 2	90 Hrs	06							
Paper 3. Practical and Field Work	120 Hrs	08							
Total	300 Hrs	20							
ADVANCED DIPLOMA COURSE- THIRD Y	EAR								

Theory: Paper 1- Phytochemical application of crude drugs with special reference to Ayurveda.	90 Hrs	06
Theory: Paper 2- Floriculture- 3.	90 Hrs	06
Paper 3. Practical and Field Work.	120 Hrs	08
Total	300 Hrs	20

CERTIFICATE COURSE- FIRST YEAR (300 Hrs, 20 Credits)

Paper 1- Medicinal and Aromatic Plants- 1 (90 Hrs, 06 Credits)

Module 1. Int	roduction to major medicinal plants.		
AYUS	H- Ayurveda (3hrs), Yoga (3hrs), Uanani (3hrs),	Siddha (3hrs),	Homeopathy
(3hrs)		(15 hrs)	
Module 2. M	ajor Medicinal group of plants:-		
1.	Dasamoola (6hrs)		
2.	Dasapushpam (6hrs)		
3.	Nalpamara (3hrs)		
4.	Panchamoola (3hrs)		
5.	Panchapallava m (3hrs)		
6.	Trikadu (3hrs)		
7.	Triphala (3hrs)		(27 hrs)
Module 3. Fa	ctors leading to deterioration of quality of drugs.		(03 hrs)
Module 4. Co	mmon Ayurvedic preparations:-		
1.	Choorna (3hrs)		
2.	Ghrita (3hrs)		
3.	Kashaya (3hrs)		
4.	Lehya (3hrs)		
5.	Taila (3hrs)		(15 hrs)
Module 5. Cu	ltivation and medicinal uses of:-		
1.	Adhatoda (3hrs)		
2.	Andrographis (3hrs)		
3.	Asoca (3hrs)		
4.	Bael (3hrs)		

5. Brahmi (3hrs)

- 6. Castor (3hrs)
- 7. Cinnomon (3hrs)
- 8. Ginger (3hrs)
- 9. Tinospora (3hrs)
- 10. Turmeric (3hrs)

(30 hrs)

Paper 2- Floriculture- 1 (90 Hrs, 06 Credits)

Module 1. Introdu	action (3 hrs), Importance and scope of floriculture (6 hrs), Pres	sent status
of floriculture	in India (3 hrs). (12hrs)	
Module 2. Classif	ication of Ornamental plants (3 hrs).	
Impor	tance, Scope, Origin, Botanical and common name of cultivars	
(25 mi	nimum).	(28hrs)
Module 3. Cut flo	wers and its importance (6 hrs), selection of cultivars	
for	cut flower (8 hrs).	(14 hrs)
Module 4. Princip	bles of flower arrangements:-	
1.	Bouquet making (3 hrs)	
2.	Bridal makes (3 hrs)	
3.	Car decorations (3 hrs)	
4.	Wreath making (3 hrs)	(12hrs)
Module 5. Cultiva	ation of Ornamental plants:-	
1.	Cold frame (6 hrs)	
2.	Green house (6 hrs)	
3.	Hot beds (6 hrs)	
4.	Poly house (6 hrs)	(24 hrs)
	Paper- 3 Practical and field work (120 Hrs, 08 credits)	

- 1. Working knowledge and identification of garden tools and implements.
- 2. Different propagation techniques:
 - a. Cutting and other vegetative parts
 - b. Seeds
 - c. Layering
 - d. Budding
 - e. Grafting
- 3. Different types of flower arrangements according to Japanese and Western Style.
- 4. Preparation of herbarium of common medicinal plants and dried specimens.
- 5. Visit a well maintained medicinal plant garden in Ayurvedic industry

and submit an industrial visit report. **DIPLOMA COURSE- SECOND YEAR (300Hrs, 20 Credits)**

Paper 1- Medicinal and aromatic plants- 2 (90 hrs, 06 Credits)

Module 1. C	ultivation of Medicinal plants:-	
1.	Adhatoda zeylanica (3hrs)	
2.	Aloe vera (3hrs)	
3.	Alpinia galanga (3hrs)	
4.	Andrographis paniculata (3hrs)	
5.	Asparagus racemosa (3hrs)	
6.	Bacopa monnieri (3hrs)	
7.	Centella asitica (3hrs)	
8.	Cissus quadrangulari s (3hrs)	
9.	Piper longum (3hrs)	
10). Piper nigrum (3hrs)	
11	. Plumbago zeylanica (3hrs)	
12	2. Pogostemon pacholi (3hrs)	(36hrs)
Module 2. Ci	ultivation of Ornamental Plants:-	
1.	Heliconia (3hrs)	
2.	Jasmine (3hrs)	
3.	Orchid (3hrs)	
4.	Rose (3hrs)	(12 hrs)
Module 3. Ci	ultivation of Medicinal Hedge:-	
1.	Acalypha fruticosa (3hrs)	
2.	Adhatoda zeylanica (3hrs)	(6 hrs)
Module 4. Cu	ultivation of Medicinal Lawn:-	
1.	Centella asiatica (3hrs)	
2.	Cyanadon dactylon (3hrs)	(6hrs)
Module 5. Co	onstruction of herbal hut (Parnakudeeram):-	
1.	Alangium salvifolium (3hrs)	
2.	Asparagus racemosus (3hrs)	(6 hrs)
Module 6. Co	ultivation of flowering medicinal trees as avenue plants:-	
1.	Cassia fistula (3hrs)	
2.	Lawsonia inermis (3hrs)	
3.	Saraca asoka (3hrs)	(9hrs)
Madala 7 D		

Module 7. Prospect of herbal technology:-

I. Plants as nutraceuticals (1hrs).

	4. Amaranthus spinosa (8hrs)	(15hrs)
IV.	 Indigenous herbs used as vegetables:- Boerhavia diffusa, 2. Moringa oleifera, 	, 3. Amaranthus viridis,
III.	Processing and preservation of seasonal fru 1. Mango, 2. Pineapple, 3. Jack fruit. (3hr	uits in Kerala:- rs)
II.	Under-utilized fruits: - 1. Avarroha bilimba	i, 2.Phyllanthus acidus (3hrs)

Paper 2. Floriculture -2 (90Hrs, 06 Credit)

Module 1. Soil and climate requirement (3hrs), water management and propagati	ion techniques
(8hrs). (11hrs)	
Module 2. Propagation technique by different methods:-	
1. Seeds, 2. Stem 3. Root cuttings and 4. Underground stem.(10hrs	5)
Advantages and disadvantages (2hrs)	(12hrs)
Module 3. Gardening and Harvesting (2hrs), marketing of commercially	
important flower crops (4hrs)	
1. Rose, 2. Orchid, 3. Canna (6hrs)	(12hrs)
Module 4. History and scope of Bonsai making (3hrs). Bonsai and art (3hrs),	
Classification of plants suitable for Bonsai (6hrs).	(12hrs)
Module 5. Bonsai containers, Bonsai Making and important points for bonsai	
making (10hrs). Changing of pots / Containers (2hrs).	(12hrs)
Module 6. Pruning of roots and stems in Bonsai technique (6hrs).	
Trimming of plants:- Irrigation, Mannuring, protection from adverse	
Conditions (6hrs)	(12hrs)
Module 7. Principles and types of flower arrangement (4hrs).	
1. Western (3hrs) and 2.Japanese(3hrs)	(10 hrs)
Module 8. Growth regulators (3hrs). Role and classification of growth regulators	for
ornamental crops (3hrs). Different methods for the use of growth reg	gulators (3hrs)
	(9hrs)

Paper 3: Practical and field work (120Hrs, 08 Credits)

- Botany, binomial, common name and morphology of useful parts of common medicinal plants used in Ayurvedic industries.
- 2. Preparation of a raw drug museum of major medicinal plants in Kerala.
- 3. Preparation of garden designs: small and medium.
- 4. Identification and study of indoor plants.
- 5. Identification and description of shrubs.
- 6. Preparation of pot- mixtures for potting of medicinal/ ornamental plants.
- 7. Visiting famous botanic gardens in Kerala/ neighbouring state (any one).
- 8. Submit a field visit report.

ADVANCED DIPLOMA COURSE – THIRD YEAR

(300Hrs, 20 Credits)

Pa	ipei	r 1 I	Phy	tocl	nem	ical	appl	icati	on of	f <mark>crude</mark>	drugs	with	specia	l refe	erence	e to A	Ayury	veda
	(90hrs, 06 credits)																	

Module 1. Morphological evaluation of Raw Drugs from adulterants (detailed ap	proach).
	(10hrs)
Module 2. Isolation techniques in plant secondary metabolites: -TLC/GC/HPLC.	(15hrs)
Module 3. Utility of plant drugs as:-	
1. Anti-oxidants (5hrs), 2. Anti-diabetic agents (5hrs),	
3. Anti-cancer agents (5hrs).	(15hrs)
Module 4. Prospects of medicinal plants in:-	
1. Nanotechnology (10hrs), 2. Drug delivery (10hrs),	
3. Chemotherapy (10hrs), 4. Phytoremediation (10hrs).	(40hrs)
Module 5. Conservation and resource management of medicinal plants	
with special reference to RET- plants.	(10hrs)
Paper -2 Floriculture -3 (90Hrs, 06 Credits)	
Module 1. Gardening: -	
1. History of gardening in India (5hrs).	
2. Importance and scope of gardening (5hrs).	
3. Various garden components and common plants used to make	
each components (10hrs).	
4. Types of gardens (3hrs).	
5. Preparation of garden designs (5hrs).	
6. Famous garden in India (2hrs).	(30hrs)
Module 2. Dry flower technology: -	
1. Introduction (2hrs).	
2. Advantages and uses of dried flowers (3hrs).	
3. Techniques for the production of dry flowers (7hrs).	
4. Selection of plant materials for dry flower arrangement (3hrs).	
5. Drying plant materials (3hrs).	
6. Methods of drying plant materials: Air drying, Press drying and	
Embedded drying (7hrs).	
7. Preparation of plant materials for arrangement: Dyeing/colourin	g (3hrs).
8. Care of dried flowers (2hrs).	(30hrs)
Module 3. Artificial flower arrangement: -	
1. Types of materials used for making artificial flowers (3hrs).	
2. Artificial flower making: Rose/Carnation/Marigold (6hrs).	
3. Advantages of artificial flowers (4hrs).	(4 F) \
4. Care of artificial flowers (2hrs).	(15hrs)
Module 4. Value addition from dry/artificial materials: -	
1. Dry/artificial flower arrangements (5hrs).	
2. Potpourri making (3hrs).	
3. Floral handicraft using pressed flowers and leaves: Cards/Collag	ges (7/hrs).
	(15hrs)

Paper 3. Practical (120Hrs, 08 Credits)

- 1. List out common raw drugs used for pharma products.
- 2. List out common plants used for making various garden components.
- 3. Dry flower arrangement using the collected dried plant materials.
- 4. Artificial flower arrangement using the handmade flowers.
- 5. Artificial flower arrangement using the handmade leaves.
- 6. Visit a well maintained Nanotechnology lab in Kerala/ neighbouring state (any one).
- 7. Submit a Lab visit report.

References:

- 1. Arora J.S. 2006. Introductory Ornamental horticulture. Kalyani Publications.
- 2. Bhattacharjee S.K. 2006. Advances in Ornamental Horticulture. Vols. I-VI.
- 3. Bose T.K. and Yadav L.P. 1989. Commercial Flowers. Naya Prokash.
- 4. Chadha K.L. and Chaudhury B. 1992. Ornamental Horticulture in India. ICAR.
- 5. Lauria A. and Ries V.H. 2001. *Floriculture Fundamentals and Practices*. Agrobios. Pointer Publ.
- 6. Rajeevan P.K., Singh, K.P. and Valsalakumari P.K. 2003 ed. Bulbous Ornamentals
- 7. Sabina G.T. and Peter K.V. 2008. Ornamental Plants for Gardens. New India Publ Agency.
- 8. Sheela V.L. 2007. Flowers in Trade. New India Publ. Agency.
- 9. Valsalakumari. 2008. *Flowering Trees.* New India Publ. Agency. Woodrow M.G.1999. *Gardening in India.* Biotech Books.
- 10. Valsalakumari P.K., Rajeevan P.K., Sudhadevi P.K. and Geetha C.K. 2008. *Flowering Trees* New India Publ. Agency. Vol 1.The Back Ground. Springer, Netherlands.

<u>ADD-ON COURSE IN BOTANY</u> (Career Oriented Programme)

Certificate/Diploma/Advanced Diploma Course

"Medicinal and Ornamental Plants"

Course duration

- Certificate Course: 01-year.
- : Diploma: 01-year.

:

.

: Advanced Diploma: 01-year.

1000/- per course/year.

Fee Structure

CERTIFICATE COURSE- FIRST YEAR	2	
Distribution of Papers	Hours	Credits
Theory: Paper 1- Medicinal and Aromatic Plants- 1	90 Hrs	06
Theory: Paper 2-Floriculture -1	90 Hrs	06
Paper 3. Practical and Field Work	120 Hrs	08
Total	300 Hrs	20
DIPLOMA COURSE- SECOND YEAR		
Distribution of Papers	Hours	Credits
Theory: Paper 1- Medicinal and Aromatic Plants- 2	90 Hrs	06
Theory: Paper 2-Floriculture- 2	90 Hrs	06
Paper 3. Practical and Field Work	120 Hrs	08
Total	300 Hrs	20

ADV	ADVANCED DIPLOMA COURSE- THIRD YEAR												
Ι	Distribution of Papers	Hours	Credits										
Theory: Paper 1-	Phytochemical application of crude drugs with special reference to Ayurveda.	90 Hrs	06										
Theory	r: Paper 2- Floriculture- 3.	90 Hrs	06										
Paper 3.	Practical and Field Work.	120 Hrs	08										
	Total												

Course offered: Mahatma Gandhi University, Kottayam with the affiliation of UGC.

- Centre : C M S College Kottayam, Kottayam, Kerala, India.
- Principal : Dr. Varghese C. Joshua.

Co-ordinator : Dr. Hari N. [Department of Botany].

Course Dimensions :

Course offered by Mahatma Gandhi University, Kottayam with the affiliation of UGC to enrich the students with a better career guidance along with their regular degree courses. The add-on course will not affect the regular curriculum, as the time schedule is from 09.00 am to 09.45 am and on Saturdays 10.00 am to 01.00 pm.

The well defined syllabus makes up the students to achieve a Certificate Course after completing one academic year, if they are willing to continue in the second year a Diploma Course certificate in Medicinal and Ornamental Plants will be issued; on third year an Advanced Diploma Course certificate in Medicinal and Ornamental Plants will be issued.

General outcome of the course(s) :

- Help to promote the need of cultivation and conservation of Medicinal and Ornamental plants.
- Help to provide basic training in medicinal and ornamental plants in tune with the Ayurvedic and floriculture practices.
- Help to aware the students about the quality of Ayurvedic products and to generate Ayurveda-based self employment opportunities.

Innovative practices fulfilled by this course(s):

- Training on propagation techniques such as Cutting and other vegetative parts, Seeds, Layering, Budding and Grafting were given.
- Training on different types of Fresh and Dry-flower arrangements was given.
- Training on preparation of herbarium of common medicinal plants and dried specimens were given.
- Conduct visits to medicinal plant garden in Ayurvedic industry/Botanical gardens.



1



Page 11 of 55

Diplemen.

Form B:

CAREER ORIENTED ADD-ON COURSES (Theory and Practical)

MARK SHEET-DIPLOMA

Name of the College: CMS COLLEGE, KOTTAYAM

Year:MARCH 2020



2018-2021 Batch

PAPER: 1 -MEDICINAL AND AROMATIC PLANTS -2

PAPER: 2 -FLORICULTURE – 2

PAPER: 3& 4- PRACTICALS AND FIELD WORK -2

Uni SL No.				TH	EORY			PRAC	TICAL						
	Reg. No.	Name of Candidate (s)	PAP Max: 10	ER: I 00 Marks	PAPER: 2 Max: 100 Marks		PAP Max: 8	ER: 3 0 Marks	PAPER: 4 Max: 80 Marks		Field visit/Reco rd/Project/	Viva- Voce	TOTAL Max	% of Marks	G R
			Continual Max 50 Marks	Written Max: 50 Marks	Continual Max 50 Marks	Written Max 50 Marks	Continual Max 10 Marks	Written Max: 70 Marks	Continual Max: 10 Marks	Written Max 70 Marks	Max 30 Marks	10 Marks	400 Marks		A D E
1	1133	ABIN T JOHN	48	37	48	37	10	66	9	59	30	10	354	88.5	A
2	1134	ABITHA JOSEPH	47	32	48	37	10	66	9	52	29	10	340	85	1
3	1135	AMAL PRASAD	50	43	50	43	10	69	10	63	30	10	378	94.5	A+

				b	- 10		2		the						175K	Tang?
	4	1136	ARUN CHANDRA BABU	60	42	50	45	10	66	9	55	29	10	366	91.5	A+
	5	1137	ASHNA NAZAR	50	41	50	43	10	70	10	57	30	10	371	92.75	A+
	6	1138	AVANI SHIBU	48	38	46	34	10	65	10	58	30	9	348	87	A
	7	1139	CHANDANA KRISHNA	47	32	46	27	9	64	8	49	29	9	320	80	A
	8	1140	HARIKRISHNAN K.S	49	46	46	35	9	62	9	50	28	8	342	85.5	Α
	9	1141	JIBIN SHAJI	47	33	49	40	9	61	9	51	29	8	336	84	A
	10	1142	MARTINA MARIA SONY	50	43	50	44	10	68	8	49	29	10	361	90.25	A+
	11	1143	MEGHA S	50	50	50	50	10	70	10	70	30	10	400	100	A+
	12	1144	RUBY MOL BABY	45	28	44	25	9	57	9	57	28	8	310	77.5	B+
	13	1145	SANDRA	50	41	48	35	10	66	9	54	30	10	353	88.25	A
	14	1146	SREEEJITH H	50	44	46	33	10	65	9	58	29	10	354	88.5	A
1	15	1147	SREELAKSHMI S	48	36	50	43	10	68	10	61	30	10	366	91.5	A+
1	6	1148	V.G ATHULIA	47	32	50	40	10	67	8	48	29	9	340	85	A
1	7	1149	VIDYA T . K	47	40	47	37	8	49	8	48	28	8	320	80	A
1	8)	1150	VIJAY P. BIJU	47	36	44	36	0	ABSE NT	0	ABSE	0	-	163	40.75	NQ
19	>	1151	ZAIRA SAFEER	50	45	50	44	10	67	10	70	30	10	386	96.5	A+
20		1152	ABHINAND V	50	45	50	43	10	68	10	62	30	10	378	94.5	A+
21		1153	AHALYA REGHUNATH	50	43	46	35	10	67	10	60	29	9	359	89.75	A

×

AC

2	2 1154	AKASH SURENDRAN	45	29	46	29	10	65	9	55	29	8	325	81.25	A
2	3 1155	ALEESHA RACHEL ISSAC	45	26	48	37	10	59	10	61	29	8	333	83.25	A
2	1 1156	ANJALI M KAMMATH	50	40	50	46	10	68	10	70	30	10	384	96	A+
2	5 1157	ANJIMA PRAKASHAN	48	36	48	36	9	63	10	62	34	9	355	88.75	A
20	, 1158	ARDRA K P	47	32	48	38	10	64	9	57	30	9	344	86	A
2	, 1159	ATHUL LATHA JACOB	48	36	50	46	10	68	10	69	30	10	377	94.25	A+
28	1160	BHAGYA SATHEESH	47	33	44	25	9	68	8	46	28	8	316	79	B+
29	, 1161	DEON SAJAN	48	37	48	37	9	60	9	55	29	9	341	85.25	A
3) 1162	EMIL CHACKOCHAN	47	32	46	33	10	62	9	50	29	10	328	82	A
3	1163	FARISA HARIS A	50	49	50	42	10	70	10	70	30	10	391	97.75	A+
32	1164	GOKUL K V X	-	ABSENT	-	ABSENT	0	ABSENT	0	ABSENT	0	-	0	0	NQ
33	1165	GOKUL RAJ	49	50	49	42	0	ABSENT	0	ABSENT	0	-	190	47.5	NO
34	1166	JIYA GEORGE	-	ABSENT	-	ABSENT	0	ABSENT	0	ABSENT	0	-	0	0	NO
35	1167	KRISHNA V ROY	50	49	50	43	10	70	10	70	30	10	392	98	A
36	1168	PARVATHY M	50	40	48	36	10	68	9	56	29	10	356	89	A
37	1169	PREMHARI V 🗙		ABSENT	-	ABSENT	9	63	9	52	28	8	169	42.25	N
38	1170	SREEKUTTY P R	50	43	46	34	10	60	10	66	30	10	359	89.75	A
39	1171	SRUTHILAKSHMI	50	44	50	42	10	68	10	62	30	10	376	94	A
		JATADIMINU	- Second Section			-									

3

1					1											
	40	1172	VEENA REJI	50	45	50	43	10	67	10	67	30	10	382	95.5	A+
	41	1173	VIPIN GOPAL	50	12	10		10		10		20	10	272	02.25	
ŀ				50	43	48	36	10	68	10	68	30	10	3/3	93.25	A+
	42	1174	ROHAN JOHN		ABSENT		ADSENT	0		0	ABSENT	0	-	0	0	TC
F							ABSENT		ABSENT		TIDOLITI					
	43	1175	SOORAJ P S	50	46	50	44	10	58	10	62	29	9	368	92	A+
						-										1

Name and Signature of the Co-ordinator

(College Seal)



Name and Signature of

PRINCIPAL C.M.S COLLEGE KOTTAYAM

4

Form B:

CAREER ORIENTED ADD-ON COURSES (Theory and Practical)

Ad. Diplonen

MARK SHEET-ADVANCED DIPLOMA

Name of the College: CMS COLLEGE, KOTTAYAM

18: 1H Parte

1.4

Year: MARCH 2020

A HILL MARTINE TO THE ASS

2017-2020

OTTAYAN

	PAPER: 1 -MEDICINAL AND AROMATIC PLANTS -3
	PAPER: 2 -FLORICULTURE -3
1	PAPER:3 - MEDICINAL AND AROMATIC PLANTS - III & FLORICULTURE - III

				THE	EORY		PRAC	TICAL				G R A D E
Uni SL	Reg.	Name of Candidate (s)	PAP Max: 10	ER: 1 0 Marks	PAP Max: 10	ER: 2 0 Marks	PAP Max: 1	ER: 3 70 Marks	Field visit/Record /Project Report/Vis	TOTAL Max	⁹ e of Marke	
No.			Continual Max 50 Marks	Written Max 50 Marks	Continual Max 50 Marks	Written Max 50 Marks	Continual Max 20 Marks	Written Max 150 Marks	a voce (s) Max 30 Marks	Marks	Hains	
1	1085	ABHIDHA YOUSEF	49	39	48	30	20	121	15	322	80.5	A
2	1086	ABHIRAMI S ANIL	49	35	48	31	19	113	20	315	78.75	B+
3	1087	ANAGHA THAMPI	49	38	48	31	20	137	30	353	88.25	A
4	1088	ARJUN OMANAKUTTAN	50	43	49	39	20	131	15	347	86.75	A

	5 1089	9 ASHNA M SHAJI	50	44	50	44	20	132	86 030	370	92.5	A+
(, 1090	ATHILA AKBAR	49	36	48	32	20	114	25	323	80.75	Α
7	1091	ATHIRA PRASAD	50	41	48	31	20	121	20	331	82.75	A
8	1092	ATHIRA RAVIKUMAR	48	32	48	31	20	138	25	342	85.5	А
9	1093	ATHIRA S	48	34	47	25	20	140	30	344	86	A
10	1094	AYSHA BEEVIK S	50	41	50	40	20	144	30	375	93.75	A+
11	1095	BINUJA B	50	40	48	32	20	125	20	335	83.75	A
12	1096	DEVIKA M M	50	42	49	38	20	113	25	336	84	A
13	1097	FATHIMA YOONS	50	40	50	40	20	121	15	336	84	А
14	1098	GLADIS JOHN	50	40	49	36	20	113	20	327	81.75	A
15	1099	GLORIS JOSEPH	48	30	48	34	20	143	20	343	85.75	Α
16	1100	HARI K	48	33	47	29	20	120	15	312	78	B+
17	1101	HELNA SARA JEBU	48	32	48	30	20	112	20	309	77.25	B+
18	1102	JENEFA S J	49	38	50	44	20	141	20	362	90.5	A+
19	1103	K AGNES MARIA	49	36	49	39	20	127	30	350	87.5	A
20	1104	KEERTHANA V	50	42	49	38	20	133	30	362	90.5	A+
21	1105	AJAL THOMAS	48	33	49	38	20	113	25	325	81.25	A
22	1106	ANANDU ANILBABU	49	37	47	25	20	111	25	313	78.25	B+
23	1107	ANASWARA K ANIL	50	40	47	28	20	110	25	319	79.75	B+
Martin Cont	the way and and the			the state of the second state		1						

de.

2	4 1108	3 ANGEL AKKEENA JAMES	47	27	46	21	20	97 KOTTAY	15	270	67.5	в
2	5 1109	ANJANA E S	50	44	50	42	20	129	30	365	91.25	A+
20	, 1110	DENNA SUSAN JACOB	50	45	50	42	20	145	30	382	95.5	A+
27	, 1111	FEBAKUTTY VARGHESE	50	41	50	41	20	120	30	352	88	A
28	1112	GREESHMA MADHU	50	40	49	37	20	102	15	311	77.75	B+
29	1113	HONEY MARIYA JOHN	49	36	47	29	20	112	20	312	78	B+
30	1114	JEENA JANIKUMAR	49	36	47	26	20	140	15	333	83.25	Α
31	1115	KELSEY ROSE CHRISTDAS	49	36	49	39	20	144	20	357	89.25	Α
32	1116	KESIYAMOL JOSEPH	48	31	46	24	20	102	15	284	71	B+
33	1117	LAKSHMI AJITH	49	38	49	37	20	125	20	338	84.5	A
34	1118	M SWATHIKRISHNA	50	45	50	46	20	143	30	384	96	A+
35	1119	NEJILA NOUSHAD	49	36	49	38	20	111	15	317	79.25	B+
36	1120	POOJA J	48	34	50	40	20	112	30	333	83.25	A
37	1121	REEMA MATHEW	50	43	48	32	20	101	20	312	78	B+
38	1122	REMYA RAMESH M	48	31	47	28	20	119	25	317	79.25	B+
39	1123	SNEHA M JOHNSON	48	31	48	33	20	124	25	329	82.25	A
40	1124	SREELAKSHMI J PILLAI	50	41	50	44	20	133	25	363	90.75	A+
41	1125	ANN MERIN REJI	49	39	49	37	20	126	20	340	85	A
42	1126	GITTY MERIN GEORGE	48	31	48	33	20	147	25	352	88	A

A DESCRIPTION OF A DAY AND A DAY

....

K.

43	1127	KIRAN BOSE P B	47	26	48	30	20	126	20	317	79.25	B+
44	1128	RAHUL PRASAD	48	30	50	40	20	131	20	339	84.75	A
45	1129	REENLY PETER	48	32	50	41	20	120	25	336	84	A
46	1130	SABIN BABU	48	32	48	31	20	125	20	324	81	A

Dr. Hari. 1

NT OF

KOTTAYAM 686 001 Name and Signature of the Co-ordifatorordinator JGC Sponsored Add-on-course Dept. of Botany CMS College, Kottayam



Name and Signature of Principal

PRINCIPAL C.M.S COLLEGE KOTTAYAM

Corliptute

Form B:

CAREER ORIENTED ADD-ON COURSES (Theory and Practical) (CERTIFICATE)

MARK SHEET

Name of the College: CMS COLLEGE, KOTTAYAM

Year: MARCH 2020

2019-2022 Batch, -

PAPER: 1 -MEDICINAL AND AROMATIC PLANTS -1 PAPER: 2 -FLORICULTURE - 1 PAPER: 3- PRACTICALS AND FIELD WORK-I

		eg. o. Name of Candidate (s)	THEORY				PRACTICAL					1		
Un SL No.	i. Reg. No.		PAPER: 1Max: 100 Marks		PAPER: 2Max: 100 Marks		PAPER: 3Max: 80 Marks		PAPER: 4Max: 80 Marks		Project/Repo	TOTAL		G
			Continual	Written	Continual	Written	Continual	Written	Continual	Written	rt (s): Max. 40 Marks	Max: 400 Marks	% of Marks	R A
			Marks	Max: 50 Marks	Max 50 Marks	Max: 50 Marks	Max: 10 Marks	Max: 70 Marks	Max: 10	Max: 70			24	D E
1	1176	AKSHAYAMOL V R	44	22	48		0		Marks	Marks		44 44.8		
2	1177	BIJIMOL SURENDRAN	44	- 22		31	9	22	8	41	39	297	74.25	
3	1170	BINUA BINU		23	46	29	8	44	8	49	39	290	70.5	B+
-	1178	F SC/ST P	44	23	46	28	9	54	8	11		270	12.5	B+
4	1179	DIYA HARIS	46	26	46	26	9	- 54		44	40	296	74	B+
5	1180	DONA MOL P S	46		16	20		53	8	46	40	300	75	B+
6	1181	GOPIKA KRISHNAN	10	27	40	28	8	41	8	45	38	287	71.75	
	1101	FGIR	48	31	48	33	7	37	8	49	10	207	11.75	B+
	1182	FOECR	49	34	50	11	10	57	10	17	40	301	75.25	B+
8	1183	NEENA BENNY	50		46	44		60	10	70	40	367	91.75	
		FOIR		40		29	8	40	8	44	40	305	76.25	A+
												505	10.25	B+

ertificate Course Marcin - 205

0

2

2

	1 1101	RENIMOL P.P.	1 1 1									-			
-	1184	FOECR	44	25	46	30	7	39	8	44	38	284	70.25	B+	1
1	0 1185	F. SC/STR	44	24	46	30	7	37	8	43	33	272	68	В	
1	I 1186	ABHITHALEKSHMI P V FOBE R	48	31	46	28	8	42	8	45	34	290	72.5	B+	
12	2 1187	AKSHAY THANKACHAN M SC/S T R	45	35	47	44	7	39	7	35	37	296	74	B+	
13	1188	F G R	46	27	46	27	10	68	9	54	40	327	81.75	A	
14	1189	ALWIN JOSE MGTR	0	ABSENT	0	ABSENT	0	ABSENT	0	ABSENT	0	0	0	NQ	-
15	1190	AMIN MAKARANTH	44	29	44	32	8	45	8	43	38	291	72.75	B+	-
16	1191	ANANDHU CHANDRABOSE M SC/STR	44	29	45	36	8	49	8	46	36	301	75.25	B+	
17	1192	ANANDHU KOCHUMON	46	26	45	26	10	63	9	54	38	317	79.25	B+	
18	1193	ANCY MOSES	46	27	46	31	7	34	8	45	38	282	70.5	B+	-
19	1194	ANUSREE VINOD T N FOFCR	48	32	46	28	9	52	10	60	40	325	81.25		
20	1195	BLESSY B MARIYA	46	28	46	27	9	53	9	53	40	311	77.75	D.	
21	1196	CHRISTY JOHNSON MOECR	44	24	44	24	0	ABSENT	0		0	136	34	NQ	-
22	1197	FORCR X	0	ABSENT	0	ABSENT	0	26	8	46	38	118	29.5	NQ	-
23	1198	GISALA SIBY	44	26	46	29	8	42	8	49	35	287	71.75	Di	
24	1199	HEZMINA GHEZAKIEL	49	31	49	34	10	61	10	63	40	347	86.75	B+	
25	1200	HRUDYA SUNIL	46	30	50	40	10	66	9	54	40	345	86.25	A	
26	1201	JINSA ELIZABETH VARGHESE	44	24	48	35	10	61	10	63	40	335	83.75	A	
25 26	1200 1201	HRUE F JINSA F GT	PYA SUNIL PYA SUNIL ELIZABETH RGHESE R	PYA SUNIL 46 7 R ELIZABETH 44 RGHESE 44 R	PYA SUNIL 46 30 ELIZABETH 44 RGHESE 24	PYA SUNIL 46 30 50 ELIZABETH 44 48 RGHESE 24	DYA SUNIL 46 30 50 40 CYA SUNIL 46 30 50 40 ELIZABETH 44 48 35 RGHESE 24 35 35	ASTR 46 30 50 40 10 OYA SUNIL 46 30 50 40 10 ELIZABETH 44 48 10 10 RGHESE 24 35 10	DYA SUNIL 46 30 50 40 10 66 CYA SUNIL 46 30 50 40 10 66 ELIZABETH 44 48 10 61 RGHESE 24 35 61	ASTR 46 30 50 40 10 66 9 OYA SUNIL 46 30 50 40 10 66 9 ELIZABETH 44 48 10 61 10 10 RGHESE 24 35 61 10 10 10	LAST R 46 30 50 40 10 61 60 OYA SUNIL 46 30 50 40 10 66 9 54 ELIZABETH 44 48 10 10 66 9 54 RGHESE 24 35 61 10 63	LAST K BT BT	LAST R 46 30 50 40 10 61 60 40 347 OYA SUNIL 46 30 50 40 10 66 9 54 40 345 ELIZABETH 44 48 10 61 10 63 40 335 RGHESE 24 35 61 10 63 40 335	LAST K Box Box	LAST K Image: Stress of the

to.

27	1202	JITHIN K THANKACHAN	49	31	48	38	8	42	0	ABSEN T	20	236	59	NQ
28	1203	KRIPA SUSAN THOMAS	47	30	48	38	10	66	9	53	40	341	85.25	A
29	1204	PRAISY SUSAN PRASAD	44	24	46	34	9	58	9	58	40	322	80.5	A
30	1205	PREGEERTHANA T P	46	29	46	34	10	69	10	67	40	351	87.75	A
31	1206	RESA DIYA TITUS	48	32	46	33	8	47	7	38	39	298	74.5	B+
32	1207	SAYANORA SAJI E BECR	48	34	48	36	10	64	9	59	40	348	87	A
33	1208	SINDOORA SABU	40	43	50	48	10	70	10	69	40	380	95	A+
34	1209	SONA ACCAMMA VARGHESE	46	27	48	35	7	32	10	62	39	306	76.5	B+
35	1210	VISMAYA ELIZEBETH FG74	48	31	50	46	8	43	9	54	39	328	82	A

Name and Signature of the Co-ordinator

(College Seal)



Name and Signature of cib

PRINCIPAL C.M.S COLLEGE KOTTAYAM

3