## MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM STUDENT ENROLMENT LIST

Name of department : Chemistry

Name of course : Basics of Food Chemistry (2019-20)

SI	No. Name of Student	Signature
1	AJAYR .	A
2	AMAL A R NAIR	That
3	ANJITHA S	Sin
4	ANJU U	
5	ANUSUDHAN U	-Am
6	ARUN KUMAR U	
7	ASHNA S	A
8	ATHIRA G	Direction
9.	JANNATHUL ALIYA B	- A-
10	JYOTHIMOL A J	Fond
'11	KAVYA M	atomy
12	KRISHNA PRIYA S B	
13	SHEHINA S	Chehina
14	SREELEKSHMI R N	8PA -
15	VIDHYARAJ K R	1 de
16	AISWARYA RAGHU	augul
17	ANJANA P.B	Morsk
18	ARYA M S	Carp
19	GAYATHRI LAL	don'
20	KARTHIKA B	do
21	KAVYA S K	Whom
22	MANUDAS T	14
23	MAYA DEVI B	100
24	MIDHUN M	Do
25	PARVATHY G	12
26	PRANAV S PRASAD	The China
27	PREETHYMOL R	Tocal Control
28	RESHMA R	
29	SAHALA SALIM	112
30	SREELEKSHMI RU	100
31	ADARSH T U	A.d.
32	ADITHYA M	A
33	AKHILA B	710
34	ANAGHA ANIL A	013
		DE R PRAK

	TANAKHA A L	
[35	· ANJANA KRISHNAN	10
36	ANJITHA MOHAN .	777
37	ASHIKA A P	Anista
39	ASWATHY B	-Asonta
40	ATHIRA NANDAN	Achy
41	ATHIRA G M	-Ar
42	CHANDRUS S KURUP	Hum
43	DEVIKA M S	chardrais
44	NOUFIYA M	Darka
45	RAVI SANKAR D	and:
46	S LEKSHMI	Davi.
47	SAIFA BEEGAM P N	Lechi
48	SHANS	bfs
49	. AARCHA NAIR V S	- Chan
	ABHIRAMI S	Azita
50		-470
51	AKHILA A	athia
52	ANAGHA B S	Ingn
53	ANJANA N NAIR	Anchi
54	ANJITHA A S	trys
55	ANUPAMA M S	Arm
56	ARDHRA S	A5.
57	HARI KRISHNAN R	thin.
	HISANA UMMARUDEEN	
58	HRIDYA K G	- CS
5.9	KRISHNA RANGANATH	30/
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Sjan, h.

Dr. SYAM KRISHNAN K.

Assistant Professor

Department of Chemistry

MMNSS College Kottiyam

Dr. R. PRAKASH CHANDRAN
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## **Basics of Food Chemistry**

#### Module 1

Introduction: importance of Food chemistry and food industry

Various Food additives: preservatives, anti-oxidants: sequestrants, nutrient supplement, emulsifiers, stabilizers and thickening agents, bleaching and maturing agent, humectants and anti-caking agents commonly used permitted and nonpermitted food colours

Artificial sweeteners-taste enhancers such as MSG

#### Module 2

Health effects of fast foods, instant foods, dehydrated foods and junk foods- Problems associated with trans fat

#### Module 3

Food laws and regulation in India

Laws governing food industry, key regulations of FSSA, Requirements and benefits of food grades and standard- BIS, AGMARK, ISI, FPO, CAC

Types of adulterants- intentional and incidental adulterants: Health hazards. Common food adulterants

Adulterants in milk, ghee, oil, coffee powder, honey, tea, asafoetida, chilli powder, pulses and turmeric powder - identification

#### **Objectives**

- 1. To Familiarize students the importance of food chemistry & food industry
- 2. To improve the analytical skill of students

## **Learning Outcomes**

- Understand the basics of Food chemistry
- 2. Realise the adverse health effects of fast food as the youth are more inclined toward
- 3. Familiarize the common adulterants in food and their detection

course co-condinated (

Department of Chemistry MMNSS College Kottiyam

Dr. R. PRAKASH CHANDRAN Head, Dept. of Chemistry M M N.S.S. College, Kottiyam - 691571

### **Basics of Food Chemistry**

#### Course Schedule and topic of discussion

Data	Time	Topic	
Date	Time	Nur	nber nours
15/06/2019 Saturday	10 am-1 pm 1.45 to 3.45 pm	Introduction: importance of Food 5h chemistry and food industry Various Food additives: preservatives, anti-oxidants: sequestrants, nutrient supplement	
22/06/2019 Saturday	10 am-1 pm 1.45 to 3.45 pm	Food additives: emulsifiers, stabilizers and thickening agents, bleaching and maturing agent, humectants and anticaking agents commonly used permitted and nonpermitted food colours  Artificial sweeteners-taste enhancers such as MSG	h
29/6/2019 Saturday	10 am to 1 pm	Health effects of fast foods, instant foods, dehydrated foods and junk foods- Problems associated with trans fat	3h
6/7/2019 Saturday	10 am-1 pm 1.45 pm to 3.45 pm	Food laws and regulation in India Laws governing food industry, key regulations of FSSA, Requirements and benefits of food grades and standard- BIS, AGMARK, ISI, FPO, CAC	
20/7/2019 Saturday	10 am-1 pm	Types of adulterants- intentional and incidental adulterants: Health hazards Common food adulterants and their detection	
23/7/2019 Tuesday	3.15 pm to 4.45 pm	Seminar by students	1h 30 min
24/7/2019 Wednesday	3.15 pm to 4.45 pm		1h 30 min
27/7/2019 Saturday	9 am to 12 pm & 12.30 pm to 3.30 pm (two batches)	Adulterants in milk, oil, honey, to asafoetida, chilli powder, and turme powder - identification	ea,   3h ric   (Practical
3/8/19 Saturday	9 am to 12 pm & 12.30 pm to 3.30 pm (two batches)	Final exam and feedback	3h

Dr. SYANI KILISHNAN K.

Assistant Professor

Department of Chemistry

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Dr. R. PRAKASH CHANDRAN
Head, Dept. of Chemistry
M.M.N.S.S. College, Kottiyam
chandranprakash

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# Department of Chemistry, MM NSS College, Kottiyam Add on Course (2019-20)

## **Basics of Food Chemistry**

Each Question carries 4 marks each  $(4 \times 10 = 40)$ 

Total marks-40

Time: 2h

- 1. Write a note on preservatives
- 2. What are anti-oxidants?
- 3. Write a note on artificial sweeteners
- 4. What are the health effects of fast food?
- 5: Write a note on trans fat
- 6. Explain the various food laws
- 7. What is meant by BIS, AGMARK, ISO?
- 8. Write a note on the various food adulterants
- 9. How will you determine the adulterants in ghee and honey
- 10. Suggest suitable methods for the determination of adulterants in milk and chilly powder

#### **Practical Examination**

20 Marks

Time: 2h

Analyze the following sample (with ✓ mark)

Milk Chilly powder Turmeric powder Honey

Dr. R. PRAKASH CHANDRAN

Head, Dept. of Chemistry

Head, College, Kottiyam - 691571

## MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM **END COURSE EVALUATION**

Name of department : Chemistry

Name of course

: Basics of Food Chemistry (2019-20)

Duration of Exam: 2h Theon + 2h practical

Total Marks: 60

Sl No	Name of Student	Marks Obtained
1	AJAY R	51
2	AMAL A R NAIR	48
3	ANJITHA S	56
4	ANJU U	58
5	ANUSUDHAN U	55
6	ARUN KUMAR U	49
7	ASHNA S	52
8 .	ATHIRA G	59
9	JANNATHUL ALIYA B	41
10	JYOTHIMOL A J	116
11	KAVYA M	52
12	KRISHNA PRIYA S B	59
13	SHEHINA S	50
14	SREELEKSHMI R N	39
15	VIDHYARAJ K R	47
16	AISWARYA RAGHU	53
17	ANJANA P B	59
18	ARYA M S	57
19	GAYATHRI LAL	14-2
20	KARTHIKA B	5
21	KAVYASK	31
22	MANUDAS T	52
23	MAYA DEVI B	38
24	MIDHUN M	43
25	PARVATHY G	42
26	PRANAV S PRASAD	5 100
	PREETHYMOL R	50
27	THE STANDAR	
28	RESHMA R SAHALA SALIM	Dr. R. PRAKASH
20	SAHALA OI	Dr. R. PRANASI

30	SREELEKSHMI RU	53
31	ADARSH T U	14.6
32	ADITHYA M	4.5
33.	AKHILA B	52
34	ANAGHA ANIL A	51
35	ANAKHA A L	4.9
36	ANJANA KRISHNAN	49
37	ANJITHA MOHAN	44
38	ASHIKA A P	56
39	ASWATHY B	51
40	ATHIRA NANDAN	48
41	ATHIRA G M	53
42	CHANDRUS S KURUP	44
43	DEVIKA M S	56
44	NOUFIYA M	54
45	RAVI SANKAR D	42
46	S LEKSHMI	28
47	SAIFA BEEGAM P N	92
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5	ANIANA NI NAIR	<del>10</del>
5	J I I I I I A A S	56
	ANUIDAMA M S	42
<u> </u>	A PDHRA S	40
4	- I KDISHNAN R	41
	HARI KRISTIN III.	54
	JOYA K G	118
	60 KRISHNA RANGANATH	70
.	60 KRISHNA KANO	

Number of Students enrolled:

60

Number of Students completed: Assistant Professor

Department of Chemistry
MMNSS College Kottiyam

Dr. R. PRAKASH CHANDRAN Head, Dept. of Chandran M.M.N.S.S. College: For your chandranpr. Congregation

	- T-	onic Num	i
Date	Time	opic of ho	ours
		-traduction: importance of Food 5h	
15/06/2019	10 am-1 pm	ntroduction: Importance of 1999	
Saturday	- 45 10	chemistry and food industry Various Food additives: preservatives,	
Julian		anti-oxidants: sequestrants, nutrient	
T 1 - 1		runnlement	
		Food additives: emulsifiers, stabilizers   5 n	
22/06/2019	10 8111 2 5111	and thickening agents, bleaching and	
Saturday	1.45 to 5/15	maturing agent, humectants and and	
		caking agents commonly used permitted	1
		and nonpermitted food colours  Artificial sweeteners-taste enhancers	
			1
BHE Z & T		such as MSG	
		Health effects of fast foods, instant	3h
29/6/2019	10 am to 1 pm	foods, dehydrated foods and junk 10003-	
Saturday		Problems associated with trans fat	1
		Food laws and regulation in India	5h
6/7/2019	10 am-1 pm	laws governing food industry, key	
Saturday	1.45 pm to 3.45 pm	and the state of FSSA. Requirements and	1
	1.00	benefits of food grades and standard	
		BIS, AGMARK, ISI, FPO, CAC	1
			3h
	10 am 1 nm	Types of adulterants- intentional and	3"
20/7/2019	10 am-1 pm	l adulterants: Health Hazerus	. 1
Saturday		Common food adulterants and their	.
		detection	1h 30 min
	45.00	- donte	11130
23/7/2019	3.15 pm to 4.45 pm		1h 30 min
Tuesday	1.45.00	n Seminar by students	111 30 111111
24/7/2019	3.15 pm to 4.45 pr		25
Wednesday		Adulterants in milk, oil, honey, to	ea,   3h
27/7/2019	9 am to 12 pm	a sile shill nowder, and turns	ric (Practical)
Saturday	& 12.30 pm to 3.3	l dontification	
Saturday	pm (two batches)	powder - Identification	
			3h
- 12.12.2	9 am to 12 pm	Final exam and feedback	
3/8/19	& 12.30 pm to 3.3	30	
Saturday	pm (two batches)		
	pin (two bates)		

Dr. SYAMI A LISHNAN R Assistant Professor Department of Chemistry MMNSS College Kottiyam

Dr. R. PRAKASH CHANDRAN

Head, Dept. of Chemistry

M.M.N.S.S. College, Kottiyain

chandranprakashin and

## Department of Chemistry, MW NSS College, Kottlyam

## Add on Course (2019-20)

## Basics of Food Chemistry

Each Obestion carries 4 marks each  $(4 \times 10 = 40)$ 

#### Total marks-40

Time 25

- Write a note on preservatives
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- 8. Write a note on the various food adulterants
- How will you determine the adulterants in ghee and honey
- 10. Suggest suitable methods for the determination of adulterants in milk and chilly powder

#### Practical Examination

20 Marks

Time: 2h

Analyze the following sample (with ✓ mark)

Milk Chilly powder Turmeric powder Honey

Dr. R. PRAKASH CHANDRAN
Head, Dept. of Chemistry
or U.N.S. S. College, Kottiyam - 691571

## WANNAM MEMORIAL NSS COLLEGE, KOTTIYAM **END COURSE EVALUATION**

Name of department : Chemistry

Name of course

: Basics of Food Chemistry (2019-20)

Duration of Exam: 2h Theom + 2h Practical

Total Marks: 60

Sl No	Name of Student	Marla Ol e i I
1	AJAY R	Marks Obtained
2	AMAL A R NAIR	51
3 .	ANJITHA S	48
4	ANJU U	56
5	ANUSUDHAN U	17
6	ARUN KUMAR U	149
7	ASHNA S	52
8 .	ATHIRA G	54
9 -	JANNATHUL ALIYA B	59
10	JYOTHIMOL A J	41
11	KAVYA M	46
12	KRISHNA PRIYA S B	52
13	SHEHINA S	59
14	SREELEKSHMI R N	50
15	VIDHYARAJ K R	39
16	AISWARYA RAGHU	47
17	ANJANA P B	53
18	ARYA M S	59
19	GAYATHRI LAL	57
20	KARTHIKA B	42
21	KAVYA S K	5.
22	MANUDAS T	37
23	MAYA DEVI B	52
24	MIDHUN M	38
25	PARVATHY G	43
	PRANAV S PRASAD	42
26	PREETHYMOL R	2 110
27	RESHMA R	150
28	SAHALA SALIM	56
29	SANALA O' LE	- B BRAKASH

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Head, Dept. of Chemistry
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M.M.N.S.S. College, Kott yam - 691571 -handranprakash@www.com

30	SREELEKSHMI RU	
31	ADARSH T U	52
32	ADITHYA M	15.6
33	AKHILA B	45
34	ANAGHA ANIL A	52
35	ANAKHA A L	51
36	ANJANA KRISHNAN	4-9
37	ANJITHA MOHAN	49
38	ASHIKA A P	44
39	ASWATHY B	56
40	ATHIRA NANDAN	110
41	ATHIRA G M	F 2
42	CHANDRUS S KURUP	41
43	DEVIKA M S	56
44	NOUFIYA M	54
45	RAVI SANKAR D	42
46	S LEKSHMI	58
47	SAIFA BEEGAM P N	52
48	SHAN S	45
49	AARCHA NAIR V S	46
50	ABHIRAMI S	36
51	AKHILA A	49
52	ANAGHA B S	53
53	ANJANA N NAIR	48 58
54 '		20
55	ANUPAMA M S	42
	ARDHRA S	40
56	LIADI KRISHNAN R	41
57	HISANA UMMARUDEEN	54
58	LIDIDYA K G	48
59	KRISHNA RANGANATH	48
10	KRISHIVATVITO	

Number of Students enrolled:

60

60

Number of Students completed:

EDP. SYAM KRISHNAN K.

Assistant Professor
Department of Chemistry
MMNSS College Kottiyam

M.M.N.S.S. College: Konya Chandranprocessing gmail.com

## **Basics of Food Chemistry**

#### Report

The add on course "Basics of food Chemistry" was offered to the first-year and second year students of BSc Chemistry (2019-20 batch). The course duration was 30 h and the classes were arranged either on evenings or on Saturdays. The course comprised of 20 h theory and 4 h practical. A session was allotted for seminar presentation by students (3h). The course concluded with the final examination Feedback

Students were impressed by the course content. Their feedback was extremely positive. All of them opined that they were able to understand something new and relevant out of their curriculum.

Dr. SYAM ABSISTANT Professor

Department of Chemistry
MMNSS College Kottiyam

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