

Sree Narayana College

Chengannur

Affiliated to University of Kerala
NAAC accredited with Grade B

CERTIFICATE COURSE ON FOOD CHEMISTRY



Course coordinator: Mrs. Neetu Pradeep
Assistant Professor
Department of Chemistry
SN College Chengannur

Contact Number: 8281797929

ORGANISING COMMITTEE

SRI. VELLAPPALLY NADESAN

(PATRON)

MS. SHEREEN K. (PRINCIPAL IN

CHARGE)

DR. SMITHA SASIDHARAN

(IQAC COORDINATOR)

MS. NEETU PRADEEP

(COORDINATOR, CERTIFICATE

COURSE)

DR. VENU S.

(HEAD, DEPARTMENT OF

CHEMISTRY)

DR. JISHA SREEDHARAN

DR. ANJU K.S.

DR. RESHMI R.

Sree Narayana College, Chengannur, named after the great social reformer Sree Narayana Guru, is a major centre for higher education to the rural community in the vicinity. The college was established in 1981. The vision of our College is to provide 'Liberation through Education' and 'Enlightenment through Education'. The college offer five undergraduate and three post graduate courses.

The Post Graduate Department of Chemistry ever since its establishment remains one of the major departments of the college, which offers high quality teaching. The department is equipped with a wide range of facilities to aid the students to do well in their performance. We cordially invite the interested undergraduate and post graduate students to join the Certificate course on 'Food Chemistry' implemented by the Post Graduate Department of Chemistry in association with IQAC, S N College Chengannur.

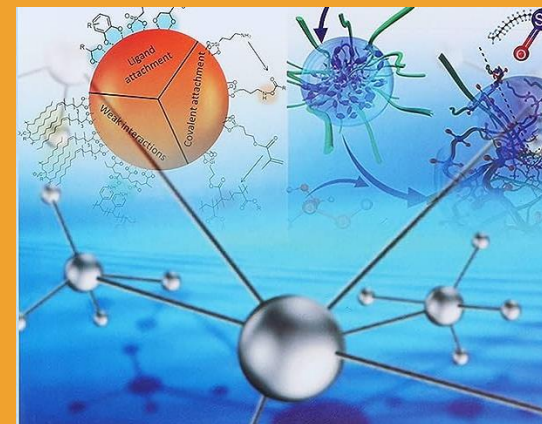
The certificate course "Food Chemistry " focuses on a general introduction to food science and nutrition, and particularly gives importance to the chemistry aspects of different kinds of foods. Food chemistry is an interdisciplinary subject which encompasses some of the basic and advance science subjects like chemistry, biochemistry, botany, microbiology, nutritional science, biotechnology and molecular biology. The course mainly deals with chemical composition of foods, basic biomolecules, chemical structure and the properties of food constituents. It also covers the chemical changes of food during processing and storage.

COURSE DETAILS:

- **THE COURSE IS OPENED TO ALL POST GRADUATE AND UNDERGRADUATE STUDENTS**
- **COURSE DURATION: 33 HOURS [THEORY (27 HOURS), PRACTICAL (6 HOURS)]**
- **COURSE FEES: RS. 250/-**
- **ASSESSMENT: ASSIGNMENT AND MCQ**

Sree Narayana College Chengannur, Alappuzha

(Affiliated to University of Kerala NAAC accredited with 'B' Grade)



POST GRADUATE DEPARTMENT OF CHEMISTRY

ORGANISING COMMITTEE

- SRI.VELLAPPALLY NADESAN (PATRON)
- MS.SHEREEN K.(PRINCIPAL IN CHARGE)
- DR.SMITHA SASIDHARAN
(IQAC COORDINATOR)
- Smt.NEETU PRADEEP
(COURSE COORDINATOR)
- DR.VENU.S
(HEAD, DEPARTMENT OF CHEMISTRY)
- DR.JISHA SREEDHARAN
- DR.ANJU.K.S
- DR.RESHMI.R

Certificate Course on “FUNDAMENTALS OF POLYMER SYNTHESIS AND CHARACTERISATION TECHNIQUES ”

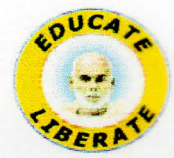
- COURSE DETAILS
- THE COURSE IS OPENED TO ALL PG & UG STUDENTS
- COURSE DURATION: 30Hrs (THEORY-24Hrs & PRACTICAL-6Hrs)
- COURSE FEE:Rs.250/-
- ASSESSMENT:ASSIGNMENT AND MCQ

Course Coordinator:
Smt.Neetu Pradeep
Assistant Professor
Department of Chemistry
S.N.College, Chengannur
Contact:8281797929

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The Post Graduate Department of Chemistry ever since its establishment remains one of the major departments of the college, which offers high quality teaching. The department is equipped with a wide range of facilities to aid the students to do well in their performance. We cordially invite the interested undergraduate and post graduate students to join the Certificate course on '**Fundamentals of Polymer Synthesis and Characterization Techniques**' implemented by the Post Graduate Department of Chemistry in association with IQAC, S N College Chengannur.

The certificate course "**Fundamentals of Polymer Synthesis and Characterization Techniques**" is likely to be a valuable asset for anyone who is interested in a career in the polymer industry. The course will provide students the opportunity to network with professionals in the polymer industry. This can be helpful in finding a job or internship after graduation. Polymer science characterization will give you a competitive edge in the job market. Many employers are looking for candidates with specialized knowledge and skills in polymer characterization. This includes using a variety of analytical techniques, such as spectroscopy, microscopy, and rheology. These skills will be valuable in a variety of careers in the polymer industry.



Sree Narayana College Chengannur

Affiliated to the University of Kerala

NAAC Accredited with B Grade

Minutes of the Meeting of Board of Studies

Attendees:-

1. Smt. Shereen K (Principal)
2. Dr. K Sreelatha (Chairman, Board of studies)
3. Dr. Smitha Sasidharan (IQAC Coordinator)
4. Dr. Venu S (Head, Department of Chemistry)
5. Smt. Neetu Pradeep (Course Coordinator)
6. Dr. Ambily Chandran (External Member)

Venue: Principal's Chamber

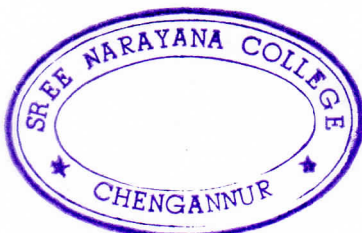
Date & Time: 06/09/2021 at 11 am


Agenda:

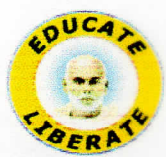
1. Review of Certificate course proposal

Minutes:

1. Reviewed the certificate course proposal submitted by Department of Chemistry.
2. Approved the syllabus and proposal of the certificate course on "Food Chemistry".




PRINCIPAL
SREE NARAYANA COLLEGE
CHENGANNUR



Sree Narayana College Chengannur

Affiliated to the University of Kerala

NAAC Accredited with B Grade

Minutes of the Meeting of Board of Studies

Attendees:-

1. Smt. Shereen K (Principal)
2. Dr. K Sreelatha (Chairman, Board of studies)
3. Dr. Smitha Sasidharan (IQAC Coordinator)
4. Dr. Venu S (Head, Department of Chemistry)
5. Smt. Neetu Pradeep (Course Coordinator)
6. Dr. Ambily Chandran (External Member)

Venue: Principal's Chamber

Date & Time: 15/12/2021 at 2.00pm


Agenda:

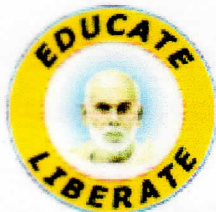
1. Review of Certificate course proposal

Minutes:

1. Reviewed the certificate course proposal submitted by Department of Chemistry.
2. Approved the syllabus and proposal of the certificate course on "Fundamentals of Polymer Science & Rubber Technology"




PRINCIPAL
SREE NARAYANA COLLEGE
CHENGANNUR



POST GRADUATE DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE: FOOD CHEMISTRY(CH21FC)

Relevance of Food chemistry

- Food chemistry is the study of chemical processes and interactions between all biological and non-biological components of foods
- It informs us the changes in foods taking place during processing and storage. The chemical processes that take place inside food determine its nutritional value, taste, texture and freshness.
- The importance of food chemistry lies in its ability to counter the effects of decomposition and spoilage and extend the shelf life of foods. Various household chemicals help in preservation of foods like use of common salt in pickles, chutney, sauces etc. These increase the osmotic pressure of food and decrease the water activity, which further prevents the growth of microorganisms in Food. Common methods of food preservation include salting, cooking, drying, refrigeration, canning, irradiation, dehydration, wood smoke, use of spices, pickling, fermentation etc.

Objectives

The students will be trained to understand and discuss the main principles, theories and concepts underlying established knowledge in food chemistry. On completing this course, students should be able to:

- describe reactions and mechanisms important in food chemistry
- explain the chemistry of the most important food components, including their properties and reactions
- develop and distinguish how individual food components contributes to the overall quality of foods
- explain the major chemical reactions that occur during food handling, processing and storage, including those that limit food shelf life

FOOD CHEMISTRY

The certificate course "Food Chemistry" focuses on providing a general introduction to food science and nutrition and particularly giving importance to the chemistry aspects of different kinds of foods. Food Chemistry is an interdisciplinary subject which encompasses some of the basic and advance science subjects like chemistry, biochemistry, botany, microbiology, nutritional science, biotechnology and molecular biology. The course mainly deals with chemical composition of foods, basic biomolecules, chemical structure and properties of food constituents. It also covers chemical changes food undergoes during processing and storage, techniques to identify and manage food spoilage. The course is divided into different modules that gives the learner the basic information about chemical composition of main types of foods, bio molecules such as carbohydrates, proteins and enzymes, lipids, vitamins, pigments, flavours, minerals and other micro components and additives. It also includes practical sessions which deals with the analysis of various contents in fruit juices, Vitamin C in citrus fruits, oxalate content in guava, Ph analysis of fruits and chocolate analysis.

Expected Outcomes:

- deep understanding of how food components contribute to overall quality of food
- explain the nutritional importance of carbohydrates, changes occurring during processing and its storage
- Importance of proteins and fats, effect of its deficiencies
- Detailed discussion of vitamins and minerals, its deficiency diseases
- Discuss the various enzymatic actions in food
- Importance of pigments and additives used in food
- Discuss about some of the fascinating facts of chemistry in our daily life

❖ Module-I

3 hrs

Introduction to Food Chemistry-definition and concepts -food, nutrition, nutrients-**malnutrition**, Importance of food chemistry, **Water in food**- as a nutrient, interaction with food components and food stability

❖ Module -II

9 hrs

Macronutrients-carbohydrates- definition- classification, sources and properties- nutritional and industrial importance- functions of sugar in food (Browning reaction), changes during cooking and processing- **Artificial sweeteners**

Proteins-definition, classification, sources and properties- nutritional importance, denaturation, and protein deficiency, Protein structure
Protein changes during processing -**Fats**- definition, classification, sources, properties and nutritional values, deficiency diseases

❖ **Module-III**

9 hrs

Micronutrients-Vitamins- sources, importance, fat soluble and water-soluble vitamins, its deficiencies, effect of processing and storage on vitamins- **Minerals**-importance and sources and deficiencies of minerals- **Enzymes**- definition, classifications, kinetics factors influencing enzyme activity, controlling enzyme action, enzyme added to food during processing, modification of food by endogenous enzyme. Enzyme inhibitors in food

❖ **Module-IV**

3 hrs

Other components-

Pigments indigenous to food, structure, chemical and physical properties, Effect of processing and storage

Flavouring agents- Vegetables, fruit and spice flavours, fermented food, Meat and sea food

❖ **Module-V**

3 hrs

Fascinating facts of Chemistry- cooking in pressure cooker, chemistry of chocolates and brewing, colour of vegetables and fruits, chemistry of slicing onions, chemistry of tastes and flavours

References:

- Food Chemistry David Newton Facts on File, Inc. New York 2004
- Principles of Food Chemistry DeMan JM AVI Publishing Co Inc., 1976
- Swaminathan, M. (2012). Advanced Text book on food and Nutrition, Vol. II.
- Swaminathan, M. (2012). Handbook of Food & Nutrition. 5th Edition.
- Shakuntala, M.N and Shadaksharaswamy, M. (2013). Food Facts and Principles. New Age International.
- Srilakshmi, B. Food science. 3rd Edition. New Age International

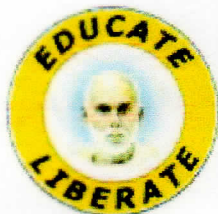
PRACTICALS

6 hrs

1. Analysis of contents in fruit juices- starch, carbohydrates and calcium
2. pH analysis of fruits
3. Analysis of Vitamin C content in citrus fruits
4. Analysis of oxalate content in guava fruit
5. Analysis of Chocolates



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SREE NARAYANA COLLEGE
CHENGANNUR



Estd: 1981

Sree Narayana College Chengannur
Alapuzha, Kerala

POST GRADUATE DEPARTMENT OF CHEMISTRY
CERTIFICATE COURSE: FUNDAMENTALS OF POLYMER SYNTHESIS AND
CHARACTERISATION TECHNIQUES (CH21PSCT)

Relevance of fundamentals of polymer synthesis and characterization techniques:

The study of polymer synthesis and characterization techniques is essential for understanding the properties of polymers and for developing new polymer-based materials. The study of polymer synthesis and characterization techniques is a challenging but rewarding field. It offers the opportunity to work on cutting-edge research and to develop new materials that can improve our lives. The course covers a wide range of topics, including:

- The different types of polymers
- The mechanisms of polymer synthesis
- The characterization of polymers
- The properties of polymers
- The applications of polymers

Objectives:

This course aims to provide students to acquaint the students to:

- **Learn how to characterize polymers:** NMR, Raman, Mass and IR-Spectra for characterization of molecular structure of polymeric materials.
- **Learn the fundamental principles of polymer synthesis:** This course will teach you about the different methods that are used to synthesize polymers, such as polymerization, crosslinking, and grafting.
- **Gain hands-on experience with polymer synthesis and characterization:** This course will give you the opportunity to gain hands-on experience with polymer synthesis and characterization, through experiments and lab work.

The course also includes a number of practical exercises, such as:

- Synthesizing polymers
- Characterizing polymers
- Applying polymers to solve real-world problems

FUNDAMENTALS OF POLYMER SYNTHESIS AND CHARACTERISATION TECHNIQUES

- **UNIT 1 - INTRODUCTION TO POLYMERS** (6 Hrs)
- Definition - Monomer, polymer and polymerisation - classification of polymers on the basis of (i) origin - Natural, semi synthetic, synthetic, (ii) Physical properties and applications - Rubbers, plastic, fibres (iii) Thermal response - thermoplastics, thermosetting (iv) Structure - Homopolymers (linear, branched, cross link or network), Copolymers (Random, Alternate, Block, Graft) (v) Crystallinity - non-crystalline (amorphous), semi-crystalline (vi) Mode of formation - Addition, Condensation Polymerisation (definition and examples only) (vii) Methods of polymerization - Bulk, Solution, Suspension Polymerisation (definition and examples only) Chemistry of polymerization: Chain polymerization, free radical, ionic, co-ordination, step polymerization, polyaddition and polycondensation, miscellaneous ring opening and group transfer polymerizations. Chemistry of polymerization: Chain polymerization, free radical, ionic, co-ordination, step polymerization, polyaddition and polycondensation, miscellaneous ring opening and group transfer polymerizations.
- **UNIT 2: POLYMERIZATION TECHNIQUES AND PROCESSING** (6 Hrs)
- Bulk, solution, suspension, emulsion, melt condensation and interfacial poly condensation polymerizations. polymer processing - calendaring - die-casting, rotational casting - compression moulding - injection moulding - blow moulding - extrusion moulding and reinforcing.
- **UNIT 3: Spectroscopic and chromatography techniques in polymer** (6 Hrs)
- Basic principle of spectroscopy, molecular, atomic and electronic spectra, Lambert-Beer's law, Frank-condon principle, electromagnetic radiation and its properties, interaction of radiation with matter, statistical method of analysis. Principles and applications in structural determination of polymers (functional group, tacticity, molecular structure, purity, unsaturation etc.) by Infra-red spectroscopy, UV-Vis spectroscopy, nuclear magnetic resonance spectrometer (¹H NMR).
- Paper chromatography, thin layer chromatography, high performance liquid chromatography, gel permeation chromatography (GPC), gas chromatography and size exclusion chromatography.

➤ **UNIT 4: MICROSCOPIC AND X-RAY TECHNIQUES**

(3 Hrs)

Optical microscopy, electron microscopy (SEM, TEM, AFM) and XRD: basics principle and applications in polymers characterization, Contact angle and measurement.

➤ **UNIT 5: THERMO-MECHANICAL CHARACTERIZATION**

(3 Hrs)

Principle and applications of Thermal gravimetric analysis (TGA), Differential thermal analysis (DTA). Differential scanning calorimeter (DSC), Dynamic mechanical analyser (DMA) and thermal mechanical analyser (TMA) in polymer analysis or determination of molecular mass and chemical structure of polymers.

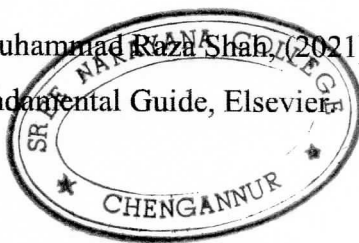
PRACTICALS

(6 Hrs)

- To verify Lambert-Beer's law by UV-Vis. spectrophotometer. Quantitative determine of chemical impurities in polymer sample by UV-Vis. spectrophotometer.
- Calculate weight percentage of inorganic and organic ingredient in polymeric compound.
- Analyze thermal behaviour of polymers by TGA.
- Contact angle and measurement of polymer
- Identification of additives present in a processed polymer by Paper and thin layer chromatography.
- Separation, characterization, and purity determination of polymers by TLC and Paper chromatography.

REFERENCES:

- Willard H.H., Merrit L.L., Dean J.A. (1988) Instrumental method of analysis, Wads worth Publishing Company.
- Kaushik N.K., Shukla S. K., (2023) Thermal Analysis Techniques and Applications, IK International Pvt. Ltd.
- Skoog D.A, (1997) Principle of Instrumental Analysis, Harcourt College Pub.
- Shah V., (2007) Handbook of Plastic Testing, Technology, Wiley-Inter science.
- Banwell C.N., McCash E.M., (2008) Fundamentals of Molecular Spectroscopy, Fourth Edition, Tata McGraw-Hill.
- Muhammad Malik, Jimmy Mays, Muhammad Raza Shah, (2021) Molecular Characterization of Polymers: A Fundamental Guide, Elsevier



SREE NARAYANA COLLEGE
CHENGANNUR

SREE NARAYANA COLLEGE CHENGANNUR
DEPARTMENT OF CHEMISTRY

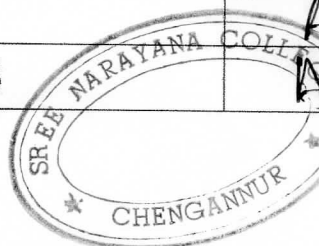
Certificate Course on "Food Chemistry"(CH21FC)

Duration: 3 months

Year: 2021-22

Student Enrolment for the certificate course

Sl.No.	Candidate code	Name of Candidate	Signature
1	63520128001	AJMI FATHIMA N	<i>Ajmi</i>
2	63520128002	AMNA FATHIMA	<i>Amna</i>
3	63520128003	AMRUTHA JAYAKUMAR	<i>Amrutha</i>
4	63520128005	ANJANA SUNIL	<i>Anjana</i>
5	63520128006	ANJU VISWANATHAN	<i>Anju</i>
6	63520128007	ANJUMOL PAUL	<i>Anjumol</i>
7	63520128008	ARJUN P	<i>Arjun</i>
8	63520128009	ARYAMOL S	<i>Aryamol</i>
9	63520128010	DEVIKRISHNA	<i>Devika</i>
10	63520128011	GREESHMA G	<i>Greeshma</i>
11	63520128012	RESHMI M RAJU	<i>Reshmi</i>
12	63520128013	SANJAY KRISHNAN S	<i>Sanjay</i>
13	63520128014	SNEHA	<i>Sneha</i>
14	63520128015	SREEJITH S	<i>Sreejith</i>
15	63520128016	SREELEKSHMI R	<i>Sreelekshmi</i>
16	63520128017	SUKANYA SUKHADEVAN	<i>Sukanya</i>
17	63520128018	VINAYAPRIYA A	<i>Vinayapriya</i>
18	63520128019	VRINDA	<i>Vrinda</i>
19	63521128001	AJIL S B	<i>Ajil</i>
20	63521128002	ANJANA T V	<i>Anjana</i>
21	63521128003	ANUGRAHA A S	<i>Anugraha</i>

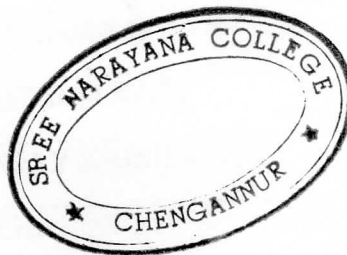


22	63521128004	ARABHI A R	<i>Arabhi</i>
23	63521128005	CHIPPY HARISH	<i>Chippy</i>
24	63521128006	GOWRI PRASAD	<i>Gowri</i>
25	63521128007	KRISHNA S V	<i>Krish.</i>
26	63521128008	MEENAKSHY A	<i>Meenakshy</i>
27	63521128009	MEENU REMESH	<i>Meenu</i>
28	63521128010	RESHMA R.S	<i>Reshma</i>
29	63521128011	ROHINI S PILLAI	<i>Rohini</i>
30	63521128012	SHAMLA P S	<i>Shamla</i>
31	63521128013	SRADHA R	<i>Sradha</i>
32	63521128014	SREELEKSHMI M S	<i>Sreelakshmi</i>
33	63521128015	SRUTHY S	<i>Sruthy</i>
34	63521128016	VISMAYA V	<i>Vismaya</i>

Noetu

Course Coordinator

[Signature]
Head of the Department



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PRINCIPAL
SREE NARAYANA COLLEGE
CHENGANNUR

SREE NARAYANA COLLEGE CHENGANNUR
DEPARTMENT OF CHEMISTRY

Certificate Course on "Fundamentals of Polymer Synthesis and Characterisation Techniques" (CH21PSCT)

Duration: 3 months

Year: 2021-22

Student Enrolment for the certificate course

Sl.No.	Candidate code	Name of Candidate
1	63520128001	AJMI FATHIMA N <i>Ajmi</i>
2	63520128002	AMNA FATHIMA <i>Amna</i>
3	63520128003	AMRUTHA JAYAKUMAR
4	63520128005	ANJANA SUNIL <i>Anjana</i>
5	63520128006	ANJU VISWANATHAN
6	63520128007	ANJUMOL PAUL <i>Anjumol</i>
7	63520128008	ARJUN P <i>Arjun</i>
8	63520128009	ARYAMOL S <i>Aryamol</i>
9	63520128010	DEVIKRISHNA <i>Devika</i>
10	63520128011	GREESHMA G <i>Greeshma</i>
11	63520128012	RESHMI M RAJU <i>Reshmi</i>
12	63520128013	SANJAY KRISHNAN S <i>Sanjay</i>
13	63520128014	SNEHA <i>Sneha</i>
14	63520128015	SREEJITH S <i>Sreejith</i>
15	63520128016	SREELEKSHMI R <i>Sreelekshmi</i>
16	63520128017	SUKANYA SUKHADEVAN <i>Sukanya</i>
17	63520128018	VINAYAPRIYA A <i>Vinaya</i>
18	63520128019	VRINDA <i>Vrinda</i>
19	63521128001	AJIL S B <i>Ajil</i>
20	63521128002	ANJANA T V <i>Anjana</i>



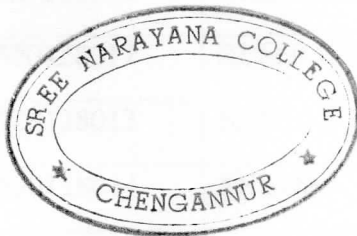
21	63521128003	ANUGRAHA A S	<i>Anugraha</i>
22	63521128004	ARABHI A R	<i>Arabi</i>
23	63521128005	CHIPPY HARISH	<i>Chippy</i>
24	63521128006	GOWRI PRASAD	<i>Gowri</i>
25	63521128007	KRISHNA S V	<i>Krishna</i>
26	63521128008	MEENAKSHY A	<i>Meenakshy</i>
27	63521128009	MEENU REMESH	<i>Meenu</i>
28	63521128010	RESHMA R.S	<i>Reshma</i>
29	63521128011	ROHINI S PILLAI	<i>Rohini</i>
30	63521128012	SHAMLA P S	<i>Shamla</i>
31	63521128013	SRADHA R	<i>Sradha</i>
32	63521128014	SREELEKSHMI M S	<i>Sreelekshmi</i>
33	63521128015	SRUTHY S	<i>Sruthy</i>
34	63521128016	VISMAYA V	<i>Vismaya</i>

Neetu

Course Coordinator

[Signature]

Head of the Department



[Signature]
 PRINCIPAL
 SREE NARAYANA COLLEGE
 CHENGANNUR

No.	NAME	Designation	✓			✓		✓						✓	✓	
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.	Ajmi Fathima N		X			X		X						a	X	
2.	Amna Fathima .		X			X		a						X	X	
3.	Amsrutha Jayakumar		X			X		X						X	X	
4.	Anyana Sunil.		X			X		X						a	X	
5.	Ange Viswanathan		X			X		X						X	X	
6.	Anamol Paul .		X			X		X						a	X	
7.	Arun. P.		X			X		X						X	X	
8.	Anamol. S.		X			X		a						X	X	
9.	Devikrishna		X			X		X						a	X	
10.	Geeshma. G.		X			X		X						X	X	
11.	Reshmi. M. Raju		X			X		X						X	X	
12.	Sangay Krishnan. S.		X			X		X						X	X	
13.	Sneha .		X			X		X						X	X	
14.	Sreejith. S .		X			X		a						X	X	
15.	Sreelekshmi. R .		X			X		X						a	X	
16.	Sukanya Sukhadeva		X			X		X						X	X	
17.	Vinaya priya. A.		X			X		X						X	X	
18.	Vsinda		X			X		X						X	X	
19.	Ajil. S. B.		X			X		X						a	X	
20.	Anjana. T. V.		X			X		X						X	X	
21.	Anugeaha. A. S.		X			X		X						X	X	
22.	Arabihi. A. R.		X			X		X						X	X	
23.	Chippy Harish		X			X		X						X	X	
24.	Gowri Prasad		X			X		X						X	X	
25.	Krishna. S. V.		X			X		X						X	X	
26.	Meenakshy. A.		X			X		X						X	X	
27.	Meenu Ramesh		X			X		X						X	X	
28.	Reshma. R. S.		X			X		X						X	X	
29.	Rohini. S. Pillai		X			X		X						X	X	
30.	Shamla. P. S.		X			X		X						X	X	
31.	Sradha. R.		X			X		X						X	X	
32.	Sreelekshmi. M. S.		X			X		X						X	X	
33.	Sruthy. S.		X			X		X						X	X	
34.	Vismaya. V.		X			X		X						X	X	

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Working Days
Days Present
Days absent
Leave Taken

Remarks

X				X	X			X	X	X		12	11				
X				X	a			X	X	X		12	10				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	11				
X				X	X			X	X	X		12	12				
X				X	X			a	X	X	X	12	11				
X				X	X			a	X	X	X	12	11				
X				X	X			X	X	X		12	11				
X				X	X			X	X	X		12	11				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				
X				X	X			X	X	X		12	12				



PRINCIPAL
SREE NARAYANA COLLEGE
CHENGANNUR

No.	NAME	Designation	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Ajmi Fathima N		X	X						X				X	
2.	Amna Fathima		X	a						X				X	
3.	Amrutha Jayakumar		X	X						X				X	
4.	Anjana Sunil.		X	X						X				X	
5.	Anju Viswanathan		a	X						X				X	
6.	Anjumol Paul.		X	X						X				X	
7.	Azha P.		X	X						a				X	
8.	Azhamol. S.		X	X						X				X	
9.	Devikaishna.		X	X						X				X	
10.	Greeshma. G.		X	X						X				X	
11.	Reshmi. M. Raju.		X	X						X				X	
12.	Sanjay Krishnan. S.		X	X						X				X	
13.	Sneha.		X	X						X				X	
14.	Sreejith. S.		X	X						X				X	
15.	Sreelekshmi. R.		X	X						X				X	
16.	Sukanya Sukhadevan		a	X						X				a	
17.	Vinaya Priya. A.		X	X						X				X	
18.	Vrinda.		X	X						X				X	
19.	Ajil. S. B.		X	X						X				X	
20.	Anjana. T. V.		X	X						X				X	
21.	Anugraha. A. S.		X	X						a				X	
22.	Arathi. A. R.		X	X						X				X	
23.	Chippy Harish		X	X						X				X	
24.	Gowri Peasad.		X	X						X				X	
25.	Krishna. S. V.		X	X						X				X	
26.	Meenaksby. A.		X	X						X				X	
27.	Meenu Ramesh.		X	X						X				X	
28.	Reshma. R. S.		X	X						X				X	
29.	Rohini. S. Pillai		X	X						X				X	
30.	Shamla. P. S.		X	X						X				X	
31.	Shadha. R.		X	X						X				X	
32.	Sreelekshmi. M. S.		X	X						X				X	
33.	Srethij. S.		X	X						X				X	
34.	Vismaya. V.		X	X						X				X	

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Work Day Day Pres Day abse Lea Tak Remarks

X			X													X	7	7	0		
X			X													X	7	6	1		
a			X													X	7	6	1		
X			X													X	7	7	0		
X			X													a	7	5	2		
X			X													X	7	7	0		
X			X													X	7	6	1		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	6	1		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	6	1		
X			X													a	7	6	1		
a			X													X	7	6	1		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		
X			X													X	7	7	0		



PRINCIPAL
SREE NARAYANA COLLEGE
CHENGANNUR

No.	NAME	Designation	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Ajmi Fathuma N		X	X							X	X			
2.	Amna Fathuma.		X	X							X	X			
3.	Amrutha Jayakumar		X	X							X	X			
4.	Anjana Sunil.		X	X							X	X			
5.	Anju Viswanathan		X	X							X	X			
6.	Arjunol Paul.		X	X							X	X			
7.	Arjun.P.		X	X							X	X			
8.	Arjunol.S.		X	X							X	X			
9.	Devikaashna		X	X							X	X			
10.	Greeshma.G.		X	X							X	X			
11.	Reshmi.M.Raju		X	X							X	X			
12.	Sanyas Keshwan.S.		X	X							X	X			
13.	Sneha.		X	X							X	X			
14.	Sreejith.S.		X	X							X	X			
15.	Sreelakshmi.R.		X	X							X	X			
16.	Sukanya Sukhadevan		X	X							X	X			
17.	Vinaya Priya.A.		X	X							X	X			
18.	Vinda		X	X							X	X			
19.	Ajil.S.B		X	X							X	X			
20.	Anjana.T.V.		X	X							X	X			
21.	Anagrabha.A.S.		X	X							X	X			
22.	Arabhi.A.R.		X	X							X	X			
23.	Chippy Harish.		X	X							X	X			
24.	Gowri Prasad		X	X							X	X			
25.	Kashna.S.V.		X	X							X	X			
26.	Meenakshy.A.		X	X							X	X			
27.	Meenu Ramesh		X	X							X	X			
28.	Reshma.R.S.		X	X							X	X			
29.	Rohini.S.Pillai		X	X							X	X			
30.	Shamla.P.S.		X	X							X	X			
31.	Sradha.R.		X	X							X	X			
32.	Sreelakshmi.M.S.		X	X							X	X			
33.	Sreathy.S.		X	X							X	X			
34.	Vismaya.V.		X	X							X	X			

No.	NAME	Designation	Online												
			✓ 1	2	✓ 3	✓ 4	✓ 5	✓ 6	✓ 7	✓ 8 3hr	9	✓ 10	✓ 11	12	
1.	Ajmi Fathema N		X		X	X	X	X	X	2	X		X	X	X
2.	Amna Fathema		X		X	2	X	X	X	X			X	X	2
3.	Amrutha Jayakumar		X		X	X	X	X	X	X			X	X	X
4.	Anyana Sunil		X		X	X	X	2	X	X			X	2	X
5.	Anju Viswanathan		X		X	X	X	X	X	X			X	X	X
6.	Anjemol Paul		X		X	X	X	X	X	X			X	X	X
7.	Arjun P.		X		X	2	X	X	X	X			X	X	X
8.	Amamol S.		X		X	X	2	X	X	X			X	X	X
9.	Devikrishna		X		X	X	X	X	X	X			X	X	X
10.	Greeshma G.		X		X	X	X	X	X	X			X	X	X
11.	Reshmi M. Raju		X		X	X	X	X	X	X			X	X	X
12.	Sanyay Krishnan S.		X		X	2	X	X	X	X			X	X	X
13.	Sneha		X		X	X	X	X	X	X			X	X	X
14.	Sreepith S.		X		X	X	X	X	X	X			X	X	X
15.	Sreelekshmi R.		X		X	X	X	X	X	X			X	X	X
16.	Sukanya Sukhadevan		X		X	X	X	X	X	X			X	X	X
17.	Vinaya Priya A.		X		X	X	X	X	2	X			X	X	X
18.	Vainda		X		X	X	X	X	X	X			X	X	X
19.	Ajil S. B.		X		X	2	X	X	X	X			X	X	X
20.	Anyana T.V.		X		X	X	X	X	X	X			X	X	X
21.	Anugecha A.S.		X		X	X	X	X	X	X			X	X	X
22.	Arabhi A.R.		X		X	X	X	X	X	X			X	X	X
23.	Chippy Harish		X		X	X	X	X	X	X			X	X	X
24.	Gowri Prasad		X		X	X	X	X	X	X			X	X	X
25.	Krishna S.V.		X		X	X	X	X	X	X			X	X	X
26.	Meenakshy A.		X		X	X	X	X	X	X			X	X	X
27.	Meenu Ramesh		X		X	X	X	X	X	X			X	X	X
28.	Reshma R.S.		X		X	X	X	X	X	X			X	X	X
29.	Rohini S. Pillai		X		X	X	X	X	X	X			X	X	X
30.	Shamla P.S.		X		X	X	X	X	X	X			X	X	X
31.	Sradha R.		X		X	X	X	X	X	X			X	X	X
32.	Sreelekshmi M.S.		X		X	X	X	X	X	X			X	X	X
33.	Sruthy S.		X		X	X	X	X	X	X			X	X	X
34.	Vismaya V.		X		X	X	X	X	X	X			X	X	X

MONTH OF

January 20 22

(23 days - 30 hrs)

14	15	16	✓	✓	✓	✓	✓	Online	✓	✓	26	✓	✓	Online	✓	Working Days	Days Present	Days absent	Leave Taken	Remarks	
								3hr						2hr	3hr						
			X	X	X	a	X	X		X	X		X	X	X	X	23	21	2		
			X	X	X	X	X	X		X	X		X	X	X	X	23	21	2		
			a	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	a	X	X		X	X		X	X	X	X	23	20	3		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	a		X	X	X	X	23	21	2		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			a	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	22	1		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		
			X	X	X	X	X	X		X	X		X	X	X	X	23	23	0		