

DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE ON

ACADEMIC YEAR

2020-2021



GOVERNMENT DEGREE COLLEGE

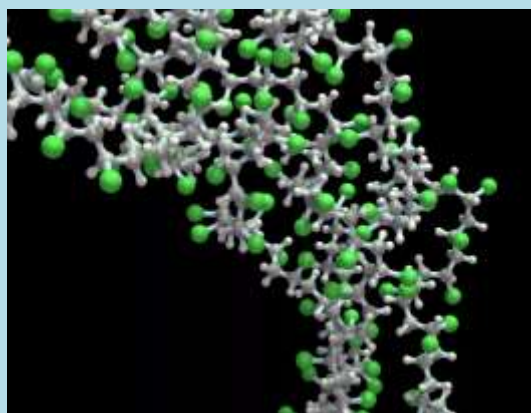
PALAKONDA

SRIKAKULAM DISTRICT



GOVERNMENT DEGREE COLLEGE-PALAKONDA PARVATHIPURAM MANYAM DISTRICT

CERTIFICATE COURSE ON SIGNIFICANCE OF POLYMER



Duration of the course: 30 Hrs
09/Aug/2021
To
18/Sep/2021

ORGANIZED BY DEPARTMENT OF CHEMISTRY

Instruction to the Students :

- 75 % of course attendance compulsory to get the certificate.
- Students who will get 40 % of marks in the examination they will eligible to get certificate.

**Sri.S.Jaganmohana Rao,
(Course Coordinator)
Kum.M.Prasanthi (Faculty)**

GOVERNMENT DEGREE COLLEGE- PALAKONDA
DEPARTMENT OF CHEMISTRY

Palakonda,
Date : 03/08/21

To
The Principal,
Govt. Degree College,
Palakonda,
Parvathipuram Manyam District

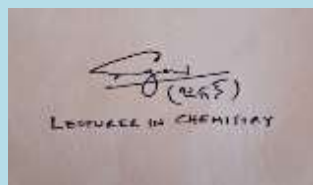
Respected sir,

We, the faculty members of Department of Chemistry submit your notice that we would like to conduct a Certificate course on "Significance of Polymer" for B.Sc. students with the duration of 30 hr's

Hence we humbly request you to accord permission to initiate the certificate course in our department.

Thanking you sir,

Yours faithfully,



A handwritten signature in black ink is written over a rectangular stamp. The stamp contains the text "LECTURER IN CHEMISTRY" in capital letters. The signature is written in a cursive style, with the name "S. S. S." and the initials "(S.S.S.)" visible.

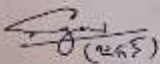
GOVERNMENT DEGREE COLLEGE-PALAKONDA
DEPARTMENT OF CHEMISTRY

CIRCULAR

Date: 04/08/2021

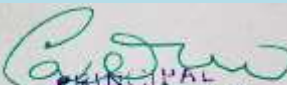
The Department of Chemistry is planning to conduct a certificate course on “Significance of Polymer” for B.Sc. students. Hence the interested candidates are advised to meet the In-charge or other faculty members of Department of Chemistry.

Participation/merit certificate will be issued to individual after completion of the course.



LECTURER IN CHEMISTRY

Lecturer in-charge
Department of Chemistry

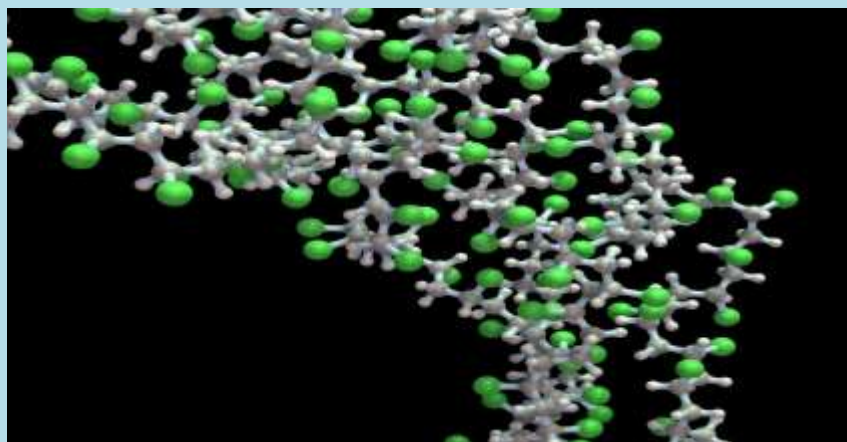


PRINCIPAL
Govt. Degree College
PALAKONDA
Srikakulam (Dist.)

Principal
GDC, Palakonda

DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE ON SIGNIFICANCE OF POLYMER



2021-2022

GOVERNMENT DEGREE COLLEGE
PALAKONDA



SRIKAKULAM DISTRICT

Sri S. Jagan Mohan Rao

COURSE COORDINATOR

Sri B. Prasada Rao

PRINCIPAL

INTRODUCTION :

Polymers are very large molecules compared to water. They have many more atoms than a water molecule--from 10,000 to 100,000 atoms per molecule. The word polymer is derived from the Greek root poly-, meaning many, and mer, meaning part or segment. Many of the same units (or mers) are connected together to form a long chain or polymer. Because they can be extremely large, often made up of hundreds of thousands of atoms, polymers are also referred to as macromolecules.

Polymers are made up of smaller repeating units, called monomers, which are linked together by covalent bonds. The polymerization processes by which polymers are synthesized fall into two categories. Addition polymers are formed by addition reactions that link together monomers containing multiple bonds.

OBJECTIVES :

- Develop intellectual breadth and depth in polymer science and engineering and to have specialized training for career in teaching, research and industry
- reduce the volume of waste in packaging materials.
- describe the typical features and biomedical uses of polyamides.

OUT COMES :

- After studying this course , Student should be able to understand the key design features of a product which relate directly to the materials used in its construction.
- Recognizes bounds between polymer chains.
- use essential descriptions about polymer chemistry.
- Defines related concepts.
- Recognizes monomers and polymers.
- evaluate the structure of polymers.
- Recognizes bounds between polymer chains.

GENERAL INFORMATION AND COURSE STRUCTURE

1. Duration of module Training: 30 hrs
2. Entry Qualification: B.Sc. students
3. Language: English/ Telugu
4. Teaching mode: Offline .

Distribution of training on hourly

basis:

S. No	Components to be covered	Duration	Theory	Days
1	Introduction and classification of Polymers	2	2	2
2	Structure and properties of polymer	9	9	9
3	Types of Polymers	9	9	9
4	Uses of Polymers	9	9	9
5	Review and Assessment	1	1	1
	Total	30	30	30

Syllabus :

- Introduction and Classification of Polymers
- Structure, Properties of polymers
- Types of polymers
- Uses of Polymers

INSTRUCTION METHODS

Some of the following method of delivery may be adopted

1. Lecture
2. Video lesson
3. Demonstrations
4. Group discussions

ASSESSMENT

1. Assignments: 40%
2. Course End Examination: 60%

Assessment Mode: Descriptive and multiple-choice

answers Examination conduction: Offline

The syllabus for value added course on “Significance of polymer ” is hereby approved for the session 2021-22.

GOVERNMENT DEGREE COLLEGE-PALAKONDA
DEPARTMENT OF CHEMISTRY

Course : Analytical Techniques in Chemistry
Course End Examination, April - 2021

Duration:2 hrs

Max.Marks:30

PART-A

Answer any four of the following questions

4x5=20 Marks

1. Write the terminology in Pharmaceutical Chemistry?
2. Write Nomenclature of Drugs?
3. Write the classification of drugs based on Therapeutic activity?
4. Describe about Administration of Drugs?
5. Write the synthesis and therapeutic activity of paracetamol?

PART-B

Answer the all following questions

10x1=10 Marks

1. Chemical name of Aspirin_____
2. Trade names for paracetamol_____.
3. Give one example for Oral Drug_____.
4. GTN acts as _____Drug.
- 5..Nylon threads are made of.. ()
a. polyester polymer b. polyamide polymer c. polyethylene polymer d. polyvinyl polymer
6. Which of the following is a branched polymer? ()
a. low density polymer b. polyester c. high density polymer d. nylon
7. On the basis of mode of formation polymers can be classified: ()
a .as addition polymers only b. as condensation polymers only
c . as copolymers d. as addition and condensation polymers
8. The process of heat softening, molding and cooling to rigidity can be repeated for which plastics? ()
a. Thermoplastics b. thermosetting plastics c. both (a) and (b) d. neither (a) nor (b)
9. In addition polymer, monomer used is ()
a. unsaturated compounds b. saturated compounds
c. bifunctional saturated compounds d. trifunctional saturated compounds
10. Out of the following polymers, which one does not involve cross-linkages? ()
a. Vulcanized Rubber b. Polythene c. Melamine d. Bakelite

Registrations

21

S.NO	NAME OF THE STUDENT	COURSE YEAR / COURSE GROUP	DATE OF REGISTRATION	SIGNATURE OF THE CANDIDATE
1	Gurubilli Deepika	1 st C.B.Z	5/8/2021	G. Deepika
2	Mahanthi kalyani	1 st C.B.Z	5/8/2021	M. Kalyani
3	Mudila. Kavya	1 st M.P.C	5/8/2021	M. Kavya
4	visai Antharao	1 st M.P.C	5/8/2021	V. Anantha rao.
5	H. Someswara rao	2 nd CBZ	5/8/2021	M. Someswara rao
6	Abotula. Sandhya Rani	2 nd CBZ	5/8/2021	A. Sandhya Rani
7	majji. Himaja	2 nd m.p.c	5/8/2021	m. Himaja
8	Azika. Vineetha	2 nd CBZ	5/8/2021	A. Vineetha
9	Tamarapu. surapunaaidu	2 nd m.p.c	5/8/2021	T. surapunaaidu
10	Manthina. parvathi	2 nd m.p.c	5/8/2021	M. parvathi
11	A. Pradeep Kumar	1 st M.P.C	5/8/2021	A. Pradeep Kumar
12	Kavati. Janardhanarao	1 st m.p.c	5/8/2021	L. Janardhanarao
13	P. Shiva Ganesh	2 nd CBZ	5/8/2021	P. Shiva Ganesh
14	Rottavasa. Ganesh	2 nd M.P.C	5/8/2021	R. Ganesh
15	V. Mangula	1 st CBZ	5/8/2021	V. Mangula
16	Peddinti. veeranna	1 st CBZ	06-08-2021	P. veeranna
17	Sasubilli. Harivitha	1 st CBZ	6-8-2021	S. harivitha
18	Givida. vasayam	2 nd m.p.c	5/8/2021	G. vasayam
19	Mandangi. Anitha	2 nd CBZ	6/8/2021	M. Anitha
20	Vasada. Ramya	2 nd CBZ	6/8/2021	V. Ramya
21	Rowthu. Sivamani	1 st C.B.Z	6/8/2021	R. Sivamani
22	palepu. Dhilleeswar	1 st m.p.c	6/8/2021	P. Dhilleeswar
23	Boneka. sunil	1 st CBZ	6/8/2021	B. sunil.
24	Mula. Gowthami	2 nd CBZ	07/08/2021	M. Gowthami
25	Tompala. Jagadeesh	1 st C.B.Z	7/8/2021	T. Jagadeesh
26	Sripurapu. neelima	2 nd m.p.c	7/8/2021	S. neelima
27	Majji. shyamala	2 nd m.p.c	7/8/2021	M. shyamala
28	Guiana. Eswara rao.	1 st M.P.C	7/8/2021	G. Eswara rao
29	Savara. surekha	1 st CBZ	7/8/2021	S. surekha
30	Gudupuru. Mahesh	2 nd M.P.C	7/8/2021	G. Mahesh

