

Details of activities conducted for students for Future Employment/Competitive Examinations&Higher Education

Ramesh Banothu
Department of Chemistry
Govt. Degree College Dubbak

Objective: Conducting awareness programs

Conducted sessions and provided materials to students for Future Employment/Competitive Examinations&Higher Education(P.G.,B.Ed. Entrance Examinations)

Outcome: Significant Result of the following students scored good marks&ranks and got P.G./B.Ed. Seats in reputed Colleges in the Academic Year of 2021-2022.

SNo.	Ht.No.	Name Of The Student	Group	Got Ranks in
1	602318445005	M SHIVAPRASAD	B.Sc.BZC	M.Sc. Chemistry

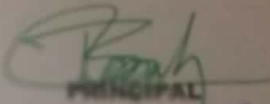
GOVERNMENT DEGREE COLLEGE, DUBBAK

Department Action Plan 2021-2022 A.Y.

Department Name: Chemistry

SNo	Agree Goal	Plan	Time Line	Resource	Remarks
1	Completion of Syllabus	Planned to Completion of Syllabus as per the OU Almanac for Even And Odd Semesters	2021-2022 AY	Department Of Chemistry	
2	National Science Day	planned to Celebrate Science Day	2021-2022 AY Yearly	Department Of Chemistry	
3	Quizz, Seminars, Group Discussions and Assignments	planned to Conduct Quizz, Seminars, Group Discussion	2021-2022 AY	Department Of Chemistry	
4	Internal and Lab Exams	planned to Conduct Internal and Lab Examinations	2021-2022 AY	Department Of Chemistry	
5	Certificate Course	planned to Conduct Certificate Course on Solvent extraction and Chromatography techniques	2021-2022 AY	Department Of Chemistry	Conducted
6	Student study Project	Planned to motivate the students for Study projects in Water purification techniques	2021-2022 AY For Final Year Students	Department Of Chemistry	Conducted
7	Interactive Lecture Class Lecture	Planned to Conduct interactive lecture in 2021-2022 A.Y	2021-2022 AY	With the Experienced Faculty	Conducted

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PRINCIPAL
GOVERNMENT DEGREE COLLEGE
DUBBAK DIST. SUBURBAN

Government Degree College -DUBBAK

Chemistry Assignment 2021-2022 A.Y.

Lecturer Name: B Ramesh

S.No.	Student Name	Ht.No.	Group	Year	Grade
1	Ch. Akhila	602319445005	BZC	III	A
2	D Ramya	602319445008	BZC	III	A
3	E Anusha	602319445009	BZC	III	A
4	E Radhika	602319445011	BZC	III	A
5	M Supraja	602319445014	BZC	III	A
6	N Sravanthi	602319445015	BZC	III	A
7	P Sandhya	602319445016	BZC	III	A
8	P Teja	602319445017	BZC	III	A
9	P Rajeshwari	602319445018	BZC	III	A
10	B Revathi	602320445002	BZC	II	A
11	Ch Navya	602320445003	BZC	II	A
12	J Bhargavi	602320445005	BZC	II	B
13	K Anitha	602320445007	BZC	II	A
14	M Kaveri	602320445008	BZC	II	A
15	N Shravani	602320445009	BZC	II	B
16	N Srihari	602320445010	BZC	II	A
17	P Akanksha	602320445011	BZC	II	A
18	V Koumudi	602320445012	BZC	II	A
19	V Srinidhi	602320445013	BZC	II	A
20	S Teja	602319445020	BZC	II	A

21	M Akanksha	602320482001	BCCs	II	A
22	B Shravani	602321445001	BZC	I	A
23	B Rohith Reddy	602321445002	BZC	I	b
24	Ch. Raghuram	602321445004	BZC	I	A
25	Ch Varshitha	602321445005	BZC	I	A
26	Ch Nithin	602321445009	BZC	I	B
27	Ch Sravankumar Redd	602321445010	BZC	I	B
28	D Navya	602321445011	BZC	I	B
29	E Navaneetha	602321445013	BZC	I	B
30	K Manasa	602321445018	BZC	I	B
31	M Soundarya	602321445022	BZC	I	A
32	P Byula	602321445026	BZC	I	B
33	P Jyothi	602321445027	BZC	I	B
34	P Sanjay	602321445028	BZC	I	A
35	S Kapil	602321445029	BZC	I	B
36	S Navya	602321445030	BZC	I	A
37	S Vijitha	602321445032	BZC	I	A
38	T Shruthi	602321445033	BZC	I	A
39	V Anjali	602321445034	BZC	I	A
40	V Swathi	602321445036	BZC	I	B

Government Degree College -DUBBAK

Chemistry Paper wise & SEM wise Result Analysis 2021-2022 A.Y.

Lecturer Name: B Ramesh

Sno	Name of the Group	Semester	Subject Name	No. of students Appeared	No. of students Passed	Total pass %
1	BZC	I	Chemistry	29	3	11%
2	BZC	II	Chemistry	20	6	30%
3	BZC	III	Chemistry	11	8	73%
4	BZC	IV	Chemistry	12	5	42%
5	BZC	V	Chemistry	8	7	88%
6	BZC	VI	Chemistry	9	9	100
Total				89	38	43%

**STUDENT STUDY
PROJECT
BY
B.Sc. III-YEAR
STUDENTS**

**TITLE: STUDY OF
ADULTRANTS IN FOOD
SUFFS**

Introduction: Adulteration in food is normally present in its most crude form; prohibited substances are either added or partly or wholly substituted. Normally the contamination/adulteration in food is done either for financial gain or due to carelessness and lack in proper hygienic condition of processing, storing, transportation and marketing. This ultimately results that the consumer is either cheated or often become victim of diseases. Such types of adulteration are quite common in developing countries or backward countries. It is equally important for the consumer to know the common adulterants and their effect on health

THEORY: The increasing number of food producers and the outstanding amount of import foodstuffs enables the producers to mislead and cheat consumers. To differentiate those who take advantage of legal rules from the ones who commit food adulteration is very difficult. The consciousness of consumers would be crucial. Ignorance and unfair market behavior may endanger consumer health and misleading can lead to poisoning. So we need simple screening tests for their detection. In the past few decades, adulteration of food has become one of the serious problems. Consumption of adulterated food causes serious diseases like cancer, diarrhea, asthma, ulcers, etc. Majority of fats, oils and butter are paraffin wax, castor oil and hydrocarbons. Red chilli powder is mixed with brick powder and pepper is mixed with dried papaya seeds. These adulterants can be easily identified by simple chemical tests. Several agencies have been set up by the Government of India to remove adulterants from food stuffs. AGMARK - acronym for agricultural marketing....this organization certifies food products for their quality. Its objective is to promote the Grading and Standardization of agricultural and allied commodities.

EXPERIMENT-1

To detect the presence of adulterants in fat, oil and butter.

REQUIREMENTS: Test-tube, acetic anhydride, conc. H₂SO₄, acetic acid, conc. HNO₃.

PROCEDURE: Common adulterants present in ghee and oil are paraffin wax, hydrocarbons, dyes and argemone oil. These are detected as follows:

- (i) Adulteration of paraffin wax and hydrocarbon in vegetable ghee Heat small amount of vegetable ghee with acetic anhydride. Droplets of oil floating on the surface of unused acetic anhydride indicates the presence of wax or hydrocarbons.

- (ii) Adulteration of dyes in fat Heat 1mL of fat with a mixture of 1mL of conc. sulphuric acid and 4mL of acetic acid. Appearance of pink or red colour indicates presence of dye in fat.
- (iii) Adulteration of argemone oil in edible oils to small amount of oil in a test-tube, add few drops of conc. HNO₃ and shake. Appearance of red colour in the acid layer indicates presence of argemone oil.

EXPERIMENT-2

To detect the presence of adulterants in sugar

REQUIREMENTS: Test-tubes, dil. HCl.

PROCEDURE: Sugar is usually contaminated with washing soda and other insoluble substances which are detected as follows:

- (i) Adulteration of various insoluble substances in sugar Take small amount of sugar in a test-tube and shake it with little water. Pure sugar dissolves in water but insoluble impurities do not dissolve.
- (ii) Adulteration of chalk powder, washing soda in sugar To small amount of sugar in a test-tube, add few drops of dil. HCl. Brisk effervescence of CO₂ shows the presence of chalk powder or washing soda in the given sample of sugar.

EXPERIMENT-3

To detect the presence of adulterants in samples of chilli powder, turmeric powder and pepper

REQUIREMENTS: Test-tubes, conc. HCl, dil. HNO₃, KI solution

PROCEDURE: Common adulterants present in chilli powder, turmeric powder and pepper are red coloured lead salts, yellow lead salts and dried papaya seeds respectively. They are detected as follows:

- (i) Adulteration of red lead salts in chilli powder to a sample of chilli powder, add dil. HNO₃. Filter the solution and add 2 drops of potassium iodide solution to the filtrate. Yellow ppt. indicates the presence of lead salts in chilli powder.

- (ii) Adulteration of yellow lead salts to turmeric powder To a sample of turmeric powder add conc. HCl. Appearance of magenta colour shows the presence of yellow oxides of lead in turmeric powder.
- (iii) Adulteration of brick powder in red chilli powder Add small amount of given red chilli powder in beaker containing water. Brick powder settles at the bottom while pure chilli powder floats over water.
- (iv) Adulteration of dried papaya seeds in pepper Add small amount of sample of pepper to a beaker containing water and stir with a glass rod. Dried papaya seeds being lighter float over water while pure pepper settles at the bottom.

RESULTS:

EXPT. NO.	EXPERIMENT	PROCEDURE	OBSERVATION
1	Adulteration of paraffin wax and hydrocarbon in vegetable ghee	Heat small amount of vegetable ghee with acetic anhydride. Droplets of oil floating on the surface of unused acetic anhydride indicate the presence of wax or hydrocarbon	Appearance of oil floating on the surface.
2	Adulteration of dyes in fat	Heat 1mL of fat with a mixture of 1mL of conc. H ₂ SO ₄ and 4mL of acetic acid.	Appearance of pink colour.
3	Adulteration of argemone oil in edible oils	To small amount of oil in a test tube, add few drops of conc. HNO ₃ & shake.	No red colour observed
4	Adulteration of various insoluble substances in sugar	Take small amount of sugar in a test tube and shake it with little water.	Pure sugar dissolves in water but insoluble impurities do not dissolve.

5	Adulteration of chalk powder, washing soda in sugar	To small amount of sugar in a test tube, add a few drops of dil. HCl.	No brisk effervescence observed.
6	Adulteration of yellow lead salts to turmeric powder	To sample of turmeric powder, add conc. HCl.	Appearance of magenta colour
7	Adulteration of red lead salts in chilli powder	To a sample of chilli powder, add dil. HNO ₃ . Filter the solution and add 2 drops of KI solution to the filtrate.	No yellow ppt.
8	Adulteration of brick powder in chilli powder	Add small amount of given red chilli powder in a beaker containing water.	Brick powder settles at the bottom while pure chilli powder floats over water.
9	Adulteration of dried papaya seeds in pepper	Add small amount of sample of pepper to beaker containing water and stir with a glass rod.	Dried papaya seeds being lighter float over water while pure pepper settles at the bottom.

CONCLUSION:

Selection of wholesome and non-adulterated food is essential for daily life to make sure that such foods do not cause any health hazard. It is not possible to ensure wholesome food only on visual examination when the toxic contaminants are present in ppm level. However, visual examination of the food before purchase makes sure to ensure absence of insects, visual fungus, foreign matters, etc. Therefore, due care taken by the consumer at the time of purchase of food after thoroughly examining can be of great help. Secondly, label declaration on packed food is very important for knowing the ingredients and nutritional value. It also helps in checking the freshness of the food and the period of best before use. The consumer should avoid taking food

from an unhygienic place and food being prepared under unhygienic conditions. Such types of food may cause various diseases. Consumption of cut fruits being sold in unhygienic conditions should be avoided. It is always better to buy certified food from reputed shop.

BIBLIOGRAPHY:

1. ENCARTA ENCYCLOPEDIA 2009
2. www.wikipedia.com
3. www.answers.com
4. www.google.com