



The Berar General Education Society's

# Shri R. L. T. College of Science, Akola

(Re-accredited with 'A' Grade by NAAC with CGPA 3.12)



**WORLD CREATIVITY AND  
INNOVATION DAY  
2020**

*On this Innovation day,*

*I wish you Develop your own Vision. Vision is  
the Specialty of Seeing the Imperceptible*



**Edited by**

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## PRINCIPAL MESSAGE



Dr. V. D. Nanoty  
Principal  
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I am Extremely pleased to present the the first issue of the creativity and Innovation Magzine going to be publish by Shri R. L. T. College of Science, Akola. exclusively meant for churning out the talent which bears immense potentiality of sharpening your innovative idea I congratulate all the contributors and the editorial board for bringing out such a beautiful magazine.

It will help the reader and contributor to update their knowledge and will give good exposure to recent development of innovative idea in science and technology. I am confident that this magazine will prove excellent platform to student who are interest in various competition like avishkar and all

## A NOTE FROM EDITOR DESK



Dr. P. T. Agrawal  
Head  
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This is the first issue of the creativity and Innovation Magzine going to be publish by Shri R. L. T. College of Science, Akola.

The aim of the magazine is to provide the platform for the students to publish creativity and Innovation Present in their mind.

As we believe that creativity and Innovations has no limitations of any subject, any languages, creative ideas and Innovations in all disciplines are welcome for the publication in this magzine. We are sure that our magazine will provide creative ideas and Innovations of new generations that will continue to help everyone interested in Research Field. We again hope that the magzine gives rise to Novel Research and many patents come forward through this playform. The help provided by our students is appreciable.

We would like to thank Management, Principal, Teaching and Non teaching staff members for their support towards this magzine. Dr. V. D. Nanoty, Principal , Shri R. L. T. College of Science Akola



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## Personal Equipment Protection Against covid 19

- ★ Infection prevention and control measures include, among other measures:
- ★ Hand hygiene, personal protective equipment and waste management materials.
- ★ The Protective equipment consists of garments placed to protect the health care workers or any other persons to get infected.
- ★ These usually consist of standard precautions: gloves, mask, gown.
- ★ If it is blood or airborne high infections, will include: Face protection, goggles and mask or faceshield, gloves, gown or coverall, head cover, rubber boots.
- ★ It mainly focuses on PPE usage in different areas of hospitals. But first, it is important to understand what exactly is a PPE. A personal protective equipment or a PPE is a part of complete protection gear used by any doctor or a worker during an outbreak of any disease which is transmitted quickly just like the current Coronavirus pandemic.
- ★ There are doctors and nurses who have to collect samples from the patient for testing purposes. Their PPE kit will be inclusive of goggles, N95 mask, shoe cover, two pairs of hand gloves, a water resistant gown and a hood that would cover their faces.

★ **Stay Safe Stay Feet**



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## Automatic Sanitizer Gate

- 1) Firstly prepare a tunnel with the help of PVC pipe.
- 2) In this tunnel to side pack by steel plates, and on front And back gates attach plastic curtain.
- 3) In the tunnel sprinklers are attach to the PVC pipe .
- 4) There is sensor attach to the front gate of the tunnel.
- 5) On other side in one tank in which add sensitiser or Disinfectant.
- 6) Outlet from this tank attach to the pipe from which tunnel is build.
- 7) Motor pump is attach to this outlet.
- 8) Due to sensor,if we enter the tunnel it will start and if we exist it will stop.





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## Home-Made Sanitizer And Hand Wash Naturally And Alcohol Free

**Requirement** :- Clean Neem leaves, fresh Alovera Pulp, Camphor, Alum, orange peel, water, Shampoo.

### **Procedure:-**

1. Boil the water in cooking Pot.
2. Pour clean leaves of Neem in this container.
3. Crush the Alum as well as camphor and mix it in this container.
4. Pour fresh alovera pulp in that container.
5. Pour orange peel in that. After getting cool, separate the solution by the help of strainer. This solution we can use as a sanitizer. But if we have to make hand wash then add some shampoo in it and your handwash is ready for use.

### **Advantages:**

1. Neem Leaves act as a antibacterial agent.
  2. Alovera pulp use as a Smoothing agent.
  3. Camphor use as a antifungal agent.
  4. Alum use for purification.
  5. Orange peel use as a cleaning agent and for fragrance
- Imp Advantage is it is Made in cheap rate and available easily And also it does not contain alcohol so there is no fear for burning





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## Homemade masks

### Procedure :

1. Cut the bottom off a folded coffee filter. Keep the top part -- you'll need it for the filter in your mask.
2. Lay a bandana or 20" x 20" T-shirt flat in a rectangle. Fold the bandana or shirt in half lengthwise.
3. Fold the cut filter in the center of the folded bandana or shirt. Then, fold the top of the bandana or shirt down over the filter. Fold the bottom up. thanks of science.
4. Place rubber bands or hair ties around the folded bandana or shirt, about 6 inches apart.
5. Fold the side of the bandana or shirt in toward the middle and tuck.
6. Place the rubber bands or hair ties around your ears, and voila -- you've made a face mask, no sewing required.





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## Bioplastic using cornstarch and vinegar

### Procedure:

1) Gather the necessary material

1. 10ml distilled water
2. 0.5-1.5gm Glycerol
3. 1.5gm corn starch
4. 1ml white vinegar
5. 1-2 drops of Food Color

2) Combination of all ingredient and stir together

3) Heat on low medium

1. Remove the mixture from heat when it become clear and thick

2. Total Heating time around 10-15 min

3. Lumps may began to produce if mixture is overheated

4. Add 1-2 drops of food colour in to mixture

4) Pour the mixture in to foil or parchment paper

5) Spread the mixture on foil and removed the bubble by using toothpick

6) Allow it dry at least 2hr and it ready to use



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## Chemical Alarm

### Introduction :

1. We can make a chemical alarm just like as the fire alarm.
2. The chemical alarm consists of smell sensation or fumes recogniser to alarm the bell.
3. The chemical alarm rings the bell when the fumes or smell of chemical start to spread in lab.
4. The large chemical bottles sometimes get licked or break due to careless handling of bottles or by accident so the chemicals get dropped out.
5. It may cause damage or get fired while getting in contact with other chemicals.
6. So, due to chemical alarm the laboratory accident gets reduced and also the wastage of chemical gets controlled.
7. The chemical alarm is a useful apparatus in all types of laboratories, industries, factories etc.







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## How To Clean Vegetable During Pandemic

Procedure :

1. To start of lets see how to clean and store milk and urd packets. When you get the milk packets put it in the small bucket full of soap water. Let it soak for few minutes after that remove it and wash it thoroughly with clean water and keep it in freeze

### 2. Now let's see how to clean vegetables

- ★ To a large bowl filled with water take one hand full of salt and then add little bit of baking soda to it and along with it add one teaspoon of turmeric powder to it. Mix it well.
- ★ Once the salt is dissolved add all the vegetables to it. Let soak it for few minute.
- ★ After few minutes remove all the vegetables from it and wash it thoroughly with clean water. Let the vegetables get dry, once it dry store them in freeze





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## Free Energy Experiment for life time

Procedure-

1. Make a saltwater solution by mixing a jar of water with a teaspoon of salt.
- 2) Place a zinc-coated nail into the solution and tape it to the one side of the cup securely.
- 3) This will be the negative electrode.
- 4) Place a copper coated wire into the Solution and tape it to other side of the cup securely

## Preparation of spray of a azardichta indica use to protect from insects and bacteria

Azardichta indica commonly called as neem plant. It is beneficial against insects and bacteria

**Content** :- Leaves of azardichta indica , Spray bottle

Procedure

1. Firstly take leaves of azardichta indica and wash them properly.
- 2 Next crush the leaves of azardichta indica into fine paste.
3. Then filter it through the piece of cotton.
4. Collect the residue and add water nearly half litre for one bowl of kaduneem.
5. Then fill it into the spray bottle



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## Short trick for iodine clock reaction

Procedure:-

1. Take a glass add distilled water and vit-C and iodine into it.
2. Take a another glass and add hot water corn starch and peroxide in to it
3. Mix the both mixture in common glass and then mix it thoroughly
4. After some time it is observed that change in the colour of mixture takes place
5. it take short time to do this experiment



## Starch Repal Paper

Process:-

1. Prepare the mixture of sand Fabric Protector and Dye
2. Take a glass of full water
3. Add mixture into glass water
4. When we remove the mixture from water it remain unwet .



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# Yoga Is A Best Medicine To Avoid Covid-19

Procedure :-

1. Yoga Regularly At Every Morning
2. Different Pose of yoga are as follow

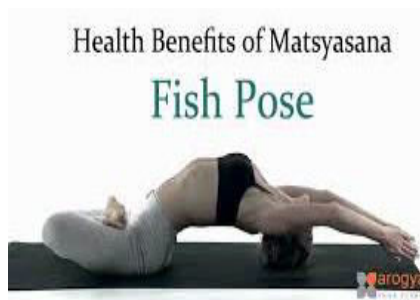
## 1. Camel Pose



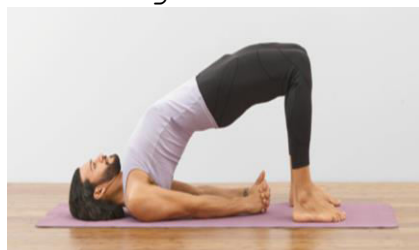
## 2. Cobra Pose



## 3. Fish Pose



## 4. Bridge Pose



## 5 Mountain Pose





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## Home Made Good Night Refill Lique

Requirement :- Neem Oil , Camphor Ball , Empty Bottle

Procedure :-

1. Open the cap of refill and fill it with neem oil and camphor
2. Tightly close the cap and fit it to machine.
3. Now use it as normal mesquite repellent and it is also ecofriendly and low cost



## Effective Ayurvedic Face Packs For Glowing Skin

**Procedure.**

1. Mix half tablespoon of turmeric with 4 tablespoon of Besan (gram flour).
2. Add milk or lukewarm water.
3. You can also add milk cream or white butter.
4. Apply the paste on face and neck area gently for 15-20 mins.
5. Rinse with lukewarm water and apply moisturizer.





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## Glass apparatus Cleaning brush

Introduction:-

1. We can make a cleaning brush for washing the glass apparatus of both small as well as large size.
2. The apparatus mainly used in clinical laboratories such as beakers, conical flask, round bottom flask, volumetric flask of size 100 ml, 500ml, 1000ml etc.
3. We need to clean the apparatus thoroughly so as to make perfect volume of required concentration of the solution
4. For this we need a cleaning brush.
5. The brush is made up of flexible fibers so that it gets bent according to area of glassware
6. So, we can make a cleaning brush having flexible fibers.
7. The brush contains a knob just like an umbrella.
8. For small size apparatus, the normal size brush cleans the apparatus perfectly.
9. For large size apparatus, after pressing the knob the brush opens the extra fibers just like an umbrella and cleans the apparatus perfectly
10. This cleaning brush is helpful for all college students who are performing chemical titrations, making solutions etc.





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## Best out of waste “Thread spools”

Procedure :

Step 1: Take a thread spools and cut it from cutter.



Step 2: mix well the cut pices of thread with fevicol.



Step 3: Apply this cut pices of thread on the balloon one by one.



Step 4: After complete the above process let's dry and take out the balloon slowly with the help of scissors or bottom part of pencil.



Step 5: Colour the nest and decore as your choice .



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## Home Made Scented Candle

Name of concept :- Home made Scented candles

Procedure -

- 1:- Melt 1 lb of soy wax In pitcher over a double boiler set up with the saucepan. Heat to 185°F
- 2:- When the melted Wax is at 185°F add 1ox. your fragrance of choice .
- 3:- As the wax cools,place the wicks insidethe 8ox. gars,centering as you can secure in place with pencils and chopsticks.
- 4:- When the wax is cooled to 135° F ,carefully Pour into tje prepare jars.
5. Let the jar cool overnight ,Before lighting ,trim the wicks to 1/4 inch.
6. Light and enjoy





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